

Scale and Differentiation in Services:
*Using Information Technologies to Manage Customer Experiences at Harrah's
Entertainment and Other Companies*

by

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ABSTRACT

This dissertation is focused on the topic of service innovation and explores economies of scale and strategic differentiation in services via an inductive field-based case study of the world's largest casino gaming company, Harrah's Entertainment. It includes comparisons to services firms in other industries such as distribution/logistics (UPS) and for-profit/online education (Apollo Group/University of Phoenix). The findings suggest that scale and differentiation (considered by many to be mutually exclusive in services) can be combined through the strategic use of information technology in a manner that increases customer switching costs, resulting in improved profitability and returns. The limitations of standardization-only scale-oriented strategies are discussed, and the dissertation concludes with a description of the three key components needed by any firm seeking to employ a strategy of scalable service differentiation: (1) a loyalty program, or other means of linking specific transaction data with specific customers, (2) an analytic engine that determines the ranking/prioritization of customers and the criteria upon which to differentiate services, and (3) a set of information technology tools that automate consistent differentiated service delivery across a company's touch-points with its customers.

Thesis Supervisor: Michael A. Cusumano

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Table of Contents

ABSTRACT.....	2
ACKNOWLEDGMENTS	3
TABLE OF GRAPHS.....	9
TABLE OF FIGURES.....	10
TABLE OF TABLES.....	11
PREFACE.....	12
CHAPTER 1 – INTRODUCTION	15
STRATEGY & FIRM PERFORMANCE	16
ARE “DIFFERENTIATED SERVICE” AND “SCALABLE” BUSINESS MODELS INCOMPATIBLE?.....	19
THE DISSERTATION FOCUS: SCALABLE SERVICE DIFFERENTIATION	23
HARRAH’S ENTERTAINMENT AS A SERVICE INNOVATOR	24
SCALABLE SERVICE DIFFERENTIATION IN ACTION	28
AN OVERVIEW OF THE DISSERTATION: BRIEF CHAPTER SUMMARIES	35
CHAPTER 2 – A REVIEW OF THE EXISTING LITERATURE	39
HOW DO SERVICES AND PRODUCTS DIFFER?.....	44
<i>Intangibility</i>	49
<i>Simultaneity & Perishability</i>	50
<i>Heterogeneity</i>	52
<i>Non-Consensus Attributes of Services</i>	53
Customer as Participant.....	53
Labor and Capital Intensity	54
Co-Location.....	55
Customization.....	55
Cultural Specificity.....	56
<i>Summary: What are Services and How Do They Differ From Products?</i>	57
HOW THE SERVICE TRAITS AFFECT THE MANAGEMENT AND STRATEGY OF FIRMS	58
<i>Implications of Intangibility</i>	58
<i>Implications of Simultaneity / Perishability</i>	61
<i>Implications of Heterogeneity</i>	64
<i>Implications of Customer Involvement</i>	66
<i>Implications of Co-Location</i>	68
<i>Summary: How Unique Service Traits Affect Firm Strategy & Management</i>	69
THE SERVICE TRAITS AND OUR UNDERSTANDING OF INNOVATION.....	72
<i>Architectural Innovation</i>	72
<i>Disruptive Innovation</i>	74
<i>Technology Life Cycle Innovation</i>	76
<i>The Problematic Trait of Customer Involvement</i>	78
THE SERVICE TRAITS AND OUR UNDERSTANDING OF NEW “PRODUCT” DEVELOPMENT	79
<i>Product Development Process Objectives</i>	80

<i>The Generic Product Development Process</i>	80
<i>Organization of the Product Development Process</i>	81
<i>Revisiting the Problematic Trait of Customer Involvement</i>	85
SERVICE INNOVATION AND NEW SERVICE DEVELOPMENT – WHERE DO WE STAND?	86
<i>Service Innovation Theory</i>	86
<i>Our Understanding of New Service Development</i>	88
The Process of New Service Creation	91
Organization of New Service Development Efforts	92
SUMMARY: ARTICULATING THE HOLY-GRAIL OF SERVICE INNOVATION	93

CHAPTER 3 – INNOVATION AND SCALE IN THE SERVICE CONTEXT: A LOOK AT UPS AND THE APOLLO GROUP..... 97

INNOVATION IN GLOBAL DELIVERY SERVICES: UPS AND “CONFIGURABLE SOLUTIONS”	97
<i>United Parcel Services: The Making of “Brown”</i>	97
<i>An Overview of UPS Today</i>	101
<i>The Competitive Landscape</i>	103
The United States Postal Service.....	103
Federal Express	104
<i>A Humble Strategic Vision: Organize Global Commerce</i>	105
<i>Service Innovation as Configurable Solutions</i>	109
Common Carrier Services: Standardizing the Service.....	110
Respectfully Complementing: The Addition of Non-Package Services	113
UPS Trade Direct: A Configurable Solution in Action.....	115
<i>Summary: Repeatability as the UPS Service Innovation Mantra</i>	119
INNOVATION IN FOR-PROFIT EDUCATION: STANDARDIZING EDUCATION AT THE APOLLO GROUP	122
<i>Rebel with a Cause: John Sperling’s Creation of the Apollo Group</i>	122
<i>Background: Bringing Education to Working Adults</i>	124
<i>The Competitive Landscape</i>	126
Career Education Corporation	126
Corinthian Colleges	127
Education Management Corporation	129
ITT Educational Services	130
Summary & Comparative Data	131
<i>The Apollo Strategy</i>	132
<i>Service Innovation as Standardization</i>	133
Centralized Curriculum Development and Management.....	136
FlexNet: A Hybrid Online-Onsite Learning Delivery Model	137
<i>Summary: Standardizing a Historically One-Off Offering</i>	139
SUMMARY: SERVICE INNOVATION AS STANDARDIZATION?	141

CHAPTER 4 – HARRAH’S ENTERTAINMENT AND THE GAMING INDUSTRY..... 145

CASINO GAMBLERS: A PROFILE OF THE CUSTOMER	145
GLOBAL CASINO & GAMING MARKET SIZE AND SEGMENTATION	148
HARRAH’S ENTERTAINMENT TODAY	151
AN OVERVIEW OF THE MAIN US CASINO OPERATORS	155
<i>MGM Mirage</i>	155
<i>Wynn Resorts</i>	158
<i>Las Vegas Sands</i>	160
<i>Station Casinos</i>	163
<i>Ameristar Casinos</i>	166
<i>Boyd Gaming</i>	168
GAMING INDUSTRY ATTITUDES ON TECHNOLOGY AND CASINOS	171
COMPETITIVE DYNAMICS & HARRAH’S PERFORMANCE	173

CHAPTER 5 – HARRAH’S SERVICE STRATEGY..... 183

FROM BINGO PARLOR TO GAMING GIANT: A BRIEF HISTORY OF HARRAH’S ENTERTAINMENT..... 183
THE HARRAH’S SERVICE OFFERING: RESOLUTION OF UNCERTAIN OUTCOMES..... 187
PLAYING THE CARDS YOU’RE DEALT: HARRAH’S FOCUS ON EXISTING CUSTOMERS 189
SETTING THE OBJECTIVE: MONOGAMOUS CUSTOMERS..... 190
ASSURING SCALABILITY THROUGH ROBUST INFORMATION TECHNOLOGY 193
CAPTURING RECIPROCAL HISTORY VIA THE TOTAL REWARDS LOYALTY PROGRAM 195
USING DIFFERENTIATED SERVICE TO INCREASE CUSTOMER SWITCHING COSTS 198
FUTURE PLANS: FEEDING THE DATA-INTENSIVE SERVICE DIFFERENTIATION STRATEGY 204

CHAPTER 6 – SCALE AND DIFFERENTIATION AT HARRAH’S 211

DIFFERENTIATED SERVICE EQUALS “LUCKINESS” 211
THE STRATEGIC SERVICE INNOVATIONS: SCALABLE SERVICE DIFFERENTIATION IN ACTION 213
 The Slot Service Dispatch System (SSDS).....214
 Description of the SSDS Capability 214
 SSDS Fit with Strategy..... 218
 SSDS Performance 219
 Contextualizing SSDS 222
 Seven Stars Club.....222
 Description of the Seven Stars Club Tier 222
 Seven Stars Fit with Strategy..... 227
 Performance of the Seven Stars Club 227
 Contextualizing The Seven Stars Program 229
 Operational Customer Relationship Management (OpCRM)230
 Description of the OpCRM Capability 230
 A Selection of the OpCRM “Rules” 234
 OpCRM Fit with Strategy..... 238
 Performance of the OpCRM Capability 239
 Contextualizing OpCRM..... 241
SUMMARY: SERVICE INNOVATION AS TARGETING BOTH SCALE AND DIFFERENTIATION 242

CHAPTER 7 – SUPPORTING THE STRATEGY: CREATING A SERVICE-ORIENTED CULTURE FOCUSED ON MEASUREMENT..... 245

DELIVERING A VIBE: TRAINING & ENABLING EMPLOYEES TO BE IN A SERVICE MODE 247
ACES IN THE RIGHT PLACES: ORGANIZING FOR QUALITY SERVICE DELIVERY 250
EMPLOYEE JACKPOT: INCENTIVIZING EMPLOYEES TOWARDS CUSTOMER SATISFACTION..... 253
GET THE FACTS: MEASURE, MEASURE, MEASURE, & MEASURE..... 256

CHAPTER 8 – CONCLUSION..... 259

SERVICE INNOVATIONS AT UPS, THE APOLLO GROUP, AND HARRAH’S ENTERTAINMENT 259
SCALE AND DIFFERENTIATION IN SERVICES: AUTOMATING PERSONALIZED EXPERIENCES 261
 An Overview261
 The Three Key Ingredients of Scalable Service Differentiation264
 Loyalty Program..... 265
 Analytic Engine..... 266
 Delivery Tools..... 267
 Application of the Strategy in Other Industries.....268
 Scale and Differentiation in Transportation Services: Airlines..... 268
 Scale and Differentiation in Retail Services: Online Commerce 273
 Scale and Differentiation in Communication Services: Cable Companies 277
 Summary: Scale and Differentiation in Service282

REFERENCES.....	283
APPENDIX.....	290
METHODOLOGY OVERVIEW	290
<i>Research Strategy: The Case Study Method.....</i>	<i>290</i>
<i>The Research Design: Single Case, Multiple Units of Analysis.....</i>	<i>293</i>
<i>Case Selection: Harrah’s Entertainment</i>	<i>295</i>
<i>Data and Information Sources</i>	<i>298</i>
Formal Semi-structured Interviews	298
Informal Discussions.....	300
Public Presentations.....	300
Other Interviews	301
Follow-up Conversations.....	301
Gary Loveman’s Articles & Speeches.....	302
Internal Presentations	303
Financial and Regulatory Filings.....	304
Harrahs.com Website	304
Direct and Participant Observation.....	305
Industry Association and Publicly-Available Data.....	305
RETURN ON INVESTED CAPITAL (“ROIC”) CALCULATION METHODOLOGY	307
ABOUT THE AUTHOR.....	308

Table of Graphs

Graph 1: Harrah's Entertainment Employee Productivity vs. US Casino Industry.....	28
Graph 2: EBITDA Margins, Federal Express vs. UPS.....	121
Graph 3: Operating Income Margin, Federal Express vs. UPS	121
Graph 4: EBITDA Margins, Apollo vs. Leading For-Profit Education Competitors.....	140
Graph 5: Return on Invested Capital, Apollo Group vs. Industry Competitors	141
Graph 6: Global Casino & Gaming Market Size (US\$ billions)	149
Graph 7: Global Casino & Gaming Market Segmentation by Region and Game Type.....	149
Graph 8: US Commercial Casino Gross Gaming Revenues (US\$ billions), 1989-2005.....	150
Graph 9: Harrah's Entertainment Revenue by Segment (US\$ million), 2003-2005	153
Graph 10: Increasing Casino Industry Productivity, 2000-2005	172
Graph 11: Strengthening Base Business at Harrah's Entertainment, 2000-2005	178
Graph 12: Improving Employee Productivity at Harrah's Entertainment, 1992-2005.....	179
Graph 13: Return on Invested Capital ("ROIC"), Harrah's vs. MGM Mirage, 1998-2005	181
Graph 14: Return on Invested Capital ("ROIC"), Harrah's vs. Competitors 1998-2005	182
Graph 15: Harrah' Entertainment Revenues (US\$ millions), 1988-2005.....	186
Graph 16: "Luckiness" of First Visit Drives a Customer's Likelihood of Returning	236
Graph 17: Harrah's Entertainment Comparative Stock Price Performance	297

Table of Figures

Figure 1: Scale and Differentiation at Harrah’s Entertainment	35
Figure 2: Various Organizational Forms of Product Development Efforts	82
Figure 3: The Scalability – Differentiation Framework	95
Figure 4: The Common Carrier Service Innovation	112
Figure 5: The Non-Package Services Innovation	115
Figure 6: UPS Trade Direct	117
Figure 7: Trade Direct Service Innovation	118
Figure 8: Contextualizing the UPS Service Innovations	120
Figure 9: The Centralized Curriculum Innovation.....	137
Figure 10: The FlexNet Hybrid Delivery Innovation	139
Figure 11: Contextualizing the Apollo Group Service Innovations	139
Figure 12: The Scalability-Differentiation Framework with Competitive Dynamics	144
Figure 13: US Gaming Locations by Type	151
Figure 14: Harrah’s Entertainment, US Footprint	152
Figure 15: Slot Service Dispatch System Performance Metrics	221
Figure 16: The Slot Service Dispatch Service Innovation.....	222
Figure 17: Growth in Annual Theoretical Value to Harrah’s (VIP vs. Seven Stars).....	228
Figure 18: The Seven Stars Innovation.....	229
Figure 19: The Operational CRM Innovation.....	242
Figure 20: Contextualizing Harrah’s Service Innovations.....	243
Figure 21: Scale and Differentiation at Harrah’s Entertainment	263
Figure 22: The Scalable Service Differentiation Strategy Model.....	265
Figure 23: Scale and Differentiation in Airlines.....	272
Figure 24: Scale & Differentiation in Online Commerce.....	276
Figure 25: Scale and Differentiation in Communication Services	281
Figure 26: Case Study Research Designs	293
Figure 27: Multiple Case, Embedded Research Design	294

Table of Tables

Table 1: Harrah’s vs. Major Gaming Companies: Cash Earnings Return on Assets*	27
Table 2: Articles Containing “Service” in the Title, by Journal	47
Table 3: Evaluating the Key Service Characteristics: An Overview of the Literature	49
Table 4: The Five Key Service Traits	57
Table 5: The Service Traits, Managerial Issues, and Corresponding Research Topics.....	69
Table 6: Service Traits and Their Strategic Impact	71
Table 7: The Service Traits and Architectural Innovation.....	73
Table 8: The Service Traits and Disruptive Innovation.....	75
Table 9: The Service Traits and the Technology Life Cycle Model.....	78
Table 10: Can Existing Theories of Innovation Accommodate Unique Service Traits?.....	79
Table 11: Generic Product Development Processes and the Service Traits	83
Table 12: Organization of the Development Process and the Service Traits	84
Table 13: Student Objectives by Company	131
Table 14: The Apollo Group Learning / Teaching Model for Degree Programs	135
Table 15: Casino Gamblers vs. Non-Gamblers	147
Table 16: Favorite Casino Games, TNS survey results	148
Table 17: Harrah’s Entertainment Properties by Geographic Segment.....	153
Table 18: Harrah’s Property Statistics	154
Table 19: MGM Mirage Property Statistics, Las Vegas Strip	156
Table 20: Wynn Resorts Property Statistics	159
Table 21: Las Vegas Sands Property Statistics.....	161
Table 22: Station Casinos Property Statistics, Major Hotel Casinos in Nevada	164
Table 23: Ameristar Casinos Property Statistics	166
Table 24: Boyd Gaming Property Statistics.....	169
Table 25: Casino Industry Competitive Dynamics.....	175
Table 26: Total Rewards Tier Benefits.....	200
Table 27: Seven Stars Company-wide Benefits.....	226
Table 28: Performance of Various Operational CRM “Rules” at Harrah’s Louisiana.....	240
Table 29: Aggregate Operational CRM Performance	240
Table 30: Research Strategy Approaches	291
Table 31: Interviews Conducted	299
Table 32: Follow-up Interviews.....	302

Preface

Over the course of ten years as an investment professional focused on service companies, I was struck by the seemingly inevitable tendency of service companies to focus eventually on standardizing their service. Across the dozens of companies with which I worked, the rationale for this pursuit was remarkably similar: by standardizing a service offering, the company might be able to achieve the holy grail of operating performance – namely, economies of scale. For better or worse, many pure professional service companies found themselves trapped in a simple “employees” times “rate” times “utilization” framework of determining financial performance. Many sought to escape this constraint by creating more “standardized” or “product-like” offerings that could scale and produce profit margins that would expand with volume.

One company with which I had the privilege of working as a member of its Board of Directors was The Taylor Group¹, a New Hampshire based systems integrator that focused virtually exclusively on the Great Plains enterprise resource software market for small and medium enterprises. After many years of struggling against the service growth constraint I described above, the company eventually resorted to developing in-house software (known as the “Integration Manager”) that would enable its consultants to perform their tasks with greater speed – which, in the context of fixed price contracts, enabled the company to achieve the elusive scale economies it had so desperately sought.

Over time, however, the company found that even greater scale economies could be developed by offering the software for sale independent of the consulting services that had traditionally accompanied the Integration Manager tool. Thus, the desire for increasing returns to effort (i.e. economies of scale) led the Taylor Group and its chief executive Dan Taylor

¹ The company was later renamed ManagedOps.com, Inc. during the heyday of the Internet bubble.

towards a business model transformation that focused on the development of standard service offerings that became so standard that they were eventually productized. Upon my arrival at MIT, I soon found that many service companies in a host of industries were using similar tactics (i.e. “productizing”) in their quest to become more efficient and achieve scale economies. Two of these companies which I investigated – United Parcel Service and the Apollo Group – are profiled later in this dissertation.

In a very symmetrical manner, I also found that the companies most interested in developing service were those companies that found themselves in an environment of rapidly commoditizing offerings. Michael Cusumano’s exhaustive work on the software industry (Cusumano, 2004) provides ample evidence of a phenomenon in which software companies began to add services in a quest to differentiate their products. Despite having excellent incremental profitability margins (after all, how much extra does it cost to produce the 1,054,761st copy of software?), software companies eventually found that products were subject to massive volatility of demand. Cusumano notes that one software company saw the price of its software drop from \$1.2 million per license to less than \$250,000 per license in less than 2 years. In a quest to overcome such capricious demand environments and the commoditization of key functionality embedded in software products, many software companies sought to add integration and other services as part of an effort to differentiate their offerings from those of their competitors. Services, they found, were a means through which to both differentiate and develop greater insight into the customer, his needs, etc.

Thus, I found that product companies wanted to be service companies – while service companies wanted to be product companies. Many emerged as hybrid companies offering both products and services, but one fundamental fact remained: services that differentiated were not

scalable, and standardization that enabled scale economies was not differentiable. Anecdotal and empirical evidence, it seemed, suggested a direct trade-off between differentiation and standardization-driven efficiency. Academic research seemed to support this evidence: Harvard Business School Professor Michael Porter had suggested that cost leadership strategies (similar, although not identical to economies of scale) and differentiation strategies were usually² inconsistent (Porter, 1985). But is this actually the case? Can firms deliver differentiated service via scalable business models?

This dissertation is an attempt to address this topic in a manner that will help both business academics and managers alike understand that the trade-off between scale and differentiation is not inevitable. In fact, this dissertation will tentatively suggest that reality may be exactly opposite this perspective: namely, that *consistent* differentiation (via the automation of services) is always scalable because of the technology used to automate a differentiated approach. If nothing else, I hope this dissertation provokes some thought on the subject of strategy and innovation in the domain of services.

Vikram Mansharamani
Moody, ME
January 2007

² Porter argues that a firm can achieve both differentiation and cost leadership under three circumstances: (1) when all other competitors are “stuck in the middle,” a situation which results from competitors unsuccessfully attempting to be all things to everyone, (2) scenarios in which costs are affected by share or inter-relationships, or (3) when a firm pioneers a major innovation. Porter further argues that both (1) and (3) are likely to be fleeting and temporary as competitors will adapt to eliminate the opportunity to achieve both cost leadership and differentiation.

Chapter 1 – Introduction

This dissertation examines how service firms can deliver services which are both scalable and differentiated. The research focuses on how companies can apply “niche-market” differentiation strategies to “mass market” opportunities by generating consistent individualization or personalization across a variety of operating environments, customers, locations, etc. In so doing, managers and academics alike may discover ways to immunize a service enterprise from the competitive profit-dissipating forces that eventually infect profitable markets. Indirectly, the research suggests the generic strategies of cost leadership, differentiation, and market focus (Porter, 1985) may be constraining to IT-enabled service firms.

I focus on service companies for two main reasons: (1) despite representing a large (and growing) share of economic activity today, services have received disproportionately little attention from management scholars – resulting in a relatively large gap in the literature; and (2) my personal experiences as an employee of, an investor in, and a customer of services companies presented several issues on which I found little focus within the strategy or innovation communities. Despite these two factors, managers seem consistently curious about service innovation as well as service-specific strategies. In short, the topic to be addressed in this dissertation is both relevant and unaddressed.

Of particular curiosity to me was the topic of how inherent differences between services and products resulted in the possible need for service-specific innovation and strategy theories. As a precursor to the dissertation’s findings about the scalable service differentiation strategy that Harrah’s used to generate an edge over its competitors, the topic of how services differ from products is a major concern of this dissertation. The topic colors the lens through which the research and analysis was conducted.

Strategy & Firm Performance

Perfect competition is an idealized model in which all firms earn an adequate return to cover their cost of capital and not a penny more. Perfect ease of entry results in the immediate dissipation of any net economic profits (economic profits = profits in excess of the cost of capital vs. accounting profits=revenue – costs). In addition to the lack of entry barriers, the perfectly competitive environment assumes that firms cannot affect price—although in aggregate all firms determine price—and that information flows are immediate. Thus, although a firm is free to choose any price, attempting to sell goods or services above the market price effectively will equate to no demand for the firm’s offering. Likewise, setting a price below the market price will result in infinite demand and the unnecessary loss of accounting profits.

This perspective on economic forces necessarily equates to a view that all firms and goods are identical. A firm is a firm is a firm, and no good is differentiated from other goods. Suppose this were not the case. If one firm had a lower cost method of producing a good, then it would sell the good below the market price—thereby capturing the entire market. Information about the firm’s methods, however, would immediately diffuse to other firms and they would soon begin producing at the same cost. Thus, although economic profits existed when the firm captured the entire market, classical economic forces would immediately eliminate such a situation driving economic profits back to zero. Likewise, if goods differed and one good was valued more highly by consumers and resulted in an economic profit to the firm producing it, other firms would immediately produce an identical offering—reverting to a situation in which aggregate economic profits again returned to zero.

In summary, the perfectly competitive environment described (albeit as a stylized ideal) by economists is one in which all firms are identical, all goods are undifferentiated, and

information flows are immediate. In short, no firm is able to sustain a competitive advantage that produces positive economic profits.

While the classical economic forces discussed above suggest that all firms are identical and no net economic profits are possible, empirical evidence suggests otherwise. Strategy researchers have focused on evaluating differences in firm performance and the origins of those differences. Two “pure” explanations for competitive advantage and variance in firm performance exist: (a) industry structure and strategic-position based accounts, and (b) firm resources/endowment based theories. In all likelihood, reality is a blend of these two perspectives.

Industry structure analysis assumes that all firms remain identical, but the environments they face are different and therefore result in differing profitability and performance. The essence of this argument is that firms differ in performance—although each one is identical—because they face different industry structures. From this view, performance is a function of the environment, not of the firm.

The second primary school of thought suggests that firms are not identical and that differences in firm performance can (at least partially) be explained by different resource endowments. Known as the “resource-based view” of the firm, this perspective suggests that firms differ in performance because they differ in resources (Barney, 1991; Wernerfelt, 1984), capabilities (Prahalad, 1993; Prahalad & Hamel, 1990), and birth (time of founding) effects (Stinchcombe, 1965). In essence, firm performance differs because firms differ. A natural and related extension of this logic is found with the population ecology view that firms are “selected away” if their capabilities and resources do not fit the current environment (Hannan & Freeman, 1977, 1984, 1989). Thus, firm performance is a function of firms, with limited weight placed on

the role of industry structure. In fact, another interpretation of this internally-focused perspective is that the structure of the environment is the result of differing firm capabilities—meaning that the “structurally attractive” industry segments are the result (rather than the cause) of differences in firm performance.

Reality is likely between these two extremes. Firms operate within and affect environments, and environments clearly affect firms (Henderson, 2000). Disentangling the causality in such a scenario is a difficult—if not impossible—task. Nevertheless, it appears that both “pure” schools of thought have tremendous merit and broad relevance for the study of strategy and innovation within services firms. Particularly relevant issues from the industry structure perspective include Porter’s five forces (bargaining power of suppliers, bargaining power of customers, the threat of new entrants, the threat of substitutes, and the nature of competition within the industry) (Porter, 1980). Pertinent considerations from the internal/resources perspective include the existence of unique capabilities and other non-replicable resources.

One distinguishing characteristic of a service is that customers are involved in the production of an offering. Because customers are not perfectly homogenous, they therefore introduce a degree of variability into the service production process. Quality control and consistency of offerings are not guaranteed, and although standardization of service offerings has created many “product-like” services, the fact remains that one cannot pre-inspect the service before it is produced. Further, managers cannot assure consumers that the service will be identical to a previously delivered service due to customer involvement. Given this heterogeneity of the same offering within a firm across time, it is highly likely that service

offerings across firms in a similar industry exhibit great variety. Further, the highly social nature of many services results in a complex interaction that cannot be immediately standardized.

This customer-introduced variability dramatically affects service firm strategy. In particular, it complicates the firm's ability to standardize an offering in a manner that promotes efficient production of the offering. Specifically, customer-introduced variability vis-à-vis the service offering limits the ability of a service firm to achieve economies of scale. Only through standardization—which by its very nature implies the loss of differentiation—have service firms been able to achieve economies of scale. By standardizing their offerings, however, service firms leave themselves vulnerable to commoditization and the competitive forces that drive economic profits away. The alternative is to remain differentiated but without scale. Firms, it seems, ultimately need to choose between two seemingly incompatible objectives: differentiated service (i.e. the high end restaurant) and scalable service (i.e. McDonalds).

Are “Differentiated Service” and “Scalable” Business Models Incompatible?

Although a relatively recent literature on “mass customization” exists (Gilmore & Pine, 1997; Pine, 1993) that attempts to address this tradeoff (primarily in the domain of products), the research seems to fall short of explaining how mass customization is meaningfully more than an unbundling of product features to allow for customer configuration. The mass customization process is about letting consumers configure the modules they would like their product to include. Consider Dell Computer, the flag-bearing champion of the mass-customization movement. While one Dell customer can order a desktop computer with a 60GB hard-drive, a DVD player, a 1.7 gigahertz processor, and 512 MB of memory, another may order a laptop with 100GB of hard-drive space, external speakers, a CD-ROM drive, a built-in wireless modem, and 256 MB of memory. The reason Dell is able to “mass-produce” these “customized” products is

that they are based on modular configurations. If a customer were to ask for an “off-the-menu” item, the system breaks down and the request cannot be accommodated. Thus, the logic of mass customization should perhaps be labeled “mass configuration.”

Fundamentally, configuration and differentiation are different concepts. Configuration is based on the selection and organization of standard modules, and although this is indeed possible in services (see UPS examples below), it differs meaningfully from service differentiation which involves treating customers differently. The driving logic behind the concepts of differentiation and configuration are in fact antithetical. Mass customization driven configurable solutions are highly dependent upon the standardization of “sub-components” of the offering. James Gilmore and Joseph Pine highlight this dependence on the inherently standard components of a mass customized offering in their recent book, *Markets of One: Creating Customer-Unique Value Through Mass Customization*: “modular capabilities are a necessity” (Gilmore & Pine, 2000). Differentiated solutions are based upon solutions that treat different customers differently.

The restaurant industry provides an interesting illustration of this concept, using the “meal” as the offering that one is procuring. McDonalds provides a mass customized solution to the service of meal development: one is given a menu of standard options from which to create a “custom” configuration that meets individualized needs. One customer might choose a cheeseburger, fries and a milkshake while another may opt for a salad, onion rings, and a diet soda. Just as with the Dell example, ordering “off-the-menu” items cannot be accommodated. (Imagine asking for a non-breaded fish fillet...)

McDonalds is not offering a differentiated service, but they are offering a mass customized, configured solution to one’s meal development needs. The differentiated equivalent in the restaurant industry is an establishment that, in the extreme, does not even have a menu. A

customer arrives and his unique needs are accommodated. No menu constrains choice, and although his needs may be exactly opposite to those of another customer, both are accommodated without issue. The mass customization approach taken by McDonalds seems inconsistent with the highly differentiated approach taken by the local diner or a high-end restaurant that cooks “made-to-order” meal solutions. Producing the McDonald’s burger is a scalable activity, while generating the “made-to-order” omelet is not. Scale and differentiation, it seems, are incompatible.

This trade-off does not imply that the concepts of mass customization are not pertinent to service firms. Many of the principles are in fact highly relevant. As the dissertation demonstrates in a discussion of the UPS Trade Direct strategic service innovation, mass customized and configurable solutions can help firms develop scale and improve their competitive positioning. These efforts do not, however, overcome the inherently standardized components of a “customized by configuration” offering that are eventually subject to commoditizing forces. In fact, the essential logic of mass customization is to create customer-specific configurations via standard components. In a service specific context, this implies that standardization (i.e. elimination of differentiation) leads to scale.

The title of a recent *BusinessWeek* magazine article summarizes the current sentiment among managers regarding the scale-differentiation trade-off quite succinctly: “Satisfaction Not Guaranteed: How cost-cutting can backfire when it ignites customer rage”(Hindo, 2006). The article goes on to discuss how cost cutting and quality service are incompatible, highlighting how companies such as Dell Computer, Home Depot, and Northwest Airlines have angered customers with poor service driven by financial constraints. To many managers, it seems a pre-determined conclusion that this trade-off necessarily exists. Are differentiated services inherently

incompatible with large scale delivery of those services? Is the trade-off between scale and differentiation inevitable?

One company that has managed to move beyond this trade-off is Harrah's Entertainment. Through innovative use of customer data and intensive IT-based analytics, Harrah's has developed what may be a model of sustainable and scalable differentiation for the entertainment services it offers its customers. Driven in large part by its pioneering loyalty card program Total Rewards, Harrah's has demonstrated an ability to understand millions of customers well-enough to offer differentiated service. Total Rewards, and its predecessor Total Gold, were begun at Harrah's in the mid 1990's and have been a fundamental cause of the sustained industry-leading profitability Harrah's has enjoyed over the past ten years.

The scalable service differentiation enablers that Harrah's has developed (most of which are powered by intensive use of information technologies) and used at its multiple properties are another essential component of the ability for the company to escape what Jim Collins and Jerry Porras refer to as the "tyranny of the OR" in their bestselling book *Built to Last*. According to Collins and Porras, "the Tyranny of the OR [is] the rational view that cannot easily accept a paradox, that cannot live with two seemingly contradictory forces or ideas at the same time. The 'Tyranny of the OR' pushes people to believe that things must be either A OR B, but *not both*" (Collins & Porras, 2002). The authors continue by providing several examples of either/or propositions that seem universally accepted, to which I might easily add "Service offerings can be scalable OR differentiated." Collins and Porras go on to suggest that visionary companies embrace the "Genius of the AND."

This dissertation is about how Harrah's managed to escape the tyranny of the OR and achieve the genius of the AND in the context of services. In particular, the dissertation will

focus upon the scalable service differentiation enablers that Harrah's used to generate sustained industry-leading returns on its invested capital. It is about how the company managed to succeed against larger, more capitalized competitors in an industry historically characterized by scale. In short, it is about how Harrah's has achieved both scale and differentiation in services.

This study will have implications relevant to a wide range of scholarly communities. Entrepreneurship scholars and entrepreneurs may take comfort in seeing that Harrah's (with limited resources) successfully operates (at higher returns on capital) against well-capitalized competitors. Strategy scholars will notice that (at least in Harrah's case) information technology matters—contrary to Nicholas Carr's controversial proposition (Carr, 2003; Carr, 2004) that it does not. Finally, innovation scholars may recognize that services are in fact different from products, and that this difference necessitates a need to re-evaluate “accepted” theories.

The Dissertation Focus: Scalable Service Differentiation

Fundamentally, this dissertation is about how companies can achieve scalable service differentiation. The research strategy I utilize is the case study method. The dissertation is a detailed case study of the world's leading gaming entertainment services company, Harrah's Entertainment. Harrah's Entertainment was selected for various reasons, most important of which was the fact that it has successfully utilized information technology to overcome the seemingly insurmountable conflict between scale and differentiation.³

In particular, I focus upon three IT-powered capabilities that Harrah's has utilized to deliver scalable service differentiation. The information technologies – which include the Slot Service Dispatch System, the Seven Stars Program, and the Operational CRM platform –

³ Other rationale included the degree and depth of access and support from senior Harrah's executives, the fact that Harrah's had an IT-enabled customer loyalty driven strategy, and that the company had undergone a remarkable transformation while competing against competitors with greater access to capital and investment resources.

individually and collectively enable the company to deliver service commensurate with a customer's value to the firm. Thus, these scalable service differentiation enablers facilitate the best service for the best customers, without degrading the quality of service that other customers receive. They also enable—to use a term that Harrah's Chief Information Officer Tim Stanley has coined—an enterprise-wide “auto- magic” capability. Auto-magic is the automated ability of the company to create high-quality, magical experiences for a customer without the appearance of orchestration. This dissertation will investigate these IT-powered technologies and how they serve as the basis for the scalable service differentiation Harrah's delivers.

The data utilized in this dissertation is primarily based upon interviews with Harrah's managers. Archival records such as SEC filings, annual reports, press releases, internal memos/reports were analyzed and compared to the findings from coded interviews (based on a standard interview guide used to question managers at all levels and across all functions of the organization). For a more in-depth discussion of methodological considerations, the reader may consult the Appendix of this dissertation.

Harrah's Entertainment as a Service Innovator

Harrah's is an extraordinarily successful company that seems to have “beaten the odds” (pun intended!) of competing against companies with greater capital and better assets. In 1998, Harrah's Entertainment was on the verge of bankruptcy and was struggling in almost all of its major markets. In Las Vegas, the company's \$300mm refurbishment of Harrah's was competing against the \$1.6bn Bellagio. In New Orleans, the company's bankrupt property was struggling with regulations prohibiting the casino from operating as a full-service casino resort with restaurants, etc. In Atlantic City (“AC”), the company's properties were run down and the whole gaming industry in AC was facing a serious downswing. In short, the company's prospects were

not promising. Harrah's Entertainment common stock (NYSE ticker: HET) was trading for \$15 per share. To many Wall Street analysts, recommending purchase of Harrah's was a sure-fired way to career stagnation. As Loveman noted:

In 1998, Harrah's had the most businesses with one name ("Harrah's") but they were all different – ranging from a Las Vegas strip property of a modest type to riverboats, native American casinos, resort properties in Northern Nevada, some with hotels, some without hotels, some with cruising riverboats, some land-based, some serving alcohol, some not...and in general, some big competitor with better facilities and better resources than we had...then in 1999, Steve Wynn opened Bellagio with what was an unthinkable budget of \$1.6bn, and at that time referred to it as the sort of place God would build if he had the money...and just up the street, there we were with little Harrah's (\$300mm of invested capital). The company was under tremendous pressure. The share price performed very poorly, we had missed our quarterly earning estimate virtually every time for several years, the company's New Orleans business was in bankruptcy. It was a tough time (Loveman, 2005a).

Today, the company is the world's largest gaming entertainment services company and has a footprint in the United States that is unmatched by any of its competitors, has an extraordinarily powerful and valuable database with detailed and pertinent information about 40mm gamblers (out of an estimated 50mm gamblers in the United States), and has plans to redesign the central Las Vegas Strip that would have been deemed unimaginable only 5 years ago. The company's profits have skyrocketed, its productivity has increased dramatically, and CEO Gary Loveman has been labeled as the Best Senior Executive in the Gaming Industry for

several years in a row by *Institutional Investor* magazine. Perhaps as the ultimate sign of the company's true value, two buyout firms recently reached an agreement with the Board of Directors of Harrah's Entertainment to take the company private for \$90.00 per share – indicating they believe the company to be worth significantly more than that offer.

Understanding what happened during this dramatic transformation of the company's competitiveness is reason alone for management scholars to study Harrah's. However, the company is also an accomplished service innovator. Inspired and enabled by a data collection and management system dressed in the garb of now familiar "loyalty programs," the company has developed the very scalable service differentiation capabilities I briefly described above. It has a highly integrated and multifunctionally-trained team that leads the company. Management bonuses are based on customer satisfaction scores, and Harrah's may be the only company that awards cash bonuses to every single property-level employee if customer satisfaction scores (which are regularly measured) improve.

Given the fact that Harrah's had limited access to capital resources over the past eight years, comparing performance measures such as stock performance, accounting profits, or even revenue growth does not do justice to the company's ability to generate substantial returns from the assets with which it had to work. Further, consolidation that has taken place in the industry over the past eight years also confounds performance analysis. One measure that appears free of these considerations and is therefore an effective measure of management's ability to squeeze returns from an existing asset pool is cash operating earnings as a percentage of tangible assets. The table below compares the results of Harrah's and its primary competitors on this metric.⁴

⁴ The use of cash operating earnings in the numerator helps to offset the impact of non-cash charges such as depreciation and amortization, as well as non-operating financial impacts. The use of tangible assets in the denominator removes the impact of goodwill and hence does not penalize companies that have acquired assets.

Table 1: Harrah’s vs. Major Gaming Companies: Cash Earnings Return on Assets*

	<u>Ameristar</u>	<u>Harrah's</u>	<u>Station</u>	<u>Wynn</u>	<u>MGM Mirage</u>
1997	14.0%	18.3%			17.2%
1998	8.1%	16.4%	12.6%		9.8%
1999	13.2%	18.1%	18.6%		14.8%
2000	7.7%	19.0%	20.7%		9.0%
2001	19.1%	18.8%	14.3%	-3.1%	10.1%
2002	16.1%	21.4%	15.9%	-1.8%	10.9%
2003	20.2%	19.3%	17.0%	-2.5%	9.9%
2004	18.8%	18.3%	18.2%	-2.3%	11.5%
2005	19.5%	11.8%	15.3%	2.5%	9.6%
Average	15.2%	17.9%	16.6%	-1.4%	11.4%

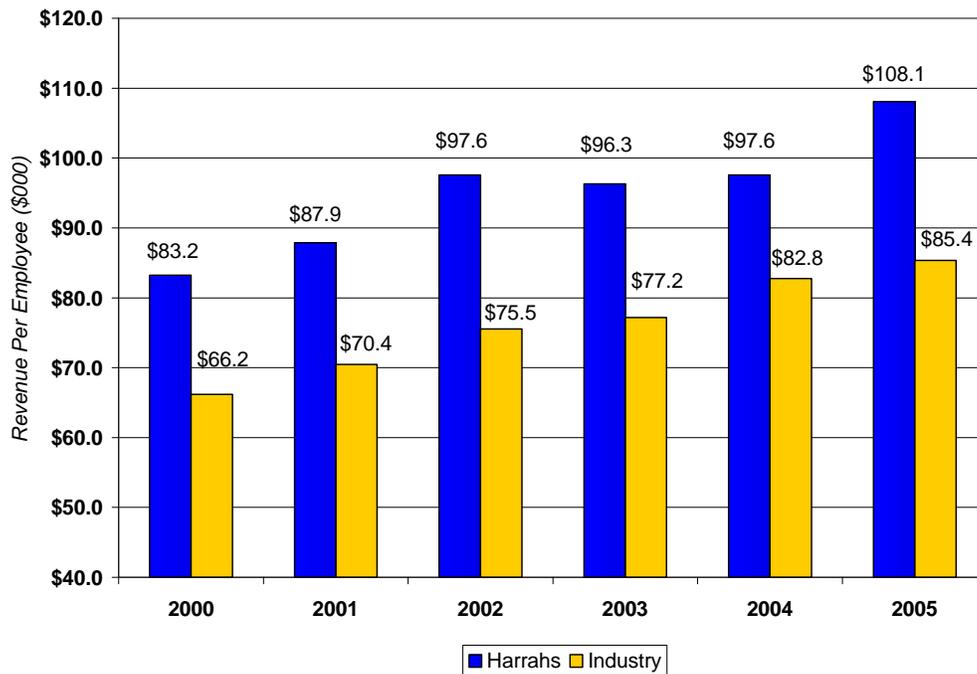
* Operating Income plus Depreciation & Amortization Divided by Tangible Assets; Source: Securities & Exchange Commission Filings

Harrah’s ability to squeeze profits from existing assets is unmatched in the industry, even after factoring in the adverse impact of Hurricane Katrina and one-time expenses associated with the acquisition of Caesar’s Entertainment, which disproportionately affected Harrah’s results in 2005. The two closest competitors (in terms of returns) are Ameristar Casinos and Station Casinos. Both are significantly smaller companies operating within (relative to Harrah’s) far more constrained geographical footprints. Thus, Harrah’s has achieved higher returns *on a significantly larger base of assets*, a not-insignificant accomplishment.

Further, Harrah’s has utilized information technology to constantly improve employee productivity. The company continues to outpace its peers in terms of productivity. A simple gauge of productivity, “revenues per employee,” demonstrates the efficiency of a labor force. As the chart below shows, Harrah’s has consistently outperformed the overall casino industry⁵ in terms of employee productivity over the past six years.

⁵ Note that the “casino industry” averages are taken from American Gaming Association data, which *includes* Harrah’s Entertainment. Removing Harrah’s from the casino industry data would increase the difference between the two statistics as Harrah’s raises the industry averages.

Graph 1: Harrah's Entertainment Employee Productivity vs. US Casino Industry



Source: Harrah's Entertainment, American Gaming Association

Scalable Service Differentiation in Action

Harrah's scalable service differentiation model has created a powerful capability that is emerging to be a source of advantage over its competitors. By meticulously tracking customer transaction data via its Total Rewards loyalty program, Harrah's has developed a formidable database of customer behavior patterns that are linked to customer-provided demographic data. Given the cumulative nature of the database (it grows in size and value every minute of every day) and Harrah's physical footprint, it is unlikely that any other casino company will ever approach the breadth and depth of casino player understanding that Harrah's has achieved. Competitors that begin today will forever lag Harrah's database.

Because of this database, the company has developed unique insights into customer behavior patterns as well as customer worth to Harrah's. For instance, Harrah's not only thinks

about a customer in terms of her value to the company on a single trip – but rather considers what the lifetime value of a particular customer may be to the company. As Chief Executive Officer Gary Loveman notes,

Our system allows us to distinguish between what a customer may be worth to us if we get them to like us versus what their worth is as we see them today...I know the type of game the person plays, the level of their wager, and whether they live in a place where they are likely to be exposed to gaming a lot...

Let's imagine you have a 60 year old lady who visits our casino briefly, plays the \$10 slot machine for a few minutes, and then goes wherever it is she goes next. Based on her value from that visit, we would say "This is not a very interesting customer; she didn't spend much money with us; probably not worth pursuing." But instead, what we do is take that information and we compare it to what people like her do in the casino business... The fact that this is a lady who has time in her life because she's a bit older, she lives nearby a major casino market, and she's come in and played a \$10 slot machine all indicate to us that this is pretty good customer, but probably a very good customer of our competitors... (Loveman, 2005b).

The company has taken customer analytics to a new level and has accelerated its application to a real-time environment. One particularly noteworthy capability (which will be profiled later in the dissertation) in the Harrah's suite of services merits particular attention: the operational customer relationship management (OpCRM) tools and their corresponding rules that enable differentiated service.

While many companies utilize analytical customer relationship management (CRM) tools to analyze the value and worth of their customers as well as to design appropriate marketing campaigns based upon a customer's stated (and in the case of highly advanced companies, revealed) preferences, they usually focus on "after-the-fact" actions. A multi-billion dollar industry exists to support analytical CRM tools and capabilities, and such capabilities are widely dispersed among corporations in a wide-variety of industries. Harrah's Entertainment's use of operational CRM goes beyond analytical CRM in that it enables real-time application of data-analytic insights derived from traditional CRM capabilities. A simple example may help illustrate the difference.

Suppose an unknown customer comes in and registers for a loyalty card. He then begins play on a slot machine with it and proceeds to lose \$100 over the course of three hours of play. Given his type of play (wager amount, type of game, number of wagers per hour, etc.), his theoretical loss (i.e. the loss he should have incurred based on the casino's average statistical advantage) may have been \$20. Because gambling outcomes are stochastic, his actual loss exceeded his theoretical loss – resulting in what is labeled an "unlucky" experience. Analytical CRM capabilities would capture this information and design a marketing campaign (possibly delivered via direct mail) to entice the customer to return. The customer, however, would leave the casino feeling that the casino was particularly unlucky and may go across the street to play at another casino. His luck may be better there and he might then develop loyalty to that casino.

Operational CRM capabilities, however, would allow a real-time intervention to alter the customer's impression of the casino before he left. Knowing that the casino has won a "lucky \$80" from this customer, operational CRM would allow a reinvestment of some portion of that amount back into this first time visitor in an attempt to change his impression *before* he walks

out the door. In fact, based on his gaming profile (i.e. demographics, type of game, wager amount, distance from casino, etc.), operational CRM may even lead to an investment of more than \$80 in this customer because of his likelihood to be an extremely high-worth customer. One possible outcome of the operational CRM tool may be the issuance of free tickets to a show that evening via a ticket printed at the slot machine when a player removes his loyalty card. If the customer actually attends the show, he will surely attribute some value to the offer and may possibly even return to the casino later that evening either before or after the show. Statistically, his next gambling experience is likely to be “luckier” (i.e. his actual loss should be less than his theoretical loss) and he may therefore change his impression of the casino and may become a loyal customer.

This is just one example of a scalable service differentiation capability that Harrah’s has utilized to automate personalized experiences and deliver “auto-magic” onto the casino floor. Others to be profiled later in the dissertation include the slot service dispatch system (SSDS) and the Seven Stars program. These examples will provide insight into the tools and methods through which Harrah’s has overcome the efficiency vs. differentiation constraint.

As mentioned earlier, the scalable service differentiation capabilities that Harrah’s utilizes to deliver its services have helped it compete effectively against better, more capitalized competitors. Fundamentally, this advantage arises from switching costs. While switching costs are well understood in the domain of products, our understanding of both *consumer* and *producer* switching costs with respect to services is not as well explored.

Switching costs with services tend to be very different than with products. In particular, these costs tend to be reversed in terms of who bears the burden. It seems that *consumer* switching costs are typically higher and *producer* switching costs are typically lower for product

firms than for service companies, all else equal. Service firms, however, tend to have higher *producer* switching costs and lower *consumer* switching costs than product firms, all else equal.

For instance, consumer knowledge of and familiarity with products such as Microsoft Excel or Microsoft Word may make it more expensive for those consumers to change to Lotus 1-2-3 or Wordperfect. By switching producers, consumers “reset” their understanding of product features and capabilities and must relearn how to use the new product. Microsoft, however, does not bear any active costs (of course, it loses revenues) if a consumer switches products and does not generate any direct benefits (*vis-à-vis* its costs) from having a long history with a consumer.

With respect to services, the opposite appears to be true. Here, the burden of switching costs appears to be shouldered by the producer. Consider McDonalds. Because McDonalds takes the time to understand and design its menu to match its customer desires (on the go adults tend to be more health-conscious; the menu is therefore adjusted to include more salads), it becomes expensive to switch customers (catering to the needs of children who desire sweeter options, etc.). Customers however may move to a different fast-food chain without incurring any substantial costs. Thus, switching costs are borne by the producer in the case of services.

The strategy Harrah’s has utilized is based on generating consumer switching costs. While this is not unique to Harrah’s, it is definitely unique to the gaming industry. Further, while other service companies have attempted to generate consumer switching costs, the basis upon which they have done so is not as robust or as sustainable as the means through which Harrah’s has done so. The primary enabler of Harrah’s ability to generate consumer switching costs is the company’s Total Rewards database – which represents a substantial amount of transaction history between Harrah’s and its customers. This database is a digital manifestation of what I call “reciprocal history” in prior work (Mansharamani, 2004).

“Reciprocal history” is the term I use to describe the mutual experience base of a consumer interacting with a producer’s services and of a producer learning how to produce to a consumer’s needs. Reciprocal history does not apply equally to most product-oriented firms in which consumers acquire history and experience interacting with a particular producer’s offering. For instance, many consumers of products develop an understanding of product features that result in ease of use and familiarity with functions. Product producers, however, do not develop a significant understanding of consumers and the subtleties and nuances of their consumption methods. Although product producers run focus groups and attempt to understand product usage purposes and patterns (i.e. is the consumer planning on driving the automobile off-road?), producer understanding of product consumption can not be as detailed, thorough, or exhaustive as producer understanding of service consumption because of the intimate interaction that occurs between a service producer and consumer.

This is an inherent characteristic resulting from customer involvement in service production. Consider legal services. A lawyer understands the consumer’s situation better than any self-help legal product ever can. This is so because of the customer’s involvement of interacting with the lawyer. Consider auto repair services. Through interaction over time, the mechanic develops an understanding of consumption patterns and needs, how a car is driven, and whether its owner “rides” the brakes. Consider airlines. American Airlines, for example, has knowledge of my most frequented travel destinations, my seat preference, my appetite for restrictions on a ticket, my cost consciousness, etc.

In no way do I intend to imply that producers and consumers in the products context do not develop detailed understandings of each others capabilities and needs. Rather, I am suggesting that producer-consumer understandings are more detailed, thorough, or exhaustive in

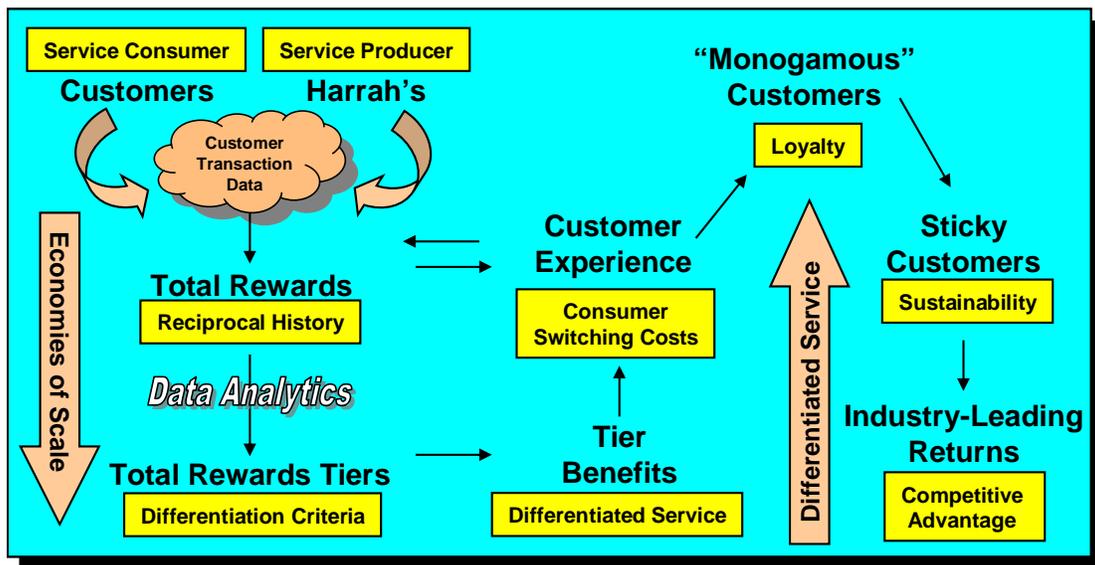
the context of services—due to the highly interactive nature of producer-consumer relationships in service delivery and consumption. Thus, customer involvement in service production leads to service producers directly observing a consumer’s actual preferences and needs (vs. the “stated” preferences that product producers obtain). This shared history that results in a producer acquiring intimate knowledge of consumption is “reciprocal history.” In Harrah’s case, Total Rewards is the store of this reciprocal history.

Reciprocal history alone, however, does not generate competitive advantage. Rather, if utilized effectively, reciprocal history can generate the consumer switching costs that lead to competitive advantage. Reciprocal history exacerbates and intensifies service consumer loyalty to particular producers and service producer loyalty to particular consumers through switching costs that arise for *both* service producer and service consumer.

Consider hotel services. As a hotel learns more about my actual preferences, it becomes better positioned (relative to competitors) than others to efficiently serve my needs. No need to provide me with a room containing a mini-bar that must be checked and restocked every night if I’ve never purchased a mini-bar product. By switching consumers, producers “reset” their understanding of consumer needs to an “average level” intended to satisfy the average consumer (i.e. they must offer rooms with mini-bars to all new consumers). When reciprocal history is introduced and utilized, however, consumers develop a switching cost as well. If a hotel knows that I prefer hypoallergenic pillows and the *Wall Street Journal* (vs. the *USA Today*), they are meeting my needs more efficiently than their competitors may. By switching producers (i.e. a new hotel), I am now forced to effectively “reset” a producer’s understanding of my needs—thereby reducing the quality of my experience and the service I receive.

In Harrah’s case, the Total Rewards program embodies the reciprocal history. Many of the company’s scalable service differentiation capabilities (based upon the reciprocal history) are encouraging the development of consumer switching costs. By growing its understanding of customer behavior over time (via the Total Rewards database), Harrah’s has created the basis for a scalable service differentiation strategy. Over time, Harrah’s is becoming increasingly personalized (i.e. differentiated) in how it serves its 40 million (i.e. scale) customers—which in turn generates consumer switching costs. The figure below diagrams how Harrah’s has created what may prove—over time—to be a service-specific competitive advantage through scale and differentiation of its offering.

Figure 1: Scale and Differentiation at Harrah’s Entertainment



An Overview of the Dissertation: Brief Chapter Summaries

The next chapter (Chapter 2) of this dissertation is a detailed review of the existing literature on services and service innovation. It summarizes the current state of understanding in academic literature. In addition to defining the five unique service characteristics that

distinguish services from products, the chapter concludes that the literature does not fully incorporate the unique service characteristics into existing theories of innovation or development. Of particular interest for further investigation is the role of a customer in the process of producing a service – and the inherent variability introduced by such involvement. The chapter concludes that customer involvement produces a trade-off between differentiation and scalability, resulting in a 2x2 framework through which to analyze service innovations.

Immediately following the literature review, Chapter 3 evaluates the topic of service innovation within two service companies that have been remarkably successful within two of the largest sectors of the global economy – transportation and logistics, and education. Short cases are presented of both United Parcel Service and the Apollo Group. The three service innovations presented in the UPS case highlight how the company has developed a service innovation agenda that is focused on producing new offerings that are repeatable and productizable. Similarly, the two service innovations profiled in the Apollo case demonstrate the desire for standard, scalable offerings at the world’s largest education institution. In both of these examples, the results of the service innovation efforts are “product-like” offerings that are highly scalable but become undifferentiated in the process of becoming scalable. The chapter concludes with a short discussion of how standardization, by itself, may actually be detrimental to long-term competitive advantage as it may reduce customer switching costs and change the basis of competition towards cost / price.

Chapter 4 sets the context for the detailed case study of Harrah’s Entertainment by providing an overview of its overall competitive strategy within the gaming industry. The chapter includes a review of the type of customers that seek casino entertainment, and the various strategies pursued by the main US casino operators in pursuit of those customers. A

brief overview of Harrah's is presented, as well as short profiles of Harrah's primary competitors. A short section then reviews the casino industry's attitudes towards technology, and the chapter concludes with a detailed discussion of the industry's competitive dynamics and how well the Harrah's strategy has performed within it.

The following chapter, Chapter 5, begins the detailed discussion of Harrah's service differentiation strategy. It begins with a short discussion about how Harrah's conceptualizes its offering to customers. The chapter then describes how service differentiation imbues many of Harrah's services, and how the company strives to make some customers "more equal than others." Next, the overall strategic objective of monogamous customers is discussed, as is the role of Total Rewards and Harrah's IT systems in capturing reciprocal history and generating mutual switching costs. Future technological plans are briefly discussed – with particular attention to their ability to influence the delivery of differentiated service.

Chapter 6 then turns to some of the scalable service differentiation capabilities that Harrah's has designed, developed, and delivered at its various properties. It begins with an insight regarding customer behavior within a casino—namely that bad service or service interruptions are seen to be luck "busters." Given this insight, one of the objectives of the differentiated service strategy is to minimize the risk that Harrah's best customers are exposed to luck busting outcomes. Three scalable service differentiation capabilities are then addressed: (1) the slot service dispatch system, (2) the Seven Stars tier, and (3) the operational CRM capability. For each of these service innovations, I describe the capability, its fit with Harrah's service strategy, its performance, and how it fits into the scalability – differentiation framework.

The next chapter (Chapter 7) captures many of the elements of Harrah's culture and management approach that are essential to support the scalable service differentiation strategy.

In particular, I review four primary components of the Harrah's service system that appear integral to the company's service operations: (1) the ability to put employees in a "mode" to deliver great service, (2) the organization of the firm's human capital to match the best customers with the best employees, (3) the incentivizing of employees towards increased customer satisfaction with monetary bonuses for all frontline Harrah's employees, and (4) the heavy focus on measurement and evidence-based management.

Chapter 8 utilizes the research findings to suggest applications of the scalable service differentiation strategy to other service industries. Three examples are provided, with brief discussions of how scale and differentiation can be achieved in the air transportation, online commerce, and communication services industries. The short summaries of each industry merely illustrate how companies within these industries can utilize the principles of scalable service differentiation to achieve slight advantages that may accumulate into a significant competitive edge.

Chapter 9, the Conclusion, summarizes the paper's findings and articulates a methodology for developing a scalable service differentiation capability. Three key ingredients are described as essential to the strategy: (1) a loyalty program, or other means of linking specific transaction data with specific customers, (2) an analytic engine that determines the ranking/prioritization of customers and the criteria upon which to differentiate service, and (3) a set of delivery tools that automate consistently differentiated service across a company's touch-points with its customers.

Chapter 2 – A Review of the Existing Literature

According to the 2005 edition of the *OECD in Figures*, services contribute approximately 78% of the gross economic value added in the US, 69% in Japan, and 74% in the United Kingdom. Of the thirty countries for which data is provided, none have a services contribution below 55%. The country with the highest service contribution is Luxemborg (83%) and the country with the lowest is Ireland (56%). It is also worth noting that over the 1993-2003 timeframe, the average services contribution to the economy of an OECD country grew by 6.8%. Labor figures are equally persuasive, with the service sector accounting for more than 80% of employment in most countries. As these data demonstrate, services are an important and growing part of the global economy. Despite their importance, services have received disproportionately little attention from academics in management fields and at business schools around the globe. The purpose of this chapter is to review this recent literature and develop a map of what we know about the management of services, and more precisely, the management of innovation in services.

A major reason behind the scarcity of focus on services lies in the history of how services have been conceptualized and measured. Historically, services have been thought of as unproductive. Adam Smith, for instance, describes services as inherently inferior to manufactured goods:

...the labor of the manufacturer fixes and realizes itself in some particular subject or vendible commodity, which lasts for some time at least after that labor is past...[while] the labor of...services generally perish in the very instant of their performance, and seldom leave any trace or value behind them...(Smith, 2002 printing, p.112).

For a more recent example, consider this quote from the marketing literature: “When a good is purchased, the buyer acquires an asset; when a service is purchased, the buyer incurs an expense” (Rathmell, 1966). In addition to viewing services as unproductive, most governments and statistics-gathering agencies have historically treated services as a residual category. In fact, for much of the twentieth-century (and the corresponding defining, mapping and measuring of economic activity categories), many economists and statisticians treated services as a “residual” or “tertiary” sector – supplementing the primary “raw materials” and secondary “manufactured goods” sectors (Miles & Boden, 2000). Services were anything but a commodity or a good.

The rapid growth of employment in the services sector during the 1960s and 1970s, as noted by Miles & Boden, resulted in two contrary interpretations: (a) politicians, sociologists, and geographers developed a theory of the “post-industrial” society while (b) economists, seeking a return to documented productivity gains resulting from manufacturing, labeled the new era one of “de-industrialization” and called for a re-industrialization to overcome the economic malaise that characterized the early 1980s.

The post-industrial society was seen as a positive development, one in which demand for material goods had been virtually satiated and in which affluence led to increasing demand for services. According to these theorists (epitomized by Harvard sociologist Daniel Bell’s *The Coming of the Post-Industrial Society*), producing services was a higher value use of human capital and harkened the arrival of an “information age” in which information processing capabilities (not manufacturing abilities) became key to economic success (Bell, 1973). Services was the natural next step in economic progression – just as productivity gains in agrarian pursuits had led to industrial life, so too did manufacturing innovation lead to a service focus. Services

were seen as superior to goods; and allowed for the rapid absorption of displaced manufacturing jobs while simultaneously increasing the proportion of “thought” that went into work.

The de-industrialization school, meanwhile, emerged in reaction to the large-scale reductions in manufacturing employment during the 1980s (primarily in the UK and US).

De-industrialization arguments are often little more than a reassertion of the view that only the production of tangible goods constitutes productive work...one line of argument is almost moralistic: if consumer demand is shifting to services, this is the symptom of cultural decadence, the growth of a hedonistic consumer culture, or welfare dependency, rather than a creative and production oriented society. An alternative perspective...sees the growth of the service sector as reflecting a failure to modernize...rather than pointing to shifts in consumer demand (Miles & Boden, 2000).

Some even sought to explain the rapid growth of the newly-industrialized-countries (“NICs”) in terms of an opportunity presented by de-industrialization in the West (Singh, 1992).

Despite this increasing focus upon the service sector among policy-makers, politicians, and (non-management) social scientists, the conspicuous lack of attention from the management community within academia reflected confusion as to the ramifications (if any) of a service economy upon the practice of management. Early management research on services even had a distinctly “manufacturing-like” tone and vocabulary. For instance, note the titles of Theodore Levitt’s (one of the earliest management scholars focused on services) two most-cited pieces: “Production-line Approach to Services”(Levitt, 1972) and “The Industrialization of Service” (Levitt, 1976). The tone of both pieces reflects a belief that the management of services was not different than the management of products or manufactured goods. In fact, services were seen as

a new domain in which to apply lessons learned from the industrialized economy. Some even began to view services as an additional offering at the root of which was a manufactured offering (Quinn, Baruch, & Paquette, 1988). Forward-thinking management scholars did begin, however, to focus increasing amounts of attention upon the uniqueness of services and the ramifications of these characteristics upon the management of strategy, innovation, R&D, operations, and marketing.

While management scholars remain interested in innovation, much of their focus has been upon products and product companies (Abernathy & Utterback, 1978; Anderson & Tushman, 1990; Benner & Tushman, 2003; Christensen, 1997; Henderson & Clark, 1990; Tushman & Murmann, 1998; Tushman & Anderson, 1986; Utterback, 1994; Utterback & Abernathy, 1975), retarding theoretical advancement of services innovation. Although several management theorists have studied the management of service operations (Bitran & Logo, 1993; Sasser, Hart, & Heskett, 1991; Sasser, Olsen, & Wyckoff, 1978) and the role of technology in services (Guile & Quinn, 1988a, b; Quinn, 1992; Quinn & Paquette, 1990), few have explicitly addressed the issue of innovation in services (Barras, 1986, 1990; Martin & Horne, 1993; Miles, 2000; Sundbo, 1997, 2000; Tether, 2003; Thomke, 2003a).

Some management scholars have described services innovations in distinctly product terms (Bitran & Pedrosa, 1998; Bullinger, Fahrnich, & Meiren, 2003; Cooper & Edgett, 1999; Guile & Quinn, 1988a; Menor, Tatikonda, & Sampson, 2002; Meyer & DeTore, 1999; Thomke, 2003a), noting the importance of new service development processes, experimentation, and an understanding of user needs. Guile and Quinn note that “many of the principles that have proved so essential to innovation management in product or manufacturing environments are equally important in services,” while others describe an “R&D” function within a services context

(Baumol, 2002; Edvardsson, Gustafsson, Johnson, & Sanden, 2000; Gwynne, 1998; Thomke, 2003a). Others have suggested that service innovation, like product development, must be thought of according to development procedures as well as the interaction of various design components (Bitran & Pedrosa, 1998; Bullinger et al., 2003; Cooper & Edgett, 1999; Meyer & DeTore, 1999; Shostack, 1984). The immediate task facing management academics interested in service innovation will be to assess the usefulness of the assertions (see sections below on product development organization, development processes, and new service development.)

Despite a myriad of arguments assuming and highlighting service innovation's similarity to product development, some researchers have tried to articulate key differences between service and product innovation. They have argued that service organizations do not have "R&D" infrastructures (Shostack, 1984; Sundbo, 1997) and that "service businesses are not product businesses" (Nambisan, 2001). Cusumano's extensive work on the software industry (Cusumano, 2004; Cusumano, 1991; Cusumano & Yoffie, 1998) also highlights the uniqueness of services and the usefulness of service revenues during tough economic conditions. Others note that innovation in services demands unique organizational forms (Sundbo, 2000; Vermeulen & Van Der Aa, 2003).

In preparing to embark on management research that pushes the bounds of what currently receives attention within business schools, I first sought to identify key gaps in the service innovation literature so as to determine "ripe" jumping off points that merit attention. As the divergence of opinions regarding the existence of service and product differences in the context of innovations demonstrates, basic distinctions between services and products remain obscured. As noted in a recent opinion piece in the *Financial Times*, "it is now time to update our curriculum for teaching and researching innovation to address the dominant sector of economic

activity” (Chesbrough, 2004). A detailed review of the existing literature and the development of a research agenda in this domain will shed needed light upon service innovation and the service development process.

How do Services and Products differ?

As set forth above, services have historically been described via a negative definition (i.e. by describing what services are not). Anything that was not a commodity or manufactured good was a service. Needless to say, this definition was not particularly conducive to research or development of the service-specific management field. The lack of consensus and rampant confusion has resulted in missed opportunities for productive research. This chapter of the dissertation will review the management literature’s current conceptualization of services and conclude with a positively-defined, working definition of what constitutes a service. Ultimately, it will be possible to formulate a set of key criteria that merit including an offering as a “service.”

The importance of classification and categorization should not be understated, especially given the goal of developing a service category distinct and unique from a “product” category. The true value of labels and categories, as noted by Hambrick, lies in the ability to infer unknown attributes to members of a group for which some attributes are known (Hambrick, 1984). Thus, by developing categories and classes that are based on common criteria and characteristics, we may be able to infer the attributes (upon the whole class) by merely studying the behavior of a sample of that class. A successful classification scheme empowers research and accelerates scholarly progress around the “theory-building” track (Christensen, Carlile, & Sundahl, 2003), enabling researchers to identify anomalies and further categorize/segment in a manner that allows the development of “anomaly-free” theory.

Two of the most important criteria of an ideal classification system are mutual exclusivity and completeness (Bowker & Star, 1999). Mutual exclusivity demands that an item not be a member of more than one category and completeness requires that all items belong to a category. An ideal definition of a service will therefore focus upon what makes a service unique.

The earliest definitions of services were provided by the marketing literature (Judd, 1964; Rathmell, 1966). Judd (1964) was building on his 1962 dissertation which criticized the American Marketing Association's negative definition of service, provided below:

Services - Activities, benefits, or satisfactions which are offered for sale, or are provided in connection with the sale of goods. Examples are amusements, hotel service, electric service, transportation, the services of barber and beauty shops, repair and maintenance service, the work of credit rating bureaus. This list is merely illustrative and no attempt has been made to make it complete. The term also applies to the various activities such as credit extension, advice and help of sales people, delivery, by which the seller serves the convenience of his customers. (Pyle, Converse, & AMA, 1960 as quoted in Judd (1964))

Judd defines a marketed service as a transaction in which “the object of the market transaction is other than the transfer of ownership (and title, if any) of a tangible commodity.” Further, Judd goes on to categorize three types of services: (a) rented goods services, (b) owned goods services, and (c) non-goods services.

As noted in Judd's first two service categories, services are often linked with goods and products. Whether referred to as a goods-service continuum (Rathmell, 1966) or a fluid boundary between goods and services (Quinn et al., 1988), there is clearly a grey area between products and services that obfuscates simple classifications. In seminars and classes alike, a

great deal of confusion exists around the product-service distinction. Nobody wishes to have a product for the sake of having a product; rather, one acquires a product for the service that it renders. Theodore Levitt, in his classic 1972 *Harvard Business Review* article entitled the “Production-Line Approach to Services,” noted that “there is no such thing as a service industry. There are only industries whose service components are greater or less than those of other industries. Everybody is in service” (Levitt, 1972). Likewise, Quinn and colleagues have noted that most manufacturing costs are in fact attributable to services, with very little of the activity base actually involved in the alteration of raw materials into finished goods (Quinn & Gagnon, 1986); services such as repair, maintenance, delivery, collections, pre- and post- purchase support, etc. compose this “massive hidden service sector” (Levitt, 1976).

Services in some form have found a receptive audience in the operations research community. Here, attention has been focused on the application of operational optimization theories to the service sector, in the belief that application to services of lessons learned in the manufacturing sector would yield substantial returns (Levitt, 1972, 1976). This attention did not stop at application of the industrial logic to service delivery; rather, it continued to describe new service development in distinctly product terms (Bullinger et al., 2003; Cooper & Edgett, 1999; Edvardsson et al., 2000; Meyer & DeTore, 1999; Tidd & Hull, 2003).

To date, there has been shockingly little focus upon services outside of the operations and marketing literatures. The ProQuest ABI/Inform online research database confirms this; the results of several searches conducted as of early 2006 are listed below:

Table 2: Articles Containing “Service” in the Title, by Journal

Journal	Discipline/Focus	“Service” in Article Title (Citations / Year on Average)
<i>Production and Operations Management</i>	Operations	6
<i>The Journal of Marketing</i>	Marketing	> 4
<i>Administrative Science Quarterly</i>	Organization	< 1
<i>Management Science</i>	Multi-disciplinary	< 4
<i>Research Policy</i>	Multi-disciplinary	< 3
<i>Industrial & Corporate Change</i>	Strategy	< 1
<i>Organization Science</i>	Organizations	< 1
<i>Harvard Business Review</i>	Managers	< 2

Thus, *Productions and Operations Management*, arguably the most prestigious and respected journal in the operations community, and *The Journal of Marketing*⁶, arguably the marketing equivalent of the Productions and Operations Management journal, are representative of the disciplinary breakdown of attention to services. When one contrasts this attention with the number of articles in the non-operations and non-marketing journals: *Administrative Science Quarterly*⁷, *Management Science*, *Research Policy*, *Organization Science*, *Industrial and Corporate Change*, and *Harvard Business Review* (arguably the most relevant for managers) each have meaningfully less focus on the topic of services.

Before reviewing the existing service innovation literature (if it can be so called), this chapter addresses the task of classification. It is important to clarify the distinction between a

⁶ Further, and perhaps more illustrative, is the fact that the marketing community has a dedicated journal for the subject of services marketing entitled the *Journal of Services Marketing*.

⁷ Just to assuage the reader’s concern that the last six years may have been anomalous, a search was conducted of *ASQ* for articles with “service” in the title going back to 1975—only 15 articles appeared in total.

product and a service offering. Understanding the unique characteristics and traits that merit labeling a particular offering a “service” is the first step in the categorization and classification process. A review of articles across marketing, operations/productions, and other management literatures yields a view of “service characteristics” that exhibits both consensus and confusion with respect to what unique traits characterize a service.

After an exhaustive search of journals and academic journals, I was able to identify 13 articles that had some discussion of characteristics that distinguish a service from a product. These 13 articles, analyzed in the table below, serve as the “literature” from the perspective of understanding the unique service characteristics. While the list of articles I include in my definition of the “literature” is likely not complete, it is definitely representative of the current academic understanding of services and how they differ from products.

Consensus exists that services are intangible, perishable, simultaneously produced and consumed, and heterogeneous. Confusion dominates regarding qualities such as capital and labor intensity, the role of the customer, magnitude of centralization, the importance of location, and the importance of culturally specific issues. The table below summarizes my interpretation of the literature vis-à-vis the discussed “service peculiarities” and “unique service characteristics.” The shaded columns represent characteristics that are in the “consensus” and the un-shaded columns are areas of perceived confusion.

Table 3: Evaluating the Key Service Characteristics: An Overview of the Literature

<i>Author (Year)</i>	<i>Service Characteristics / Traits</i>										
	Intangible	Simultaneous Production and Consumption	Perishable	Heterogeneous Offering	Customer as Participant	Customized; Limited Scale Economies	Labor / Human Resources Intensive	Co-Located	Limited Scale	Capital Intensive	Cultural Specificity
(Bitran & Logo, 1993)	X	X	X	X				X			X
(Chase, 1978)				X	X	X			X		
(Chesbrough, 2004)	X	X	X		X	X					
(Cooper & Edgett, 1999)	X	X	X	X							
(Edvardsson et al., 2000)	X	X	X		X	X	X	X	X		
(Heskett, 1987)	X	X	X				X	X			
(Judd, 1964)	X										
(Miles & Boden, 2000)	X	X	X	X	X	X					
(Nightingale, 2003)	X	X		X							
(Quinn & Gagnon, 1986)	X	X	X	X						X	
(Shostack, 1984)	X	X	X								
(Sirilli & Evangelista, 1998)	X	X					X				
(Vermeulen & Van Der Aa, 2003)	X	X	X	X							
TOTAL (13 possible)	12	11	9	7	4	4	3	3	2	1	1

Each of the four consensus characteristics merits brief discussion. The goal here is not to discuss how each of these four service characteristics affects management practice; rather, the objective at this point is simply to illustrate what is meant by the characteristic and how the characteristic manifests itself in a service offering.

Intangibility

The most accepted service characteristic in the literature is intangibility. Examples abound. A customer purchases services from a hotel. After spending the night in the room,

he/she has nothing to show for the service purchased. Another customer picks up the phone and dials a friend in Europe. After utilizing this communications service, he/she is billed for value received but again has nothing to show for the service purchased.

Judd (1964) noted that the intangibility requirement for classification of an offering as a “service” is extremely useful in that it provides two key benefits: (a) the criteria is clear and mutually exclusive (either something is tangible or it is not, there is no “hybrid”), and (b) the demarcation will allow for appropriate description of services and the development of an understanding of how they differ from products.

Although services often have a physical record of their having been performed (consider the actual report produced by a management consultant), the actual service is not tangible. This is an important distinction to make as the intangibility description is often not as clear-cut as one would hope. Often a tangible good is provided to a customer by a service company. To remain consistent, however, we can distinguish between the service and the product – although they may be bundled. Consider the case of fast-food restaurants such as McDonalds. Although one can argue that they are producing hamburgers, the appropriate analysis will allow for segmentation between the product and the service. The product is the beef, bun, onions, ketchup, and paper-wraper. The service is embodied in the preparation of these items into an offering that is purchased, the provision of an environment in which to eat the offering, and the convenience of allowing for a single financial transaction. Surely one sees the value of buying a hamburger for ~\$1 vs. the procurement of ground beef, buns, tomatoes, napkins, ketchup, and a place to eat.

Simultaneity & Perishability

The choice to link (and ultimately dismiss one of) the next two most common characteristics is a conscious one as they appear highly inter-related. It is precisely because

services are simultaneously produced and consumed that they are also perishable. In fact, returning to our classification and categorization logic, the value of a distinguishing characteristic is that it is mutually exclusive (i.e. if it applies to a service, it does not also apply to a product). Unfortunately, despite the consensus in the literature that services are perishable, this distinction is not a useful one. Many products are perishable as well. Consider a banana, which is thought to have a useful life of less than one week. (A useful modification to the definition, perhaps, is that services are *instantaneously* perishable. See below.)

Simultaneity, however, is a useful characteristic and is unique to services. Examples include telephone calls, hotel stays, doctor/dentist visits, electricity procurement, cleaning services, or automobile maintenance services. It is impossible in each of these services to separate production and consumption. Air transportation provides another example. Consider a flight from Boston to San Francisco. The service offered is transportation between the two cities. The service “production” begins upon customer boarding and concludes upon deplaning at the destination. Service consumption, likewise, begins upon customer boarding and concludes upon deplaning. There is no way for service production to occur without consumption. An empty seat instantaneously perishes. It represents service production for which there will never be consumption. One might argue that the next available flight allows for later consumption (particularly if one has purchased a flexible ticket), but the argument falls upon itself. The later flight is a new service production.

Multiple services may be combined into a bundle that appears to offer non-simultaneity. Baggage delivery services (accompanied by air travel) may result in drop off before the flight and baggage claim after the flight. Occasionally (and unfortunately) these services are decoupled. Likewise, ticket purchase and customer service are “accompanying services” that

can be decoupled from the actual transportation services which the consumer has received. In each case, one will notice that the actual service is simultaneously produced and consumed in an offering.

Heterogeneity

As a result of the fact that “humans tend to be inconsistent in their behavior and therefore in their delivery and consumption of services” (Bitran & Logo, 1993), the customer-provider interface becomes a point of significant heterogeneity in services. One can contrast this heterogeneity with the factory-produced tangible offering which might have a six sigma quality rating of 99.9997% similarity to all other tangible offerings.

The literature accepts that humans are inconsistent and that services, often delivered by humans, are therefore unlikely to be homogenous. Services tend to be specialized to provide the greatest value to individual customers. Even seemingly homogenous customer objectives (such as in the airline industry where customers want to be taken from point A to point B) have been customized for customers demanding refundable tickets and those who are willing to pay for extra comforts while traveling (first class).

Further, the fact that humans are involved in the production and consumption of services leads to an inherently inconsistent social interaction that will lead to a potentially different experience each time. Several scholars have noted the importance of this “interaction” point, referring to it as the “moment of truth” (Bitran & Hoeh, 1990). Others have noted that customer involvement leads to necessarily heterogeneous outcomes and that managers of service companies should seek to minimize customer interaction in a quest for efficiency (Chase, 1978) – generally seeking to control customer involvement in the service production process.

Non-Consensus Attributes of Services

In addition to these ~~four~~ three “consensus” characteristics that are unique to services, several other characteristics are mentioned in the literature. The following brief review of each of these attributes intentionally avoids any discussion of why the literature lacks consensus.

Customer as Participant

The literature varies in the extent to which it addresses the importance of the customer in a service offering. The customer role in a service transaction is very different than his/her role in a product transaction; in a service transaction, a customer is a key participant in the production process and can play multiple roles. Professor Hank Chesbrough of the University of California at Berkeley eloquently captures this difference between a service and product transaction:

The service transaction is different. The exchange is generated by both parties, and the process of adoption or consumption is an integral part of the transaction. So the adopter or customer is also a co-producer, intimately involved in defining, shaping, and integrating the service into his or her organization. The supplier of the service can extend an offer of what is to be provided...but cannot entirely specify the requirements of the service. Instead, the supplier designs the system to elicit this information from its customers, and modifies the offering in response to customers' needs before the sale...(Chesbrough, 2004)

Several researchers have suggested using “degree of customer involvement” and “magnitude of customer contact” to classify service types (Bitran & Lojo, 1993; Bitran & Hoech, 1990; Chase, 1978; Chase & Dasu, 2001; Heskett, Jones, Loveman, Jr, & Schlesinger, 1994).

Some suggest “respecting the customer” (Bitran & Hoeh, 1990) while others suggest minimizing customer involvement to achieve greater efficiency (Chase, 1978).

Labor and Capital Intensity

Services tend to be produced via either labor or capital-intensive methods. Examples of services in the first group—high labor-intensity—include professional service firms such as management consultancies, law firms, accounting firms, and some training companies. These organizations are people-heavy, with a majority of the costs originating in human resources. Due to the inability to fire professionals on a project by project basis, the cost structures of these professional service firms are primarily fixed. Management of professional services firms is difficult, as personalities and egos often complicate efficient teamwork. Scholars have addressed the importance of recognizing this dependence upon employees, providing case studies of professional service firms managing strong egos while fostering teamwork (Lorsch & Tierney, 2002; Maister, 1993; Sasser et al., 1991).

Examples of high capital-intensive service offerings include hotels, airlines, and telecommunications services. Large fixed plants and high capital expenditures characterize these offerings, with initial start-up costs running into the hundreds of millions of dollars. Similar to the labor-intensive offerings, which are driven by staff utilization, these high capital intensity businesses are driven by plant utilization. Success is driven by customer loyalty, demand management, and achieving consistent consumer satisfaction. Scholars have written cases on airline, hospitality, electric utility, telecommunications, education, and logistics companies (Guile & Quinn, 1988a; Heskett, Sasser, & Schlesinger, 1997; Sasser et al., 1991).

Given the inability of capital or labor intensity to distinguish between service and product companies, it seems the distinction is not particularly useful. This is particularly true given that

many products are made via both labor intensive methods and capital intensive methods. Of greater value, perhaps, is the importance of “utilization management” in services (see below).

Co-Location

Most services are consumed in the same location at which they are produced (Bitran & Logo, 1993). This characteristic of services implies that producers either travel to the consumer or the consumer travels to the producer. It is impossible for a cleaning service to clean a house without visiting the house. The production (cleaning) necessarily occurs at the site of the consumption (the house). Similarly, a guest is unable to procure accommodations (the production) at a hotel without visiting the site to sleep in the room (the consumption).

While modern technologies are introducing an element of “distance” into this relationship (Edvardsson et al., 2000), they are unable to remove the essential existence of a production/consumption interface. This interface is referred to as the “moment of truth” (Bitran & Hoeh, 1990) because “much of a service’s perceived value is created at the moment and place of contact” (Quinn & Paquette, 1990) – which is often in the field.

Customization

Although several scholars claim that services are characterized by their high degree of customization (Chesbrough, 2004; Miles, 1993), several others note that services can be standardized in a manner that allows for increased efficiency and greater scale (Chase, 1978; Levitt, 1972, 1976). Within services, customization is most clear among professional and personal services firms that cater to each client’s specific situation. Tax preparation, legal, hair styling, and catering services are highly customized solutions to specific client needs.

Closely related to the issue of customization/standardization is the subject of scale economies. Given that scale is a derivative of the customization issue (higher standardization allows for greater scale and greater customization limits scale), the issue of scale is a moot point and follows from conclusions regarding standardization.

This customization distinction, however, does not help distinguish between products and services. Can products be customized? Of course. Consider Dell Computer, which offers customized computing products to meet client needs. It is also possible to order a car with the exact colors and features that you desire. Further, authors Joseph Pine and James Gilmore have noted that this approach can serve as the basis of a mass-customization strategy (Gilmore & Pine, 2000; Gilmore & Pine, 1997; Pine, 1993) which allows for the scale and cost benefits of mass production with the customized benefits of individualization.

While some may argue that these examples are not really customized products but rather configured products, the question then is matter of degree. Likewise, can services be standardized? Absolutely, one need only look at the delivery services offered by UPS or FedEx or restaurant services offered by McDonald's or Burger King.

Cultural Specificity

Bitran and Lojo (1993) note that the cultural context in which a service is consumed and/or produced is an attribute of the service itself: "culture influences the expectations and behavior of customers and service providers, and gaps that may exist between their cultural orientations can either enhance or detract from the service encounter." They go on to note how "good" restaurant service in the northeastern US differs dramatically from "good" service in the South. Northeasterners expect formal distance (both figuratively and literally) between the customers and servers, while Southerners prefer informal, friendly interactions between the

customers and servers. The issue of cultural specificity is obviously important in international contexts, particularly when crossing major cultural barriers (Asia vs. Western Europe, etc.).

While the subject of cultural specificity clearly applies to services, its value as a distinguishing characteristic (between products and services) is limited as cultural issues also come into play when marketing products. For instance, cars sold in the United States may be culturally unacceptable to Europeans who seek smaller (to accommodate parking constraints) and more fuel efficient (to accommodate higher fuel taxes) vehicles. Likewise, clothing styles may vary from culture to culture, resulting in a need to produce garments catering to the tastes of a particular culture.

Summary: What are Services and How Do They Differ From Products?

In an effort to synthesize the findings of the literature (and the interpretation thereof presented above), the table below captures the five main service characteristics that seem to have classification and categorization value in distinguishing services from products.

Table 4: The Five Key Service Traits

Characteristic	Description of the Trait	Air Travel Example Illustration
Intangibility	After “consuming” a service, no physical manifestation of the offering exists. Customers are not left with anything tangible as a result of their having purchased a service.	After a customer has consumed travel services such as air transport, she/he is left at the destination with nothing physical (apart from the ticket stub) to show for the expenditure.
Simultaneity/ Perishability	Services are simultaneously produced and consumed. Customers are therefore unable to see or experience the actual service they will receive before it is delivered. Further, services are perishable and cannot be “stored” in a format for later delivery.	If a passenger is on a plane, then she/he is consuming the service as it is produced. If she/he is not on the plane, then the service has perished and been produced without consumption.

Heterogeneity	Each service encounter is somewhat unique and the particular service being procured is not produced (for examination by the client or anyone else) before the time of consumption.	Every time a passenger gets on a plane, she/he is subject to the mood of the flight attendants, the weather conditions (turbulence), and air traffic (delays). Each affects the perceived quality of the service.
Customer Involvement	Due to the simultaneous (perhaps joint) production and consumption of services, customers affect the quality and effectiveness of the service; further, customers may interact among themselves.	Despite having an on-time flight without any turbulence, one unruly passenger can affect the service for all other passengers. Further, a passenger may demand a window seat when none is available.
Co-Location	Most services are also consumed in the same location at which they are produced.	It is impossible for one to consume air travel without being on the plane. Likewise, it is not possible to produce air travel without that same plane.

NOTE: Adapted from (Mansharamani, 2005).

How the Service Traits Affect the Management and Strategy of Firms

This section of the chapter evaluates the implications of the five unique service offering characteristics upon service firm management practice, in an effort to escalate the unit of analysis from the level of the service offering to the level of the firm. In particular, the objective is to explore how the unique offering characteristics demand unique *general* management practice. Further, this section of the chapter will also evaluate how these five unique characteristics might affect our analysis of firm strategy (assuming all else remains equal).

Implications of Intangibility

Three managerial implications arise from the intangibility attribute: (1) the marketing and sale of services is far more complex and “psychological” than that of products due to the inability to see or experience a service prior to its purchase/consumption – resulting in greater dependence upon reputation; further, the inability to return a service yields greater “angst” in the

purchase decision as it has a sense of permanence not present in product purchase decisions; (2) the intangible nature of service offerings makes it extraordinarily difficult to appropriate innovations due to the “open and obvious” nature of them; customers will want to know exactly what service is to be provided before they agree to procure the new innovation; and (3) intangible services that are bundled with products are not seen as valuable by themselves – despite the fact that the product may have no value without them.

Bitran and Lojo (1993) began to explore the managerial implications of this quality, noting that “the intangible nature of services makes it difficult to promote their consumption on purely technical grounds.” Due to the intangible nature of the service, decisions to purchase tend to overweight (relative to decisions to purchase products) expectations and perceptions (Chase & Dasu, 2001), resulting in the prevalence of service guarantees and quality assurance programs (Heskett, 1987; Heskett, Sasser, & Hart, 1990; Reichheld & Sasser, 1990).

Because customers are unable to see or experience the actual service they will receive prior to their purchase/consumption of the service⁸, reputation is also a prominent element of any service business model—this is not to say that reputation is not important in products, merely that it seems to be of greater importance in services. Consumers will likely depend on the experiences and impressions of others as well as their own beliefs in making decisions regarding services. Many academics have used this fact to develop theories stressing the importance of generating customer loyalty (Bitran & Hoeh, 1990; Chase & Dasu, 2001; Coyne, 1989; Edvardsson et al., 2000; Hart, 1990; Heskett et al., 1997; Shostack, 1984; van Biema & Greenwald, 1997).

⁸ See “Implications of Simultaneity/Perishability section below for a brief discussion of how standardization may affect a customer’s ability to judge the expected service based upon prior deliveries of the service.

Intangibility also makes it particularly difficult for firms to appropriate service innovations. The “open and obvious” nature results from the requisite sharing with customers what they will receive; without sharing, customers would not be able to assess the value of the offering. Further, although business method patents are an increasingly popular class of patents, the ability to seek intellectual property protection for an intangible good is limited and its effectiveness as a means of protection is questionable.

Third, intangibility exacerbates the “taking-for-granted” or undervaluing of a service by customers, particularly when the service is bundled with products. Certain services suffer from what earlier work labeled as the “lighthouse syndrome” (Mansharamani, 2005). Just like the unrecognized (until removed) value of a lighthouse, maintenance and preventative services are in an unfortunate situation vis-à-vis the customer when it comes to the obviousness of value delivered. Most customers do not realize the value of the service unless things go wrong, in which case they tend to blame the service provider. Service providers that efficiently and effectively accomplish their objective of no breakdowns, however, fall victim to their own success as customers may not see the value of their offering. Although reputation can alleviate some elements of this potential problem, the need to “materialize” the service and make the customer aware of value received remains important (Bitran & Logo, 1993).

From a strategic perspective, these three ramifications of intangibility (all else being equal) affect competition by impacting the threat of entry. As discussed above, the inability for customers to analyze an offering prior to its consumption greatly complicates the nature of the marketing function. In particular, reputation acquires an increased importance in the minds of consumers considering the purchase of service, which in turn reduces the threat of entry from new competitors that lack the reputation needed to compete.

Implications of Simultaneity / Perishability

The primary ramification of the simultaneous production and consumption of service offerings upon service firms is the inability to pre-produce services (i.e. create an inventory buffer) to smooth mismatches between supply and demand (Bitran & Mondschein, 1997). This has two direct ramifications for service managers: first, service production capacity may remain inactive for periods of time (a phenomenon I term “the stranded capacity problem”), and second, customer needs may be unmet during periods of peak demand (a phenomenon I term “the inadequate capacity problem”). These two direct results confuse pricing and complicate capacity planning (Berry & Yadav, 1996).

The stranded capacity problem arises from the relatively-fixed capacity of most service firms. While this is obvious in capital-intensive sectors such as air travel, hospitality, electricity, and telecommunications, it is also present in (skilled) labor-intensive services such as professional services. At the root of the problem is the inability to rapidly reduce capacity in times of weak demand. Two primary methods exist for dealing with the stranded capacity problem: (a) spurring demand during these periods (such as hotels and airlines with “off-peak” fares or other incentive programs), and (2) forming variable “capacity” (such as restaurants with wait staff paid hourly, construction firms with 100% temp laborers, and airlines that cancel flights when lacking adequate customer demand (they don’t really do that, do they?!), etc.)

The inadequate capacity problem is driven by the inability to inventory services. While it is definitely possible to prepare some portion of the service in advance of its delivery (Chopra & Lariviere, 2005), it is impossible to inventory a service. Thus, although accountants can pre-populate forms with prior year data, they cannot pre-calculate tax returns for potential

consumers. Likewise, auto repair services need an understanding of the problem (tire alignment, engine malfunction, air conditioning problem) before they can deliver a repair solution.

The inseparability of production and consumption, when combined with the relatively fixed nature of costs in these industries, leads to management efforts focused on utilization maximization. Given that utilization cannot at any point exceed 100%, many service firms “variabilize” supply and smooth demand to motivate customer purchases in off-peak periods.⁹ It is this problem that originally attracted operations scholars such as Gabriel Bitran, Theodore Levitt, and others to the study of service firms.

Finally, it appears that simultaneity complicates a problem discussed above under the “implications of intangibility” section – namely, the inability of customers to evaluate a service prior to its procurement. The fact that there are degrees of service standardization seems to cause some confusion on this matter. While a customer cannot in fact view the actual service that he/she will receive, the customer can view the service as delivered to other customers in prior deliveries. Consider airlines and package delivery services. While a customer may have an expectation of the service to be delivered (i.e. the plane takes off from Boston and lands in Dallas), there is no way to know about the “quality” of the service beforehand. Will the flight attendant be in a good mood? Will there be a screaming baby next to a focused business customer? What about turbulence and weather conditions? Perhaps the airspace is particularly congested today, resulting in massive delays...or that the baggage handlers forgot to load the 14 pieces of luggage that were connecting from a different flight... Thus, although the “unknown”

⁹ While it is true that firms can have workers continue to work overtime and exceed the planned capacity of the firm, such measures are only temporary as the fundamental constraint of capacity remains due to the simultaneity of production and consumption. After a service operation is 100% utilized for 24 hours per day, 7 days a week, 365 days per year, there is no ability to surge utilization.

factor of a service is smaller in standardized services, it is not absent. It merely boils down to a matter of degrees and gradations of “standardization.”

Perhaps the best admission of this variability in service performance arises from the financial services and investment management community’s primary disclaimer: “Past performance is no guarantee of future results.” Thus, although one can assume that past performance of a service has been acceptable, it does not necessarily mean that your own experience will be as positive as those before you. As stated above, service guarantees and other quality assurance/control mechanisms can be used to address this issue – but even these mechanisms target “after the fact” service recovery. The importance of reputation, highlighted above, is further strengthened by the simultaneity of services.

The strategic ramifications of the supply-demand management complication discussed above, however, create unique complications for the management of service firms. In particular, it affects the power of customers / buyers in a fairly dramatic manner. In evaluating the extremes of very specific and very flexible consumer needs, we find that customer need specificity dramatically alters the nature of the perishability-customer power relationship. In particular, customers with flexible needs have increased power. Consider the case of air travel. Those consumers willing to purchase air transport services at the last minute—when the services would otherwise “expire”—have tremendous power over producers. Surely \$50 received for a cross country flight is better for an airline than an empty seat crossing the country. On the other hand, however, consumers with very specific needs are significantly less powerful vis-à-vis producers. The need to fly on a specific date and on a specific routing leaves a consumer with few options. Thus, the perishability characteristic of services (all else being equal) interacts with the nature of customer needs to affect the bargaining power of customers.

Implications of Heterogeneity

The necessarily social nature of most services, as discussed above, leads to an inherently heterogeneous offering. Further, many services companies—such as auto repair, management consulting, investment management, IT services, and hotel companies—operate in unregulated environments. Despite the fact that no mandated restrictions affect these companies or protect them from market forces, many of these service companies use certifications to generate an image of quality consistency. Industry associations and independent certification organizations assure the consistency of human resource capability in several service industries. Even management consulting firms, which seemingly lack “quality assurance” measures comparable to certification, employ only MBA students from the top business schools—effectively creating a “pseudo-regulated” certification process. Similar certifications exist in IT services (Microsoft Certifications, etc.), finance (Chartered Financial Analyst), law (membership in the Bar Association), and real estate brokerage (licensure, etc.).

In addition to training for consistent service quality, managers need to train employees to be flexible enough to handle heterogeneous customers and to simultaneously produce a consistent offering that does not create any unnecessary reputation risk – a non-trivial task. Academics recognize the importance of this issue; two primary schools of thought exist as to the appropriate manner in which to utilize service employees.

The first, which I shall call the Empowerment School, suggests that optimal performance on the heterogeneity/consistency tradeoff is achievable via accommodation on the heterogeneity side of the equation (Bowen & Lawler, 1992; Bowen & Lawler, 1995; Schlesinger & Heskett, 1991). These scholars believe that managers should train employees so that they are flexible enough to accommodate heterogeneous customer needs (i.e. create “empowered” employees).

The most famous example of a company that has successfully utilized this approach is Southwest Airlines, where employees are empowered to adapt to customer needs.

The second school of thought is based upon the belief that employees can only add volatility and heterogeneity to the service and therefore need to be “trained” into operating like machines. This approach, which we shall call the Production Line School, essentially believes that service quality and performance can be improved through the introduction of scripts, policies, and procedures from which employees should not deviate (Davidow & Uttal, 1989; Levitt, 1972, 1976; Swank, 2003). McDonalds, Shouldice Hospital, and Jefferson Pilot Financial are three companies profiled in the literature that demonstrate how production-line style management can be successfully implemented.

From a strategic perspective, the heterogeneity of offerings leads a heavy dependence upon labor management. The two approaches highlighted above show the two strategic extremes, with empowerment dramatically increasing the importance of labor as managers demand “capable professionals” while the production line approach seeks machine-like execution from “dumb-labor.” Given that a primary ingredient in the production of most services is human labor, the heterogeneity characteristic of service therefore interacts with labor philosophies to affect the bargaining power of suppliers. In particular, managers that adopt an empowerment approach to heterogeneity management are more dependent on capable, dynamic, and adaptable labor (thereby increasing the bargaining power of labor), while those opting for a production line approach are willing to utilize virtually any labor (thereby decreasing the bargaining power of labor).

Further, the Empowerment School and the Production-Line School approaches impact the nature of rivalry and competition among existing firms. In particular, the production line

approach seeks to achieve consistency and standards comparable to that in manufacturing; the goal is scale, cost-efficiency, and high quality (defined as high consistency). The result of this approach is more-likely-than-not to be a competitive strategy based on price and scale.

Empowerment oriented managers, however, focus on enhancing the customer experience via a highly adaptable employee force that meets unique customer needs. As a result, companies taking this approach are more-likely-than-not to pursue competitive strategies based on customer experience differentiation.

Implications of Customer Involvement

Although customer involvement in the production process is not unique to services (Thomke & Von Hippel, 2002; von Hippel & Katz, 2002; von Hippel, Thomke, & Sonnack, 1999), it does lead to interesting managerial actions. To begin, managers need to understand that management of the customer is just as important as management of the employees—because both can equally influence the service production process due to the “location” of knowledge. Service firms need to devise appropriate mechanisms through which customer knowledge that may be tacit and/or sticky (Chesbrough, 2004; von Hippel, 1994, 2001) can be extracted – a task that is seemingly essential to the designing, developing, and delivering of new services.

For example, consider the service of an IT implementation firm. In order to deliver a high-value implementation of information technology, the client must provide the service firm an understanding of how the IT will be used, what business processes will be automated by the IT, etc. Without such knowledge, it becomes impossible for an appropriate solution to be devised. Similarly, it is impossible for even the most-skilled attorney to create an estate plan that accomplishes her/his client’s objectives without a detailed understanding of the client’s situation

and goals. Thus, the inherent nature of customer involvement in a service leads the managers of service firms to be dependent upon their customers.

Two primary research streams exist addressing the role of the customer in a service offering. The first, championed by Heskett et al. (1997), emphasizes the development of customer loyalty. According to these authors, the value of repeat interactions with the same customer rises dramatically as the number of interactions increase. Thus, the value of a customer increases with the nature and level of customer-employee interaction. High touch customers are better than low touch customers. The second research stream, epitomized by Chase (1978), claims that greater customer interaction yields lower standardization and efficiency. Effectively a production-line approach to customer management, the logic of the argument is that customers, like employees, introduce inefficiency and should be managed accordingly.

The involvement of the customer has quite significant ramifications for the strategy and management of service firms. As customer gain familiarity with companies, they become increasingly efficient co-producers of the service and are hence more valued “suppliers.” However, loyalty programs can lock-in customers in a manner that makes them less likely to leave, thereby reducing customer power. Parallels exist for new customers: they possess less power as suppliers but more as potential lifelong customers (once they get “locked-in”). These customer-producer relationships can also be reflexive, feeding upon themselves in a manner that increases switching costs for both parties: customer history with companies affects customer experiences which in turn affect their future history with the company. Finally, the “lock-in” competitive dynamics (driven by loyalty programs and the switching costs borne by companies when they seek to “change customers”) tend to affect the nature of rivalry among the existing firms by creating an increased marginal focus on existing customers.

Implications of Co-Location

The co-location of service production and consumption results in an increased geographical dispersion than with traditional product companies. For instance, most retail services are located at multiple sites to facilitate customer exposure. Similarly, lots of professional services (legal, accounting, financial planning, etc.) tend to take place with local vendors. While it would not be unusual for an American to procure a product that is manufactured in China, it is highly unlikely that that same American would procure legal services from a lawyer greater than 100 miles away from his/her hometown.

The primary implication for managers is that large service organizations will necessarily become geographically dispersed – with dramatic ramifications for the ability for a central office to monitor the “pulse” of the business. This development has led to the creation of new organizational forms to assist centralized general managers from becoming insulated from the business. Of particular note is the franchise format – popularized by many fast food and retail service companies. By creating a method through which local market knowledge trickles towards the central office, the franchise model simultaneously allows for geographic dispersion and (relatively) tight centralized management controls (Bradach, 1998).

Recent technological developments have made the co-location of producer and consumer an increasingly irrelevant characteristic from a strategic perspective. Does the fact that Amazon.com is based in Seattle affect its service to a customer in Texas? Because co-location as a characteristic does not affect strategic considerations for service firms, the topic boils down to one of location. Although location and the “clustering” of industries affects competitive strategy (Baptista & Swann, 1998; Krugman, 1991; Porter, 1998; Porter & Stern, 2001) and the innovation environment within firms, the topic is beyond the scope of this dissertation.

Summary: How Unique Service Traits Affect Firm Strategy & Management

Several key issues immediately emerge from a general management perspective with respect to service offerings. As discussed above, intangibility complicates the sales and marketing process in a way that increases consumer dependence upon reputation. Service guarantees were one method used to decrease this dependence. Further, recent advances in behavioral psychology have shed light on how to affect customer decisions. With respect to the simultaneity-associated problems of stranded and inadequate capacity, demand and supply management can supplement the “pre-processing” (to mimic inventory) to minimize productivity losses. Heterogeneity yielded two managerial issues – employee training philosophy (employees are either flexibly capable or need to be treated like machines) and customer management. The problem of customer knowledge has suggested the use of toolkits and the creation of loyalty, and organizational forms such as the franchise model can help overcome co-location issues.

The table below summarizes the existing research in the context of the general management ramifications of the five service offering characteristics. The next section of the chapter will evaluate how these five unique service traits affect/interact with extant innovation theory.

Table 5: The Service Traits, Managerial Issues, and Corresponding Research Topics

Characteristic	Managerial Issues	Research
Intangibility	Customer inability to evaluate a service prior to procurement; reputation paramount to successful sale	Service Guarantees (Hart, 1988, 1990; Reichheld & Sasser, 1990)
	Perception and image of service are very important	Customer psychology management (Berry & Yadav, 1996; Chase & Dasu, 2001)

Simultaneity/ Perishability	Stranded capacity problem	Manage supply and demand (Bitran & Mondschein, 1997; Sasser, 1976; van Biema & Greenwald, 1997)
	Inadequate capacity problem	Mimic inventory with “pre-processes” (Chopra & Lariviere, 2005)
	Customer inability to evaluate a service prior to procurement	Service Guarantees (Hart, 1988, 1990; Reichheld & Sasser, 1990)
Heterogeneity	Employee heterogeneity increases inconsistency of service offering	Production-line approach (Davidow & Uttal, 1989; Levitt, 1972, 1976; Swank, 2003)
	Employee flexibility increases the perceived value of the service	Employee empowerment approach (Bowen & Lawler, 1992; Bowen & Lawler, 1995; Schlesinger & Heskett, 1991)
	Customer heterogeneity affects service delivered to other customers	Manage customers (Chase, 1978)
Customer Involvement	Need for knowledge resident with customer	Toolkits and customer involvement (von Hippel, 1994, 2001; von Hippel & Katz, 2002; von Hippel et al., 1999) Facilitate knowledge transfer via loyalty (Heskett et al., 1994; Heskett et al., 1990; Sasser et al., 1978; Schlesinger & Heskett, 1991)
Co-Location	Geographic dispersion leads to decreased information flow	Franchise model (Bradach, 1998)

The ramifications of these five unique service traits seem to have a substantial impact on the competitive strategy of service firms (vs. product firms). While several of the characteristics substantially impact the strategy of firms, the customer involvement trait appears particularly influential vis-à-vis its strategic impact on the competitive environment, suggesting that service strategy should be thought of as distinct from product strategy. The table below summarizes how the unique service characteristics affect competitive strategy.

Table 6: Service Traits and Their Strategic Impact

Characteristic	Strategic Impact
Intangibility	Intangibility increases the importance of reputation as customers are not able to inspect or evaluate a service before it is procured and consumed. As a result, the threat of entry is reduced marginally as new entrants lack the reputation or customer history to overcome intangibility.
Simultaneity / Perishability	Simultaneity creates an exponential urgency regarding capacity that is about to perish. The example of an empty seat on an airplane departing in 2 hours demonstrates the issue. Customers with specific needs (the businessman who needs to be on the flight to make a meeting with a high-value client) will have different leverage and power than customers with flexible needs (the vacationing couple that is happy to take the next available flight with cheap seats). As such, customers with flexible needs gain power , while customers with specific needs lose power .
Heterogeneity	Because employees are human beings and introduce heterogeneity into the service production process, management philosophy with respect to labor affects the competitive strategy via the bargaining power of human resources. In particular, managers pursuing an empowerment approach will demand specific labor capabilities (i.e. an adaptable person) and will likely compete based on service experiences. Thus, empowerment-oriented managers will increase the power of labor and compete on customer experience . Likewise, managers pursuing a production-line approach will seek the lowest cost labor available and will compete on cost via standardized offerings. Thus, production-line-oriented managers will decrease the power of labor and compete on cost .
Customer Involvement	Because customers are both suppliers and buyers of a service offering, the strategic impact of this dual-role is quite dramatic. The primary distinction that affects the competitive dynamic is the classification of customers as either existing or new. From a customer as supplier perspective, existing customer suppliers gain power as they exhibit knowledge of a company's service production processes. From a customer as customer perspective, existing customers lose power as they get locked in with familiar offerings. New customer suppliers lose power (due to learning costs), while new customers gain power through the lure of lifelong loyalty. Finally, customer history creates a reflexive dynamic that <i>creates switching costs for both the company and the customer</i> , and the competitive focus drift to existing customers .
Co-Location	The <i>co-location</i> specific strategic impacts are negligible and do not differ from the well-documented <i>location</i> ramifications.

The Service Traits and Our Understanding of Innovation

Over the past thirty years, management scholars have paid significant attention to innovation and product development. During this time, several powerful explanations of innovation have emerged, specifically theories of architectural innovation (Henderson & Clark, 1990), disruptive innovation (Christensen, 1997; Christensen & Bower, 1996), and product/technology life cycle innovation (Abernathy, 1978; Abernathy & Utterback, 1978; Anderson & Tushman, 1990; Tushman & Murmann, 1998; Utterback & Abernathy, 1975). This section of the dissertation will evaluate each of these theories and their respective ability to incorporate the unique service characteristics. The next section of the dissertation will then turn to the service innovation and new service creation literature.

Architectural Innovation

Henderson and Clark's theory of architectural innovation is explicitly focused on products. In addition to framing their research in terms of product development, the authors define architectural innovations as "innovations that change the way in which components of a *product* are linked together, while leaving the core design concepts (and thus basic knowledge underlying the components) untouched" (Henderson & Clark, 1990). All of the anecdotal examples they provide (Xerox small copiers, RCA radio receivers) and the foci of the research (photolithographic aligners) are products. While there is no direct mention of the theory's applicability to services, the authors do summarize the underlying logic of architectural innovation in terms applicable to services: "the essence of an architectural innovation is the reconfiguration of an established system to link together existing components in a new way" (Henderson & Clark, 1990). Many service offerings can be broken down into sub-service components, thereby facilitating a link between architectural innovation and service companies.

For example, most Borders bookstores have an information desk where employees can provide information to customers about a particular book, whether it is in stock, and if so, its location in the store—a function that is one sub-service in the total value proposition that Borders offers its customers. Employees use a computer terminal to look up this data before regurgitating it to the customer. Recently, however, most Borders bookstores have installed “Title Sleuth” stations equipped with user-friendly computers to access the same databases formerly used exclusively by employees. Notice that the retail service offering did not introduce any new components; rather, the company altered the connections between existing components in a manner that reduced customer wait times and improved customer satisfaction.

On the surface, it appears that the theory of architectural innovation is broad enough to accommodate the unique service characteristics, especially when one considers sub-services as comparable to components of product systems. A methodical review of the unique traits, however, reveals instances in which the theory cannot accommodate the service characteristics.

Table 7: The Service Traits and Architectural Innovation

Characteristic	Incorporate?	Comments
Intangibility	Yes	Given that even intangible services can be broken down into sub-services, there is no reason to believe that architectural innovation cannot accommodate intangibility of the offering
Simultaneity	Yes	Architectural innovation tends to focus upon the production process and does not explicitly comment on consumption
Heterogeneity	No	Architectural innovation assumes that all components fit together in the same manner each time the sub-systems are combined; the inherently fickle nature of human interaction, however, does not allow for such an assumption.
Customer	Maybe	Given that the customer is explicitly involved in the production of a service, the theory of architectural innovation needs to accommodate “customers” into an understanding of how different “production pieces”

		interact to deliver the final “offering.” Depending upon how liberal one is with definitions (i.e. including customers as part of the production system), architectural innovation might be able to accommodate the customer involvement criteria.
Location	Yes	The fact that services are produced and consumed at the same place does not necessarily affect the applicability of architectural innovation

Disruptive Innovation

The disruptive innovation theory espoused by HBS professor Clay Christensen is a story of customer power (Christensen & Bower, 1996). In particular, it is about the power of customers to mislead their suppliers into overshooting (in terms of performance) the needs for which customers are willing to pay. Eventually, the very customers that faithfully informed vendors of their demands switch to lower cost “downmarket” providers of similar offerings. These innovators that attack from below with initially less capable offerings eventually achieve “offering performance” demanded by customers at costs lower than incumbent providers. Often, initial markets of the innovator do not overlap with the incumbent’s markets.

Given that disruption is a theory about markets, there is no reason to believe that it is not applicable to services. In fact, several examples indicate that the disruptive framework is extremely powerful in explaining innovation within services industries. The market for small parcel and letter delivery is a case where disruption from below went effectively unnoticed by the United States Postal Service, a dominant incumbent. United Parcel Service, the global logistics company, began its operations in 1907 as a local message delivery and errand service in Seattle. The American Messenger Company, as it was then known, preceded the United States Parcel Post system by six years and primarily served individual consumers. The company expanded by addressing the needs of retailers, providing services seen by the United States

Postal Service as “downmarket” and non-threatening, through the 1950’s. From the 1950s to the 1980s the company acquired the legal rights to enter new markets and, by 1985, UPS offered next day air service to all fifty US states. The late 1980s led to international operations and the company increased its information capabilities (tracking, etc.) through much of the 1990s. Since 2000, UPS has expanded its set of offerings to include logistics management services and purchased retail business service provider Mailboxes Etc., thereby creating a company that competes head on with the United States Postal Service. Again, cursory analysis yields an assumption that the disruptive innovation framework can accommodate services.

Rigorous (albeit a bit cookie-cutter) analysis, however, yields a different story. In particular, it appears that simultaneity and customer involvement don’t quite fit.

Table 8: The Service Traits and Disruptive Innovation

Characteristic	Incorporate?	Comments
Intangibility	Yes	The above example of package delivery services demonstrates that even intangible offerings can be misconstrued by competitors as not meeting mainstream customer needs.
Simultaneity	No	Simultaneous production/consumption leads to customer fear about trying service from unknown (i.e. new entrants) providers; “reputation” and longevity create additional advantage to the incumbent.
Heterogeneity	Yes	The inconsistency of a service and the corresponding human resource and customer management mechanisms do not necessarily affect the applicability of disruptive innovation.
Customer	No	Disruptive innovations assume that customers are unable to fully articulate their desired objectives. Given the intimate involvement of customers in service production, it seems more likely that customers may lead firms to co-produce services that they seek. Perhaps this can explain why management consultancy has never faced a disruptive threat?
Location	Yes	The fact that services are produced and consumed at the same place does not necessarily affect the applicability of disruptive innovation.

Technology Life Cycle Innovation

The primary model of product evolution argues that major innovations appear during a period of heightened innovation activity, a period labeled by some scholars as the “era of ferment.” This heightened level of activity drops off dramatically following the adoption of a dominant design. At this point, innovation activity again begins to pick up, but focused upon incremental process innovations (versus major product innovations) that increase quality and reduce cost, rather than enhance features or performance (Abernathy, 1978; Abernathy & Utterback, 1978; Utterback, 1994; Utterback & Abernathy, 1975).

HBS professor Mike Tushman and INSEAD professor Phil Anderson expanded upon the early Abernathy and Utterback work to advance the product-process life cycle model by introducing technological discontinuities (Anderson & Tushman, 1990; Tushman & Anderson, 1986), innovations that punctuate relatively long periods of incremental change. The cycle begins with an era of ferment (in which numerous possible designs exist) and continues until a dominant design emerges. At this point, the cycle enters a period of incremental change and is punctuated with a discontinuity that leads to another era of ferment.

The case of online retailing demonstrates how an era of ferment relating to a core sub-service (shipping design) resulted in a shift in the basis of competition and entry into an era of incremental change. Prior to 2003, many different models existed for the pricing of the shipping expense sub-service. Designs ranged from treatment of shipping as a loss leader (no cost to customer) through viewing shipping as a profit center (“cost plus” pricing on shipping). Some vendors offered free shipping on purchases of certain dollar amounts or certain physical sizes. During this “era of ferment,” consumer perception of cost as measured by shipping expenses drove competition.

Although it is not yet obvious if customers now expect (a la a “dominant design”) the free shipping offer, let’s assume that free shipping for orders exceeding a certain dollar amount emerges as the accepted standard. If this were the case, all online retailers would adopt this core sub-service or face the prospect of failure. Further, the adoption of a core sub-service in the business model transforms the basis of competition in the overall service to one in which cost of shipping is no longer a variable. The industry transforms from a fluid state to a specific state. The basis of competition shifts to other variables and shipping design innovations enter an era of incremental innovation, with a focus upon real time tracking capability and estimation of arrival dates. Thus, the “standardized” sub-service effectively becomes a “dominant design.”

The emergence of a dominant design at the overall service level is also worthy of analysis. Financial services firms provide an interesting example, especially in light of their recent emphasis on “one-stop-banking.” It is possible to argue that this current emphasis on consolidated financial services is the result of an emerging dominant design which began with Merrill Lynch’s 1977 introduction of its innovative Cash Management Account (CMA), a single account which consolidates a client’s checking, brokerage, mortgage, and credit card accounts. The 1970s, 1980s and 1990s might classify as an “era of ferment” in which numerous designs for client account management emerged; discount brokerage, savings and loan, and online banks all drew clients in separate directions providing “best of breed” or “point solutions.” Beginning in the late 1990s, however, most financial service firms stopped competing for a portion of a client’s financial services business and instead adopted Merrill Lynch’s integrated approach to financial services, seeking to gain all of a client’s financial services business. Even E-trade, the discount brokerage firm started in the heyday of online trading, today offers insurance, online brokerage, mortgages, auto loans, and credit card services in a single integrated account.

Thus, the concepts of dominant designs and product/process innovation appear to be applicable to service companies and while the parallel is stronger with the concept of standards, the product cycle theory has some relevance to services. As for the ability of the product/process and technology life cycle model to incorporate the five unique service characteristics, the table below summarizes the analysis.

Table 9: The Service Traits and the Technology Life Cycle Model

Characteristic	Incorporate?	Comments
Intangibility	Yes	The examples provided above (both intangible) are able to be readily accommodated by the lifecycle model.
Simultaneity	Yes	There is nothing about the simultaneity of service production and consumption that should affect the ability of the lifecycle model; instantaneous perishability likely translates into more rapid progress through the cycle.
Heterogeneity	Maybe	Increased variation is a basic input for the lifecycle model of innovation; however, it is unclear if increased variation at the experience level (vs. the firm level) is actually consistent or inconsistent with this theme.
Customer	No	The basic underlying mechanism driving the lifecycle model of innovation is one of variation → selection → retention; customer involvement in service production will likely lead to adaptation (and therefore not selection).
Location	Yes	Co-location of production and consumption does not create any specific issues for the lifecycle model of innovation.

The Problematic Trait of Customer Involvement

Across the three examples evaluated above, it is interesting to note that the most commonly accepted (i.e. consensus in the literature) service offering quality (intangibility) is readily accommodated by each theory. Further, with the one exception of co-location (which appears to be a non-factor in the evaluation of these theories), the degree of acceptance of a

service offering in the literature (see Table 1 above) seems to be positively correlated with the “incorporability” score of the characteristic into extant innovation theory.

Table 10: Can Existing Theories of Innovation Accommodate Unique Service Traits?

Theory	Unique Service Characteristics				
	Intangibility	Simultaneity	Heterogeneity	Customer	Location
Architectural Innovation	Yes	Yes	No	Maybe	Yes
Disruptive Innovation	Yes	No	Yes	No	Yes
Life Cycle Innovation	Yes	Yes	Maybe	No	Yes
“Incorporability” Score (total possible = 9) (3=yes, 2=maybe, 1=no)	9	7	6	4	9
Degree of Acceptance Score (i.e. consensus) (from Table 1 above)	12	11	7	4	3

While colleagues have justifiably suggested that the above table provides a false sense of objectivity, the fact remains that those service characteristics that are more commonly accepted are the same characteristics that present few challenges to existing theory. No attempt is being made here to suggest causation (i.e. the most incorporable are later accepted or the most accepted are then incorporated); rather, the purpose is merely to highlight the correlation between accepted characteristics and those that fit into extant theory. Attempts for precision aside, it does appear that the most intriguing service characteristic is the differing role of the customer—a topic that, upon cursory investigation, seems particularly ripe for research.

The Service Traits and Our Understanding of New “Product” Development

This chapter of the dissertation evaluates how the unique service characteristics affect our understanding of product development. In particular, it will evaluate the most commonly accepted product development frameworks (Clark & Wheelwright, 1992; Ulrich & Eppinger, 2004; Wheelwright & Clark, 1992) to determine if they can accommodate the five unique service

traits. I begin with a brief overview of existing product development knowledge, highlighting (a) the objectives of a product development process, (b) a generic product development process, including variations to the process, and (c) organization of development processes.

Product Development Process Objectives

The literature suggests that a successful product development process will achieve five key objectives: (1) quality assurance via the use of phases and stage-gates (Cooper, 2001), (2) coordination by effectively acting as a blueprint of the players involved and the roles they play, as well as the appropriate timing of particular interactions (Allen, 1977; Andreasen & Hein, 1987; Clark & Wheelwright, 1992; von Hippel, 1986; Wheelwright & Clark, 1992), (3) planning via the articulation of milestones, timelines, etc. (Smith & Reinertsen, 1998; Thomke, 2003b; Wheelwright & Clark, 1992), (4) measurement and management (i.e. a good process allows for benchmarking so management can assess the quality of the product development effort) (Cooper, 2001), and (5) highlighting improvement opportunities by careful documentation of what worked and what could be done to improve the process (Ulrich & Eppinger, 2004).

The Generic Product Development Process

The product development process accepted in the literature is characterized by a multi-phase funnel that begins with planning and concept development and ends with production (Ulrich & Eppinger, 2004; Wheelwright & Clark, 1992).¹⁰ The primary phases in this generally accepted product development sequence are strategy and planning (Meyer & Lehnerd, 1997; Moore, 1991; Porter, 1980), concept development with market needs analysis (von Hippel, 1987), system level design (Ulrich, 1995), component/detail design (Clark & Fujimoto, 1991),

¹⁰ For an excellent overview/summary of this model, see Ulrich and Eppinger (2004), page 14.

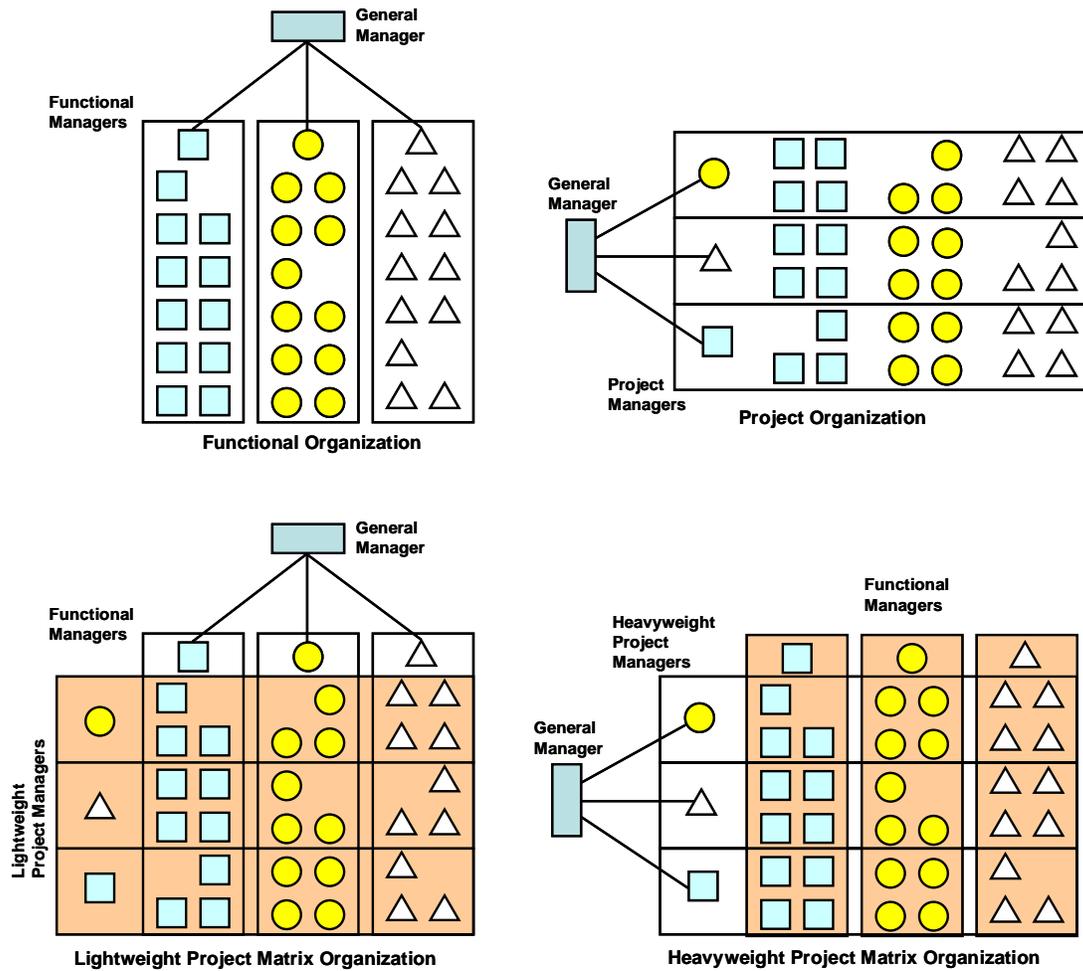
testing and refinement (Thomke, 2001; Thomke & Bell, 2001; Thomke, 2003b), and transition to production.

Beyond the generic product development processes highlighted above, several variants have been discussed in the literature. In addition to industry specific models such as those for the software industry (Cusumano, 2004; Cusumano, 1991) and the automobile industry (Clark & Fujimoto, 1991; Cusumano & Nobeoka, 1998; Womack, Jones, & Roos, 1990), Ulrich and Eppinger discuss development models for technology-push products, platform products, process-intensive products, customized products, high-risk products, quick-build products, and complex systems. Each is a variant on the generic product development process, albeit with minor modifications to the process flows.

Organization of the Product Development Process

The next major subject in the product development literature has to do with the organization of R&D and other product development efforts (Allen, 1977; Andreasen & Hein, 1987; Clark & Wheelwright, 1992; Wheelwright & Clark, 1992). Four primary organizational forms have been described in the literature: (1) the Functional Organization in which a general manager oversees functional “silos” of marketing, engineering, operations, etc., (2) the Project Organization in which a general manager oversees multi-functional teams organized around particular projects in which project team members report only to the general manager, (3) the Lightweight Project Matrix Organization in which the general manager oversees functional silos but project teams exist and report to lightweight project managers, and the (4) Heavyweight Project Matrix Organization in which the general manager oversees multi-functional teams that also report to the heads of their functions (Hackman, 2002; Hayes, Wheelwright, & Clark, 1988).

Figure 2: Various Organizational Forms of Product Development Efforts



Source: Ulrich & Eppinger, 2004, as adapted from Hayes et al, 1998

A fifth and related area of the product development literature has to do with patents and the protection of intellectual property rights associated with new products. There is a vast literature on intellectual property rights and the various means of protecting them (i.e. copyrights, patents, trade secrets, etc.). While this literature is beyond the scope of this effort, an interested reader should consult Richard Stim’s excellent overview of intellectual property (Stim, 2000) for a discussion of basic concepts.

In a quest to determine if the unique service characteristics merit special attention from the development literature, the following table addresses each of the major product development

literature findings through the lens of the five service traits. The first table below evaluates the generic product development process for its ability to incorporate the service characteristics.

Table 11: Generic Product Development Processes and the Service Traits

Characteristic	Incorporate?	Comments
Intangibility	Maybe	Intangibility (by itself) does not affect the nature of the product development process; in combination with heterogeneous offerings and fickle customers, however, intangibility places greater “reputation risk” upon the development process for services than it does for products.
Simultaneity	Maybe	The fact that service production and consumption is simultaneous means that it is impossible to test service quality without interaction with customers. Products can be completely produced and evaluated by quality control personnel before being introduced to customers. Such a process is impossible with services. However, situations in which the product is highly standardized, normal product development processes seem not to be disrupted as dramatically.
Heterogeneity	Maybe	Heterogeneity of “offerings” due to the inherently inconsistent human role prevents the incorporation of any quality control and/or standardized production methodologies. It is conceivable, however, that design for manufacturing methods can be used to minimize the heterogeneity of the service offering.
Customer	No	A key process in the product development process is “testing and refinement.” Given that a service inherently involves interaction with the customer (and all accompanying uncertainty), typical testing and refinement processes lead to reputation risk.
Location	Yes	Co-location of production and consumption does not create any specific issues for the product development processes outlined above.

As the table above shows, services do not necessarily fit into the generic product development process particularly well. One service characteristic seems to generate a bulk of the incorporation difficulty: customer involvement. Although simultaneity leads to all sorts of “pre-production” testing issues, standardization of the service seems to mitigate this impact.

Meanwhile, however, customer involvement leads to the introduction of massive, uncontrollable uncertainty. The specific development process variants outlined in Ulrich and Eppinger (2004) all exhibit similar process flows (i.e. all of them have a “testing” phase) and will therefore not be evaluated here; these variants face the same issues as the generic process.

The next table evaluates the ability of the organizational prescriptions for the product development process to incorporate the five service traits.

Table 12: Organization of the Development Process and the Service Traits

Characteristic	Incorporate?	Comments
Intangibility	Yes	Intangibility increases the “reputation risk” of a company vis-à-vis new offerings, but it does not affect how the development process should be organized.
Simultaneity	Maybe	The fact that service production and consumption is simultaneous means that it is impossible to test service quality without interaction with customers. Customer facing (traditional “front office”) and support (traditional “back office”) functions need to be combined to holistically manage the offering. Again, the same situation as discussed above arises with respect to highly standardized services that behave more like products. In these situations, the simultaneity conditions do not appear to be as problematic.
Heterogeneity	Maybe	The fact that the offering is inherently inconsistent due to human involvement leads to a greater dependence upon standardization and perception management. Aside from affecting the relative importance of the customer-facing functions, it does not directly affect organization of the development process.
Customer	No	Given the traditional role of the marketing department as extracting information from/about the customer and the traditional role of the operations department to “produce” the offering, service operations personnel need to be thought of as multi-functional as they both produce the offering <i>and</i> interact with the customer.
Location	No	The organization of development processes generally centers around an R&D or other centralized development department. Given the dispersed nature of service delivery, any “service R&D” effort necessarily needs to be distributed and decentralized.

Revisiting the Problematic Trait of Customer Involvement

Note the problematic role of the customer in the production process and the need for a joint production/marketing function vis-à-vis new service development. It is also interesting to observe that the development of new services seems to be a more distributed endeavor than product development, driven by the co-location of production and consumption. Further, simultaneity is again cause for problems among services that are not particularly standardized, demanding that the service “experience” be holistically delivered by front and back office production staff. In those cases in which the service is highly standardized (UPS and/or FedEx, for instance), the simultaneity condition is not as problematic. A customer can drop off a package in New York, go home, and then allow the manufacturing of the delivery service to begin – resulting in the arrival of the package 18 hours later in Seattle.

The management of the “quality assurance function,” however, requires special incorporation of the simultaneity element. Specifically, difficulty arises due to the dual-role played by service operations personnel – as both producers of the service and interaction points with customers (traditionally a marketing role). This dual role implies that concepts such as “design for manufacturing” must be modified in the service development process to include customers. Thus, service development efforts – particularly those that focus on the “production” element (the “design for manufacturing” equivalent in services) – need to be organized differently by incorporating the customer in a traditionally operations/manufacturing only function. Customer involvement and simultaneity thus drive the need for a “design for service delivery” function that is broader (from a participant perspective) than the design for manufacturing process.

Given the inability of the new product development literature to fully incorporate nuances specific to services, it seems necessary that the processes and organizational methods be modified for effective new service development. As noted above, intangibility does not provide meaningful complications to the generic development process or the appropriate organization of the development effort. Further, customer involvement seems to represent the most problematic characteristic for incorporation into theory—necessitating the need for further investigation.

Service Innovation and New Service Development – Where Do We Stand?

This chapter discusses two topics in the literature – service innovation theory and new service development—in an effort to synthesize what is known and what is yet to be learned. The goal is to comprehensively connect all of the prior research on the topic to formulate the current “state of the art” on the topic of service innovation and service development.

Service Innovation Theory

Despite the unique service characteristics noted above, many scholars have concluded that traditional, product-focused theories of innovation are applicable to services (Guile & Quinn, 1988a). In fact, almost all work on services innovation has focused on either demonstrating the existence of innovation activities within services firms (Miles, 1993; Sundbo, 1997), demonstrating the applicability of product innovation management tactics to services (Guile & Quinn, 1988a; Potts, 1988; Quinn, 1988) or articulating the role of innovation in service company strategy (Coyne, 1989; Cusumano, 2003a; Cusumano, 2003b; Lopez & Roberts, 2002; Meyer & DeTore, 1999; Quinn, Doorley, & Paquette, 1990; Thomas, 1978).

Recently, European scholars have been increasingly focused on service innovation, with scholarship concentrated at Lille University in France (Gallouj, 2002a, b; Gallouj & Weinstein,

1997), the University of Manchester in the UK (Miles, 1993, 2000; Miles & Boden, 2000; Tether, 2003; Tether & Metcalfe, 2003), the Science and Technology Policy Research Unit (SPRU) at the University of Sussex (Hull & Tidd, 2003; Hull, 2003; Tidd & Hull, 2002, 2003a, b), and Roskilde University in Denmark (Sundbo, 1997, 2000). Recent US academic research on service innovation has focused narrowly on service R&D/experimentation (Thomke, 2003a) and customer loyalty management (Hart, 1988, 1990; Heskett et al., 1994; Heskett et al., 1990; Heskett et al., 1997; Sasser et al., 1991; Sasser et al., 1978; Schlesinger & Heskett, 1991).

One particularly intriguing theory developed in Europe is worth highlighting because of its direct comparability with traditional innovation theories. Richard Barras describes service innovation as a “reverse product cycle” (Barras, 1986, 1990). He argues that incremental innovation precedes an era of ferment and that the era of ferment is punctuated with a discontinuity through a new service offering. In particular, improvements in the efficiency of delivering existing services lead to quality improvements, eventually yielding new service offerings. He draws examples from the financial services industry, where he notes how computer technologies led financial services firms to improve existing offerings before providing entirely new services (Barras, 1990).

Given that the reverse product cycle does not dispute the concepts of incremental innovation or the importance of a discontinuity, the model boils down to a question of timing. If the reverse product cycle theory holds, periods following incremental innovation (i.e. after the adoption of a standard sub-service) should lead to an increased level of sub-service variation, which in turn should result in a new service offering. Therefore, is the reverse-product cycle any different than the product lifecycle theory of innovation articulated by Abernathy, Utterback, Tushman, Anderson and others?

Perhaps the dearth of service-specific innovation theory is the result of poor conceptual understanding of the primary innovation process – new “offering” development. If the field has failed to advance its understanding of new service development (or if it has concluded that new service development is not meaningfully different than new product development), then it seems unlikely that new service innovation theories will emerge.

Our Understanding of New Service Development

Two excellent review articles have done a decent job of summarizing the new service development literature, one from the marketing perspective (Johne & Storey, 1998) and another from the operations angle (Menor et al., 2002). Both pieces are incomplete, for various reasons, thereby meriting the current effort. For instance, John and Storey (1998) base their review (and organization of the literature) upon the following two definitions: “Service Product – The predominantly intangible core attributes which customers purchase” and “New Service Development – The development of service products which are new to the supplier.” For reasons outlined above, the basic premise of the review leads to a gross mischaracterization of what constitutes a service. Intangibility is the most commonly (and one might argue least useful from the perspective of developing theory) accepted characteristic of services and the one that has received the most attention from the product development community. Further, a quick review of the annotated bibliography provided by John and Storey yields a shocking lack of breadth: of the 59 articles summarized in a short paragraph, none are from journals that cater to the production or operations community (i.e. not one journal with “production” or “operations” in the title of the publication). Not surprisingly, most citations are from marketing-community oriented journals.

The main review article from the operations community (Menor et al., 2002) does a better job of crossing communities (7 of the 131 citations are from journals with “marketing” in the title of the publication and 17 of the 131 citations are from journals with “productions” or “operations” in the title of the publication) and focusing upon the key service characteristics highlighted in this discussion (it addresses the traits of intangibility, simultaneity, and customer involvement). It too, however, is biased in favor of operational issues with 2 of the 14 research opportunities highlighted by the article NOT focused upon operations, production, service engineering, or service design.

The goal of this section, then, is to provide an integrated research review that is “community-agnostic” to synthesize findings related to new service development, independent of the functional academic community in which the research was published. To begin, it is probably useful to understand why the marketing and operations literatures do not cross-pollinate as much as one would expect, particularly in the realm of services. Key to understanding the bifurcated approach to service development is the literature’s definition of a “new service.”

Most “new service” definitions in the literature are based heavily upon the existing and accepted “new product” definitions in the literature. In particular they build upon the Booz-Allen & Hamilton new products framework: according to the management consultancy, six main types of product development efforts exist: (1) new-to-the-world products, (2) new product lines, (3) product line extensions, (4) product improvements, (5) repositionings, and (6) cost reductions (Booz-Allen&Hamilton, 1982). At the root of this definition is an understanding that new offerings can have elements of “newness” for customers (and markets) and elements of newness for firms (i.e. the producers of the products).

These two primary types of “newness” stress the party to whom the newness applies. While I have described these as “supply-side” and “demand-side” innovations in earlier work (Mansharamani, 2005), others have described them as “internal” or “external” (Menor et al., 2002). The distinction is that developments may be new to the production process (i.e. primarily affecting the firm or the technology used by the firm) or may be new to the customer (i.e. primarily affecting the customer or the market in which the development is offered). Particularly noteworthy is that in the realm of products, the “internal” vs. “external” distinction is the same line that distinguishes operations from marketing, leading to a “siloeed” approach in which marketing researchers focus upon concept development, customer needs, and market receptivity while operations researchers focus upon production.

Within the services domain, the distinction between customer and firm newness seems useless. Given simultaneous production and consumption and the inherent involvement of the customer in the production process, the distinction lacks merit and may, in fact, be of negative value and obfuscate a true understanding of a service development process. Even the “service-specific” development literature, however, seems intent on describing the “type of newness” as important. “New to the company” and “new to the marketplace” (Cooper & Edgett, 1999) and “internal” and “external” newness (Bitran & Pedrosa, 1998; Johne & Storey, 1998; Menor et al., 2002) remain part of the service development literature vocabulary.

Despite these shortcomings, the new service development literature does offer a great deal with respect to the process by which new services are created. Two main topics are addressed in the literature: (1) the process of new service creation and (2) organization of new service development efforts. The remainder of this chapter will address these two topics and conclude by evaluating the gaps in this literature.

The Process of New Service Creation

The processes used to develop new products are usually based upon a funnel and/or stage-gate method. In fact, it is considered best practice among product development organizations to implement and use a stage-gate process (Griffin, 1997). Within the new service development literature, several authors suggest the implementation of a process (Bitran & Pedrosa, 1998; Cooper, 2001) similar to the stage-gate process used with product development. Even models that seem a bit more fluid than the stage-gate model (See Scheuing & Johnson, 1989) continue to be sequential. With few exceptions (Alam, 2005; Edvardsson et al., 2000; Gustafsson & Johnson, 2003), the service-specific literature seems merely to suggest a rigorous application of the new product development processes to the service domain (Meyer & DeTore, 1999; Thomke, 2003b).

The exceptions tend to focus on the role of the customer. Alam (2005) suggests that the customer be involved earlier in the service development process than would be the case in a product development effort and Gustafsson et al. (2003) take the discussion one layer deeper and evaluate the processes of successful service development efforts at SAS Airlines and Telia Mobile and conclude that successful service development processes include immersion with customers. The research conducted on SAS included 1500 hours of videotaped footage, 2000 photographs, and thousands of interviews, surveys, and “in-person” experiences of the service alongside of customers (acting as a customer) to develop a new service. All of this was done in a quest to determine the customer experience. The process was significantly more than “asking customers what they want...it’s an explicit process of deciding where to direct your energy, immersing yourselves in customers’ lives, and working with customers to generate, design, and test new ideas” (Gustafsson & Johnson, 2003, p. 144).

Organization of New Service Development Efforts

While some have suggested that the management of services firms (i.e. not just their development efforts) needs to be radically revamped (Quinn & Paquette, 1990), the organization of services firms as a topic of discussion is beyond the scope of this sub-section. Rather, the focus here is upon the organization of the development efforts within service firms.

Case studies conducted by Frank Hull at American Express, Merrill Lynch, AIG, Bankers Trust, Chubb, Chase, Morgan Stanley, PaineWebber, and other service companies led him to conclude that most successful new service development efforts were multifunctional with teams crossing all primary business functions (Hull, 2003). Empirical work on US and UK service companies concluded that the most successful new service development efforts were organized in one of four configurations: (a) project-based, (b) mass customization oriented, (c) cellular, and (d) organic-technical (Tidd & Hull, 2002).

The project-based organization is a matrix organization in which individuals have dual reporting responsibilities to both a functional and project head; the mass customization configuration was characterized by the heavy involvement of customers in the development process; the cellular format organized a team of cross-trained and co-rewarded individuals into a team (not that different from the project based organization other than that it consisted of team-level identity formation rather than individual identity retention); and the organic-technical organizational method was effectively the use of co-located, cross-functional teams. Although three of these formats resemble the matrix organizations discussed above (Hayes et al., 1988), the mass customization configuration is novel and merits further investigation. It is the only new service development contribution that incorporates some of the key service characteristics that generic product development organizational theory has not considered.

Service innovation scholar Jon Sundbo has also evaluated the organization of service development efforts and concluded that three primary models for development exist: (1) the industrial model, (2) the professional associates model, and (3) the managerial model (Sundbo, 2000). The industrial model separates production and R&D efforts. In Sundbo's investigation of service firms, this model was rare although did appear among standardized mass service firms (telecommunications, electricity, etc.). The professional associates model makes new service development a priority for all associates and distributes the process among everyone at the firm. Not surprisingly, this model appeared almost exclusively among small to medium professional services firms. Finally, the managerial model was the most common format in which new service development activities were distributed throughout the organization but were not centralized around a common R&D department. Other scholars have also noted the conspicuous lack of R&D efforts in service companies (Miles, 2000; Preissl, 2000; Sundbo, 1997).

SUMMARY: Articulating the Holy-Grail of Service Innovation

Fundamentally, the problem of customer involvement in service production is driven by the variability that customers introduce into the operations of a service company. The dichotomy in the literature described above (marketing vs. productions/operations) is worth revisiting from the perspective of how each literature approaches the concept of variability. The two disciplines, interestingly enough, take completely opposite perspectives on the issue of variability (independent of the source of the variability). Operations and production management scholars have a deep-rooted aversion to variability and seek to eliminate it in any way possible. They strive for lean production, economies of scale, and "six-sigma" quality vis-à-vis consistency (El-Haik & Roy, 2005; George, 2003). The very essence of operations theory is the elimination of any variability.

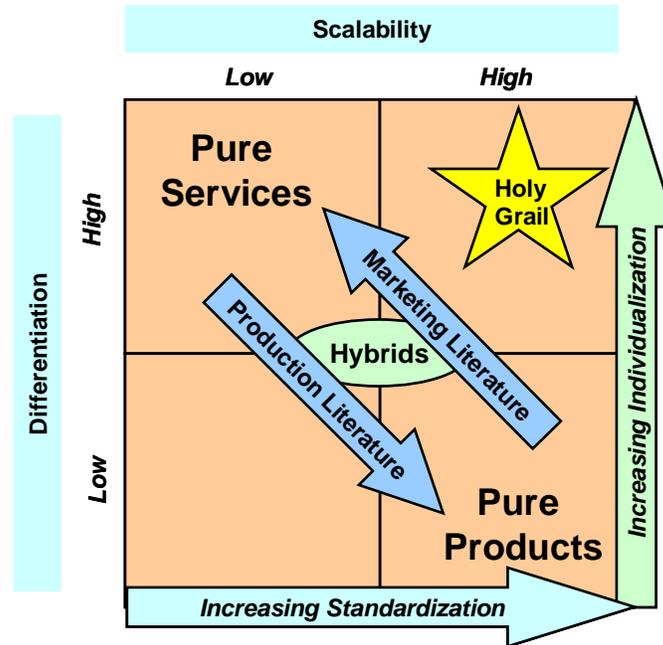
Marketing scholars, however, are always seeking to differentiate offerings. They crave variability as it is synonymous with differentiation. Variability allows for different marketing positionings and therefore allows firms to distinguish their offerings from those of their competitors. Fundamentally, differentiation is what – marketers believe – combats the inevitable forces of profit-dissipating competition and commoditization. Thus, the very essence of marketing theory is the eager embracement of any variability.

Given human involvement in any process inherently creates variation, it is not surprising that the marketing and operations literatures take different approaches to handling the topic of customer involvement. Marketers want to make products more service-like, thereby allowing greater differentiation of the offering. Operations research scholars want to make services more product-like, thereby eliminating variability and allowing for greater efficiency.

Thus, if one conceptualizes a two by two grid capturing the variables of interest that arise from the problematic role of customer involvement in service production – scale and differentiation – a four quadrant grid is formed as shown below. Note that both of the dimensions are of interest because of the unavoidable variability introduced by customer involvement in the service production process. Products have historically been conceptualized as having little differentiability, while services have been thought of as having high differentiability. With respect to scale economies and the capability for variability-reducing efficient production, services were thought to exhibit low scale while products were believed to have tremendous scale driven by efficient manufacturability. Hybrid offerings exhibited a weighted average of the pure versions of products and services and were hence restricted to a linear combination of the two – thereby constraining the “hybrid” category on the diagonal between high differentiation/low scalability and low differentiation/high scalability. In fact,

even the marketing and production/operations literatures constrained themselves to movement along this diagonal – with marketing scholars seeking a migration towards services and operations researchers advocating movement towards products.

Figure 3: The Scalability – Differentiation Framework



In earlier work (Mansharamani, 2005), I described how many service innovations can be interpreted as business model transformations in which a service is either “productized” or a standardized “product-like” service is differentiated via “servicization.” This dissertation builds on that finding by evaluating the impact of strategic service innovations on a company’s offering strategy (as described on a 2x2 grid as shown above) vis-à-vis the two primary offering characteristics driven by variability caused by customer involvement in service production.

Given my prior conceptualization of a one-dimensional spectrum ranging from pure products to pure services, such a framework now aligns with the framework of the literature

presented above along the diagonal axis connecting pure services (high differentiation and low scalability) and pure products (low differentiation and high scalability); the “interaction” effect of scalability and differentiation (i.e. the other diagonal) is a current addition to my evolving framework and a new contribution made in this dissertation.

Colleagues and others have argued that the “holy grail” I articulate above is merely a new label for the previously articulated concept of mass customization. While there are indeed many similarities, there are also numerous differences. As articulated in the introduction above, mass customization is inherently about the configuration of standardized modules in a manner consistent with a customer’s needs. The essence of differentiation is antithetical to the very standardization upon which mass customization rests: differentiation is about treating different customers differently. It is about producing offerings in a manner that prevents commoditization via imitation. In short, differentiation is about different treatment of different customers.

The next chapter turns to a review of strategic service innovations at two leading service firms with the explicit intention of contextualizing their impact on the company’s offering on the quadrant shown above. While this approach is by design limited and inevitably will be incomplete, it will nevertheless shed some light upon various issues of concern to innovation and strategy scholars – including topics such as product vs. service business models as well as standardization vs. differentiation strategies.

Chapter 3 – Innovation and Scale in the Service Context: A Look at UPS and The Apollo Group

Given the dissertation’s focus on strategic service innovation, this chapter looks at how two leading service companies have approached innovation. The chapter builds on prior work of this author (Mansharamani, 2005) on the topic of service innovation at United Parcel Service and The Apollo Group. For both of the following cases, I provide the following: (a) a brief history of the company, paying particular attention to the evolution of the company’s strategic focus, (b) a short overview of the company today, (c) a summary of the competitive landscape facing the industry and the companies operating within it, (d) a description of the company’s self-declared operating strategies, (e) descriptions of service innovations designed, developed, and deployed by the company as well as a short discussion of how the service innovations fit into my differentiation-scalability framework, and (f) a short conclusion that summarizes each company’s approach to service innovation and evaluates how they have done competitively within their industry.

Innovation in Global Delivery Services: UPS and “Configurable Solutions”

United Parcel Services: The Making of “Brown”¹¹

The origins of UPS date back to 1907 when an enterprising 19-year-old, James E. Casey, borrowed \$100 from a friend to establish his own messenger company in Seattle. The company, the American Messenger Company (AMS), was one of many messenger services in the town and faced stiff competition. Casey dealt with the competition by instituting “strict policies of customer courtesy, reliability, round-the-clock service, and low rates” (UPS, 2004). The

¹¹ Unless otherwise noted, most of the facts regarding the history of UPS are taken from the author’s interviews at the company or the company’s online corporate history (<http://www.ups.com/content/corp/about/history.html>).

company's primary offerings at that point included running errands, delivering packages, and conveying messages and documents. AMS preceded the founding of the US Parcel Post system by six years.

By 1913, several developments led the company to re-evaluate its strategic direction. Improvements in the telephone and automobile greatly reduced the need for the company's messenger services, and Casey determined it prudent to merge the company with competitor Evert McCabe. As part of the combination, the new company was named Merchants Parcel Delivery and shifted its focus from message delivery to parcel delivery. The company purchased its first car (Ford Model T) in 1913. By 1918, three of Seattle's largest stores were customers.

From 1919-1930, the company expanded into neighboring California. In addition to beginning operations in Oakland, CA, the company acquired a Los Angeles-based "common carrier" service provider in 1922. To help signify the common high quality service among the different geographic pockets in which it operated, the company changed its name to United Parcel Service. Common carrier services were distinguished from traditional delivery services in that they provided automatic daily pickup calls, automatic return of undeliverables, and streamlined billing. These services, although limited to the LA area until 1952, would prove essential in fueling the company's later growth.

The young UPS began retail delivery operations in NYC during the 1930s, but "by the early 1950's it was clear that contract service to retail stores was limited. UPS managers began looking for new opportunities while the core business remained focused on retail delivery" (UPS, 2004). In 1953, the company began offering common carrier services in Chicago. The company also began offering air based delivery options in 1953, with two-day service available between

major cities on the East and West coasts. By 1978, UPS “Blue Label Air” (which utilized existing capacity in the commercial airline fleet) was available in all 50 states.

The desire to grow the business through the addition of common carrier services led UPS into regulatory battles against the United States Postal Service. In fact, UPS engaged in legal and regulatory negotiations with various state and federal authorities throughout the 1950s, 1960s and 1970s in a quest to obtain authorization to ship freely across all 50 states. Success was slow, and arrived in pieces. After gaining authority to begin interstate service between Utah and Montana, the federal government granted UPS authority to connect its service in Arizona, Idaho, and Nevada. Eventually, the company secured the right to connect its common carrier services in every state.

By the 1980s, UPS was established as the country’s leading parcel delivery service. Nevertheless, in response to airline schedule and route disruption during the 1980s deregulation of the airline industry, UPS began to assemble its own jet cargo fleet. The quickening pace of American business led to the introduction of Next Day Air service, and by 1985, the service was available through the 48 contiguous US states. International expansion marked the 1980s, with service being offered between six European countries and the US. In 1989, UPS began domestic delivery service in Germany. Over a period of less than two years, UPS went from a third-party managed fleet of 80 aircraft visiting a handful of other countries to a company operated airline that employed over 1000 pilots and visited over 200 countries.

By 1993, the company was averaging more than 11.5 million deliveries a day. In order to keep track of all these deliveries and the whereabouts of each package, the company began investing heavily in IT systems. Between 1986 and 1996, UPS spent over \$4.7 billion on technology to improve package processing efficiency. Ground package tracking was a service

that UPS began offering in 1992, and in 2003, UPS.com's online package tracking tool crossed the 1 million tracking requests a day landmark.

In the late 1990s, UPS once again found itself re-examining its strategic direction. Sources of future growth were not obvious. UPS management decided that "the company's expertise in shipping and tracking positioned it to become an enabler of global commerce, and a facilitator of the three flows that make up commerce: goods, information, and capital"(Sanderlin et al., 2003). UPS managers immediately began acquiring or forming companies to fulfill the new vision. To facilitate acquisitions, UPS went public in 1999 and has since made three major acquisitions, as well as several smaller purchases. First, the company acquired the Fritz Companies for \$450 million in stock. Second, a mere six days later, UPS acquired First International Bancorp for \$78 million in stock. In March 2001, it purchased Mailboxes Etc, a retail facing logistics service provider that has since been rebranded "The UPS Store" and over 2004 and 2005, the company acquired Sinotrans Air, UPS Yamato Express, Menlo Worldwide Forwarding, Lynx Express, Messenger Service Stolica, and Overnite.¹² These recent acquisitions were motivated by the dual objectives of broadening the UPS global footprint and diversifying the services UPS was offering to its clients.¹³

Management recently formed UPS Supply Chain Solutions, an integrated supply chain solutions provider that streamlines the coordination of logistic, global freight, financial, mail, consulting, and optimization services to enhance customer performance. UPS either formed or acquired companies that gave it capabilities to supply each of these services. Today, UPS

¹² Sinotrans Air was an express mail carrier operating in 23 cities in China, UPS Yamato was a joint venture in Japan which UPS now owns entirely, Menlo Worldwide Forwarding was a freight forwarder, Lynx Express was a parcel carrier in the United Kingdom, Messenger Service Stolica was a parcel and express mail carrier in Poland, and Overnite was a logistics provider specializing in less-than-truckload (LTL) transportation services in North America.

¹³ Sinotrans, Yamato, Lynx, and Stolica were all geographic-footprint enhancements to the UPS network while Menlo and Overnite both expanded the types of services that UPS offers its customers.

Supply Chain Solutions delivers an integrated solution fulfilled by UPS Capital, UPS Logistics Group, UPS Freight Services, UPS Mail Innovations, and UPS Consulting (Sanderlin et al., 2003). Although UPS Supply Chain Solutions has been losing money since its beginning, the company is expected to post its first annual profit in 2007, the company's 100th year of operations.

An Overview of UPS Today

UPS is the world's largest commercial and residential package delivery company and a growing provider of supply chain services. The company recorded revenues of over \$42 billion in 2005 and is expected to grow 5-8% per year for the foreseeable future. Based in Atlanta, UPS operates the ninth largest aircraft fleet in North America with approximately 600 aircraft. During 2005, the company delivered more than 3.75 billion packages and documents (averaging more than 14.8 million deliveries per day). The company operates in more than 200 countries and has delivery and pick-up capabilities at every single address in the United States and Europe. On an average day, UPS serves more than 7.9 million customers via a fleet of more than 91,000 delivery trucks, motorcycles, vans, tractors and cars around the world. The company also allows customers to interact with the company via one of 6,700 retail branches (branded as The UPS Store, Mailboxes Etc, or a UPS Customer Center) as well as through 17,000 authorized outlets and more than 40,000 drop boxes. As of December 2005, UPS employed more than 400,000 employees around the world.

UPS is today organized as more than ten separate companies, ranging from the familiar cargo delivery services to UPS Capital (a bank to assist with inventory and trade export financing) and The UPS Store.¹⁴ The company's 2005 Form 10-K notes:

Although our primary business is the time-definite delivery of packages and documents, we have extended our capabilities in recent years to encompass the broader spectrum of services known as supply chain solutions, such as freight forwarding, customs brokerage, fulfillment, returns, financial transactions, and even repairs. We are also a leading provider of less-than-truckload ("LTL") transportation services. We have established a global transportation infrastructure and a comprehensive portfolio of services and integrated solutions. We support these services with advanced operational and customer-facing technology. Our supply chain solutions provide visibility into moving inventory across the global supply chain. (UPS 2005 Form 10-K)

While UPS earns a bulk of its revenues (and an even higher percentage of profits) from domestic package delivery (2005 package revenues were \$36.6 billion), the fastest growing segments include international package delivery and non-delivery services. From an overall financial perspective, the company has performed swimmingly, posting phenomenal operating results over significant periods of time. Over the last five years alone, the company has grown revenues from \$30 billion to \$43 billion, operating profits from \$4 billion to \$6 billion, and net income from \$2.4 billion to \$3.9 billion.

¹⁴ Other businesses include UPS Air Cargo, UPS Freight, UPS Consulting, UPS Professional Services, UPS Logistics Technologies, UPS Mail Innovations, UPS SonicAir, and UPS Supply Chain Solutions.

The Competitive Landscape

Although UPS competes with many companies in each segment of its business, there is really only one primary competitor that has the scale and breadth of capabilities to offer services comparable to UPS – Federal Express. After a short discussion of the US Postal Service, which is occasionally thought of as a competitor, the discussion turns to Federal Express, the strategy it has adopted for competing with UPS, and a look at the performances of UPS and FedEx.

The United States Postal Service

The United States Postal Service (“USPS”) is a branch of the US government’s executive branch. USPS delivers more than 200 billion pieces of mail each day to over 144 million households and businesses via the efforts of its more than 700,000 employees. USPS generates more than \$70 billion of annual revenue, serves more than 7.5 million customers each day, and operates a network of more than 37,000 Post Offices.

While the USPS does in fact compete with UPS on several offerings, it is so meaningfully different than UPS that it does not make sense to consider it a true competitor for various reasons. First, USPS is a government entity and as such is motivated by different objectives (ubiquity of service vs. profitability of service, etc.). Second, as estimated by Citigroup,¹⁵ most of the USPS revenues come from first class mail – a service that UPS does not even offer. Third, USPS express and priority mail tends to be more letter or document oriented – versus the UPS and FedEx foci on small packages, goods, and documents.

In addition, USPS actions in recent years indicate that it might be better to think of it as either a customer or complementor of the UPS or FedEx offering suite. This is particularly true

¹⁵ See Citigroup Equity Research dated November 13, 2006 and titled “UPS: More UPSide for Big Brown”

given that both UPS and Federal Express handle large portions of USPS domestic air transportation needs via outsourced service.

Federal Express

Federal Express is the original pioneer of express deliveries in the United States. The company, which started operations in 1973, was founded by current Chief Executive Officer Fred Smith and currently operates in numerous businesses that compete head-on with UPS. The company today is organized into four distinct operating units: (1) FedEx Express, (2) FedEx Ground, (3) FedEx Freight, and (4) FedEx Kinkos. FedEx Express is the original worldwide express transportation and delivery services company; FedEx Ground is a provider of small-package ground delivery systems, FedEx Freight is a US-focused regional less-than-truckload freight services company, and FedEx Kinkos is a document/printing solutions provider.

It is interesting to note that Federal Express and UPS did not directly compete until 1982 when UPS introduced its Next Day Air offering. Further, Federal Express did not enter into any of UPS's historical businesses until 1998 with its acquisition of Caliber Systems, a ground transportation business. Nevertheless, the companies today compete on several fronts and for the same customers. Unlike UPS, however, that conceptualizes itself as a total supply chain solutions provider helping synchronize commerce, FedEx thinks of itself in distinctly network terms; the company's 2006 annual report summarizes this perspective eloquently: "FedEx is a network of networks, allowing for tailored solutions that meet the needs and expand the possibilities of our customers." It should not be surprising that the company also sets its strategy to optimize the network: according to the company's 2006 Form 10-K:

Through the use of advanced information systems that connect the FedEx companies, we make it convenient for customers to use the

full range of FedEx services. We believe that seamless information integration is critical to obtain business synergies from multiple operating units... We manage our business as a portfolio—in the best interests of FedEx as a whole, not a particular operating company (Federal Express 2006 Form 10-K).

Management's operating philosophy is to compete via a portfolio of companies, which, to use Chief Executive Officer Fred Smith's terms, are "operating independently, competing collectively, and managed collaboratively."

Specifically, the company's Form 10-K highlights three strategic initiatives that the company is pursuing in support of its efforts to compete: (1) optimizing and expanding the Federal Express network, particularly in markets such as China and India, (2) increasing the capacity of the FedEx Ground and FedEx Freight networks while also expanding the FedEx Kinko's network, and (3) "emphasizing the 'compete collectively' part of our core strategy through service improvements and focusing our employees and contractors on delivering the best customer experience in the industry, resulting in better alignment across the entire FedEx network" (Federal Express 2006 Form 10-K).

A Humble Strategic Vision: Organize Global Commerce

Given its impressive track record of operating performance, UPS finds itself today facing one of its largest challenges to date: figuring out a way to sustain the growth. Before diving into the company's stated strategies, I first describe what management feels are its strengths that help it compete against other logistics service providers. According to the UPS 2005 Annual Report, the company differs from other competitors in the logistics market in the following manners: (1)

global reach and scale, (2) technology development and usage, (3) a broad, flexible range of services and integrated solutions, (4) customer relationships, and (5) the distinctive UPS culture.

Each of these five points merits brief discussion. While the company's presence in the US is obvious to almost everyone here in America, the fact that UPS has air hubs in Germany, Hong Kong, Singapore, Taiwan, and the Philippines demonstrates the company's global footprint. UPS has operated in Europe for over 30 years and has a developed air and ground business comparable to its US business. It further serves more than 40 Asian countries and territories, and is the largest air cargo carrier in Latin America and the Caribbean. As mentioned earlier, the company has operations in over 200 countries.

UPS is a leader in developing and using technology. In addition to the package tracking capability offered to customers, the company has extensively utilized technology in sorting facilities and created technologies that enable customers to link to real-time package information. UPS also offers integrated e-commerce solutions allowing online merchants to directly integrate with UPS to manage, monitor, and provide their clients with visibility into the supply chain.

The broad, flexible set of services and integrated solutions are best summarized in the company's 2005 Annual Report:

Our express air services are integrated with our vast ground delivery system – one system handling all products. The integrated air and ground network enhances efficiency, improves productivity and asset utilization, and provides us with the flexibility to transport packages using the most reliable and cost-effective transportation mode or combination of modes (UPS 2005 Annual Report).

The fourth UPS strength—the company’s customer relationships—is fairly self-explanatory and stems from the other UPS strengths listed above as well as the company’s longevity (celebrating 100 years in business during 2007). The fifth and final strength is the UPS culture. In addition to having a long-standing “employee-owner” approach to incentive compensation,¹⁶ the company has a strong tradition of promoting from within:

...this policy makes it generally unnecessary for us to hire managers and executive officers from outside UPS. The vast majority of our management team began their careers as full-time or part-time hourly UPS employees, and has spent their entire careers with us. Our chief executive officer and many of our executive officers have more than 30 years of service with UPS and have accumulated a meaningful ownership stake in our company (UPS 2005 Form 10-K).

The UPS operating strategy, which leverages the five strengths just discussed, focuses on sustaining the growth trajectory the company has developed over the last five years through continued US and international expansion fueled by two primary foci: (1) providing comprehensive supply chain solutions that enable greater customer visibility into their entire “moving inventory” supply chain, and (2) leveraging leading-edge technology and e-commerce solutions to drive transportation and logistics management services.

In an effort to provide comprehensive supply chain solutions, UPS has acquired or built 35 million square feet of distribution space and more than 1000 facilities worldwide. These facilities are utilized to help support the supply chains of both large and small companies in 186 countries globally. UPS has also focused on helping manage these supply chains, rather than

¹⁶ The UPS employee stock ownership program began in 1927.

simply providing elements used in them (such as warehouses, distribution centers, etc.). As such, the company has helped its clients redesign supply chains and reorganize supply chain processes and movements of inventory. UPS also provides air, ocean, and ground freight transportation services, customs brokerage, and financial services including letters of credit, inventory financing, and trade finance.

The use of technology is a key strength of the company. Again, the objective here is to assist UPS customers by providing easy-to-use technology that streamlines shipment processes and provides appropriate shipment information on an as-needed and real-time basis.

Technologies enabling simplified global logistics management (such as TradeDirect, which is profiled below among the UPS service innovations) as well as electronic information services (such as Quantum View, a technology that enables customers to proactively track inbound and outbound packages) serve as strategically important capabilities that build and deepen customer relationships, as well as drive additional revenue to the core delivery business.

As important as the company's current strategy is its plan for what it hopes to be in the future. Fundamentally, a company's strategic vision is the ultimate "agenda-setting" mechanism for its innovation priorities. As current Chairman and Chief Executive Mike Eskew notes, the company has a vision of becoming the preferred supplier of total supply chain management across global, multimodal supply chains:

Today, of course, we are more than just a delivery company...we manage networks, or more precisely, we optimize networks. Our integrated small package business is evidence of our skills in this area ...as we move outside of our core and take on additional modes of transport or brings our skills to bear, we see optimizing networks means more than just transporting goods from point A to

point B, it means having the right product mix on each asset to maximize returns. It also means managing the entirety of the network, from the planning stage to the injection point to the actual transportation, staging, redirecting shipments, even product returns along with all the necessary supporting customer service surrounding each of those activities. Sometimes this means managing the movement of goods using our own assets, and sometimes it means leveraging third-party networks such as rail and ocean. And optimizing a network involves more than managing just the physical movement of goods...it means managing informational requirements for each shipment as well. A network is much more than just a trade link. When you synchronize the technology across the global, multimodal transportation network, you really have something unique. And that's what we are creating.¹⁷

Service Innovation as Configurable Solutions

Over the 100 years of its history, UPS has undergone numerous business model transformations. This section of the UPS study analyzes three extremely important strategic service innovations designed, developed and deployed by UPS management—namely, the decision to (a) offer common carrier services throughout the United while also building a supporting airline business, (b) introduce non-package services into the suite of offerings presented to current and potential customers, and (c) develop an integration service – known as Trade Direct -- to help customers better manage their cross-border supply chains via a suite of already existing UPS standardized offerings.

¹⁷ Presentation by Chief Executive Officer Michael Eskew at the September 2006 UPS Analyst Day.

Common Carrier Services: Standardizing the Service

The 1953 decision to begin offering common carrier services outside of the Los Angeles area was a major business model transformation for UPS. Common carrier service entailed the commitment on the part of the company to move goods between particular locations – regardless of volumes. This strategic service innovation changed the business from a point to point service into a network-based service. Common carrier services effectively standardized the transportation offering so that it began to resemble the characteristics of product businesses. The common carrier model was a means of “productizing” the offering by creating a high fixed cost operating model that enables economies of scale. Given the company’s commitment to drive a particular route, the effective marginal cost of an additional package was close to zero, thereby mimicking the dynamics of a “product model.”

Once management decided to pursue common carrier services around the country, the company’s strategy was straightforward: seek regulatory approval to transport packages and documents within and across any of the 50 United States. As noted in the company’s history, this was no easy feat and took the company almost 30 years to accomplish. Having built the network, the company began resembling a high capital intensity service company with standard “product-like” offerings. Revenues increased dramatically, margins increased with additional volume, and the company entered a virtuous cycle of increasing growth and profitability. Individual service differentiation was lost as the company scaled.

Thus, the key strategic decision that enabled growth through the early 1980s was the implementation of the common carrier model. It inherently changed the economics of the business by creating a network model with economies of scale, versus the previous contract delivery model in which the company got paid for effort expended. By the early 1980s (as the

air service offering was gaining momentum), however, UPS management began to realize that they were dependent upon air fleet operators, leaving UPS vulnerable to their “product” quality.

To mitigate this vulnerability, UPS built its own airline specifically to support its now thriving products business. UPS management’s decision to build an airline was in direct reaction to misaligned incentives between its suppliers and its own needs. In order to control service quality and manage uncertainty, the company decided to vertically integrate. Tom Weidemeyer, Chief Operating Officer of UPS and former president of UPS Airlines, noted in 2002 how the decision unfolded:

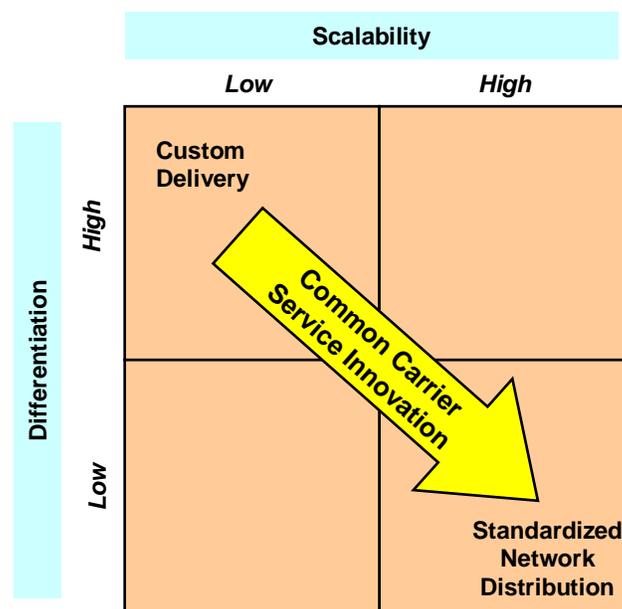
*First off, we couldn't lease enough space in the bellies of airplanes, so we went out and bought some. Now we didn't have any expertise in running an airline, so the first thing we did was turn those aircraft we owned over to somebody else to operate them. And we said, "We need to have this service level." Over time, that grew from six aircraft that we bought back in 1981. By the time we got to '87 or '88, we had 80 aircraft. And we had four different operators trying to maintain the service level that we believed was necessary for our customers. **But our service level objectives were not intrinsic to their businesses...** And so, in the summer of 1987, we announced to the world that the following spring, we were going to be an airline. We marched down that path...put 1,000 pilots on the payroll in the space of about 8 months...hired the mechanics, and went outside and hired some management expertise (Weidemeyer, 2002).*

Thus, the driving consideration of the airline entry decision was to align the service delivery professionals’ incentives with those of UPS. By reducing supply side uncertainty, UPS was able to successfully wrestle control of critical service quality drivers from suppliers.

How did the decision fare vis-à-vis corporate profitability? While it is difficult to tease apart the impact of this decision upon the company’s financial performance, some facts speak for themselves: Net margin increased from 6.5% in 1987 to 7.1% in 1998, EBITDA margins expanded from 14% in 1987 to 17% in 1998, and revenue grew more than 250% over the same time frame. (Note that I specifically chose a 10 year window post the development of the in-house airline to measure the success of the airline.)

Thus, the common carrier strategic service innovation was ultimately an effort to standardize the delivery service. By controlling the airline, the company also enabled itself to gain control over the service production activities, thereby eliminating transaction costs associated with an un-integrated model. In the language of the framework I presented above, the common carrier innovation was a diagonal move towards more “product-like” offerings.

Figure 4: The Common Carrier Service Innovation



Respectfully Complementing: The Addition of Non-Package Services

Given its success and the size of the business in the late 1990s, combined with its relative dominance of the domestic delivery market, UPS management found itself struggling to maintain its growth rate. The company held a series of strategic meetings to discuss future strategy. A key outcome was a redefinition of the company's mission to one it focused on enabling global commerce. Former Chairman and CEO Jim Kelly eloquently summarized the logic of the UPS decision to grow through non-package services during an interview with the *Harvard Business Review*:

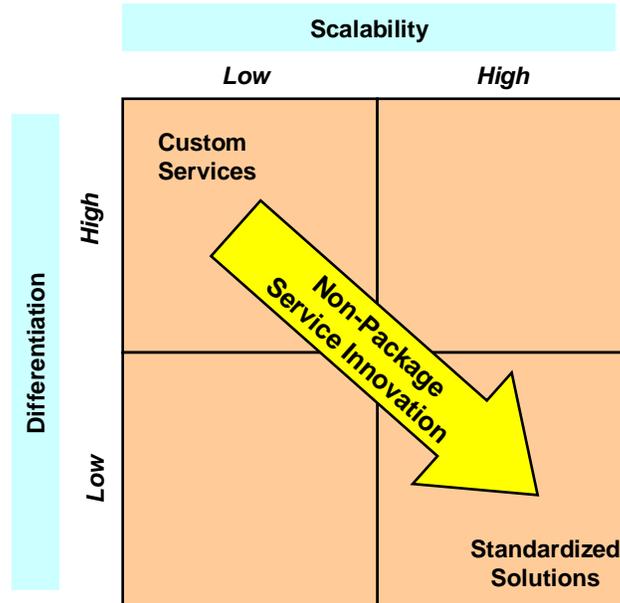
*We know we need to reach far beyond our core business, but in ways that **respect and complement** it. A few years ago, we undertook an effort to rethink our mission and charter. Instead of seeing ourselves as just a package delivery business, we defined our purpose more broadly as enabling global commerce. It's certainly true: we serve 8 million shippers and receivers a day and move about 6% of the US GDP. But global commerce involves a lot more than delivering goods; it's just as much about moving information and money. So now we think in terms of all three of those flows as we create broader offerings for our customers and push deeper and deeper into their supply chains (Kirby, 2001).*

A big reason for this change, notes Kelly was the emergence of e-commerce (Kelly, 2000). Kelly argues that the traditional world, in which suppliers push their products through distributors into retailers and ultimately to customers, had transformed into a world in which end-users pull desired products and services through the system. Kelly also predicts this change will combine with globalization in an explosive way, resulting in “the convergence of once-independent flows of goods, information, and finance.”

Weidemeyer describes the new focus as enabling the company to get a larger portion of the supply chain dollars. By expanding UPS's focus to include the flow of goods, information and finances, "we've gone from the ability to participate in six cents of every logistics dollar spent to all 100 cents of the dollar," notes Weidemeyer. "We now do warehousing...pick and pack...billing and phone center answering, financing inventory, and service parts logistics, just to name a few specific pieces of the supply chain picture" (Weidemeyer, 2002).

This expansion of services is an excellent example of service innovation targeting economies of scale. By taking the time to understand customer needs, UPS has leveraged its trusted advisor position into selling additional services. As these services begin to generate momentum, the company standardizes the offering – thereby driving economies of scale. Further, if UPS is able to convince multiple parties to consolidate their warehousing and service parts logistics (to name a few specific supply chain functions) under a single UPS roof, they generate substantial economies of scale. In fact, notes Weidemeyer, "Today we're trying to convince Dell and Gateway, and potentially Best Buy, to be in the same warehouse that UPS is now going to maintain, take the returns, repair them, and then replenish or replace them for the ultimate customer...to synchronize commerce for our customers"(Weidemeyer, 2002).

Figure 5: The Non-Package Services Innovation



UPS Trade Direct: A Configurable Solution in Action

The UPS Trade Direct service offering was designed and developed by UPS to accomplish one primary objective: increase the efficiency of UPS customers in their supply chains by minimizing the need for capital intensive warehouses, distribution centers, and in-house logistic services supporting cross-border trade. To do this, the company decided to develop a configurable solution that allowed customers to use a bundle of UPS services that allowed for seamless origin country pickup, origin country transportation, customs brokerage and clearance services, destination country transportation, and destination country delivery.

Trade Direct was initially started in the North American markets, due in large part to the North American Free Trade Agreement which facilitated cross-border trade. With time, however, the service has been expanded to include ocean container movements as well as international small packages and LTL shipments. Further, the service was initially designed to accommodate new needs being developed by the global outsourcing phenomenon – and therefore

even to this day has an “inbound” bias of packages that are picked up abroad, transported to the United States, and then delivered to customers. As of December 2005, Trade Direct services were available for 70 international origin ports and 5 US entry ports. Examining the language used by UPS to describe the service, however, indicates that the “inbound” emphasis seems to have faded away and the offering is now being generalized.

The service combines our small package, freight and brokerage capabilities to create an integrated, streamlined, and economical door-to-door solution for customers with complex cross-border distribution needs. The Trade Direct service consolidates individually labeled packages or pallets into one movement across borders. When the goods arrive in the destination country, packages are deconsolidated and entered into the UPS system for delivery, often eliminating the receiving, sorting and handling necessary in distribution centers. This service significantly cuts the supply chain cycle from point of origin to consignee. It provides our customers with faster time to market, reduced costs, increased visibility and better management of their global supply chain. (UPS 2005, Form 10-K)

Fundamentally, the consolidated Trade Direct service consists of numerous standardized service offerings that UPS had already been developing. As such, the service innovation of Trade Direct services is simply a repackaging (in a menu-driven, “configurable” manner) of existing UPS capabilities as a “new service.” Such a combinatorial approach to service innovation is an attempt by UPS to layer a differentiated service on top of already existing standardized services. In fact, the figure below summarizes the UPS conceptualization of the Trade Direct service as an integrative service:

Figure 6: UPS Trade Direct



Even CEO Mike Eskew thinks of Trade Direct as a “configurable solution” that combines multiple UPS capabilities. Nevertheless, he notes, although the service simply leverages existing capabilities, it does so in an integrated manner that simplifies the lives of customers:

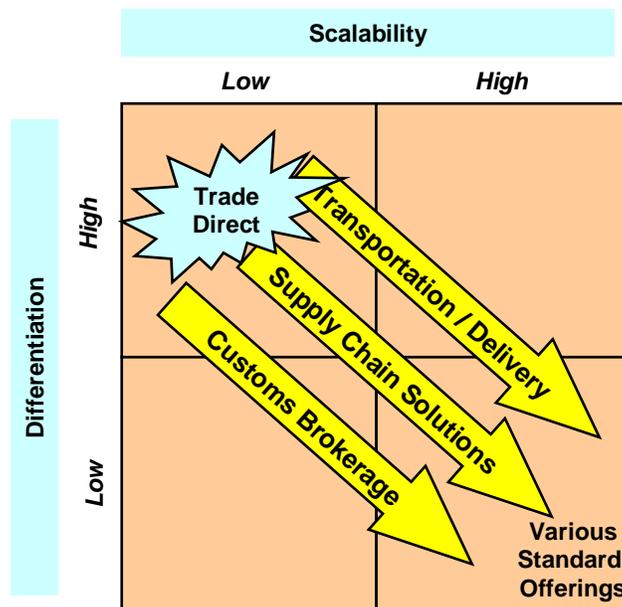
Our Trade Direct cross border shipping service is a good example of how we have taken advantage of multiple capabilities and developed a configurable solution. We have combined LTL, small package and brokerage services with technology and made it a standard product and then we armed thousands of our sales force with knowledge to position this product with our customers...They have placed value in a product that reduces their overall transportation inventory and brokerage costs. It helps them streamline their shipping processes.¹⁸

¹⁸ Presentation by Chief Executive Officer Michael Eskew, *op cit.*

Thus, the Trade Direct service innovation is really an integration service that is layered on top of the company’s standard offerings. This attempt to differentiate the standardized UPS services offered against point-solutions competitors (i.e. companies that provide only one element of the solution such as only transport or just customs brokerage, etc.) resulted in a “configurable solution” of the standard offerings. This solution is merely a bundle of already standardized services. In short, Trade Direct is a mass customized offering that uses the prior standard services as components of its dynamically configured solution.

Another way to conceptualize the Trade Direct service is that it takes individual, differentiated customer needs and translates them into a bundle of various UPS services, each of which is by itself quite standard. In this logic, UPS Trade Direct is a configuration service that drives business towards the standardized offerings. It allows UPS to scale a set of standard offerings in dynamic bundles. The diagram below contextualizes the Trade Direct solution in my framework of differentiation and scalability.

Figure 7: Trade Direct Service Innovation



Summary: Repeatability as the UPS Service Innovation Mantra

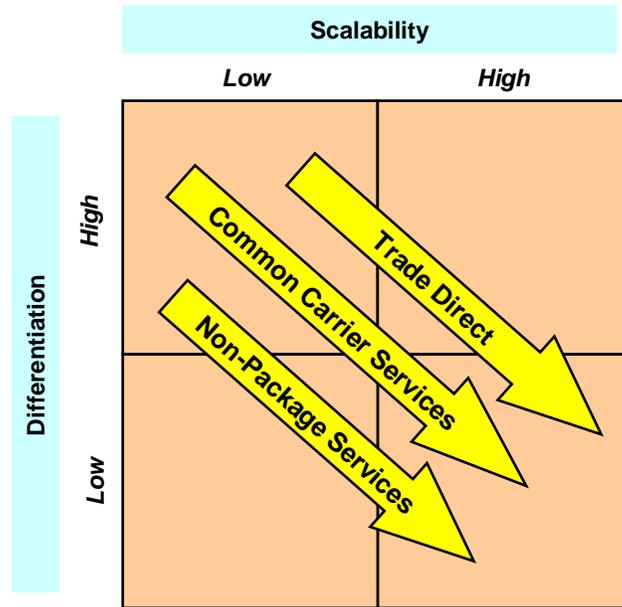
UPS has been amazingly successful over a very long period of time, in no small part because of its ability to consistently adapt to the needs of its customers. Although many of the service innovations developed at the company are extraordinarily different in strategic focus, they all share one thing in common: they are based upon repeatable, scalable, product-like and standard offerings. This should not be a particularly surprising outcome, given the relative homogeneity of the UPS management team. Further, given the heavy operational experience in the backgrounds of those same senior managers, the fact that they seek to reduce variability in the service production process is highly expected.

Current Chairman and Chief Executive Officer Mike Eskew recently noted that the aspirations of UPS have taken it into areas traditionally thought to be non-scalable, customized solutions. Eskew disagrees with the assertion that the business is not scalable, stating that it is better to think of the UPS services not as pure services, but rather as “configurable solutions” that leverage and feed business to the existing standard suite of UPS offerings. In addition to this linkage with the core transportation business, Eskew notes the importance of having these solutions be scalable:

It is important to note that UPS does not aspire to be in the contract logistic business for its own sake. We are not going to be everything for everyone. We are in the configurable solutions business. Configurable solutions are created when there is a common network of assets as well as standardized IT systems and processes that can be used by a number of customers simultaneously. These solutions are characterized by two key attributes: (1) they are linked to the transportation network where our core competencies lie; by linking our solutions to

transportation we will capture more of a customer's transportation spend (2) they have to be repeatable. **This means that the solution can be productized** – defined as a standard offering that can be marketed and sold by our worldwide sales team to multiple customers.¹⁹

Figure 8: Contextualizing the UPS Service Innovations

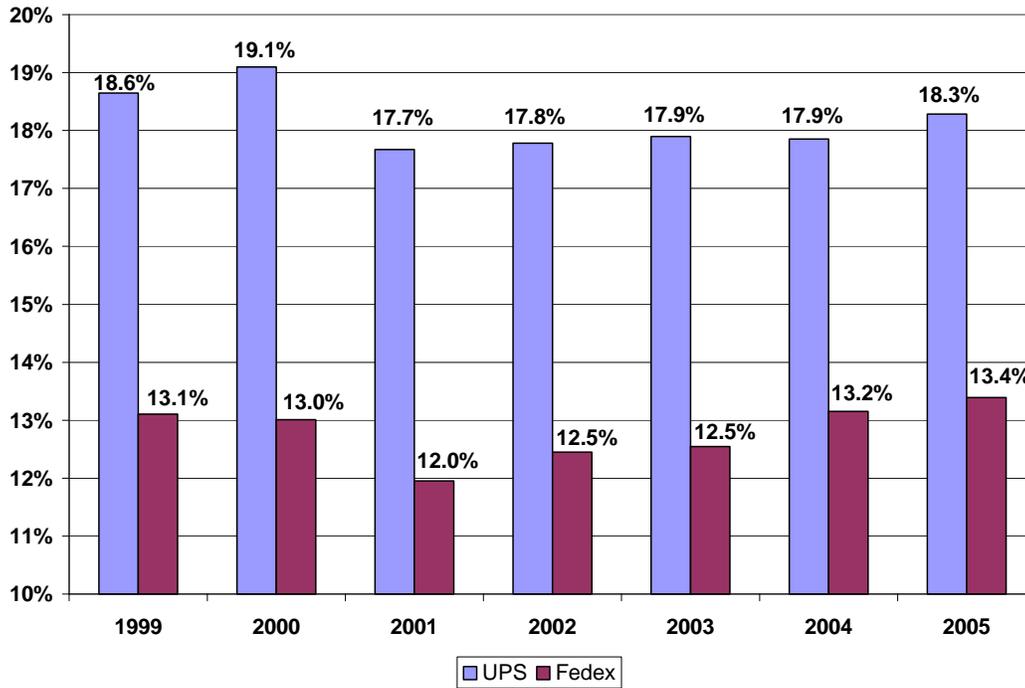


Fundamentally, the ultimate value of these strategic service innovations is found in their competitive impact. As can be seen in the following charts which compare UPS against its primary competitor, Federal Express, UPS has done extraordinarily well against its competition in recent history.²⁰ The goal of scaling the business seems to have worked quite well and UPS has managed to maintain superior margins and profitability.

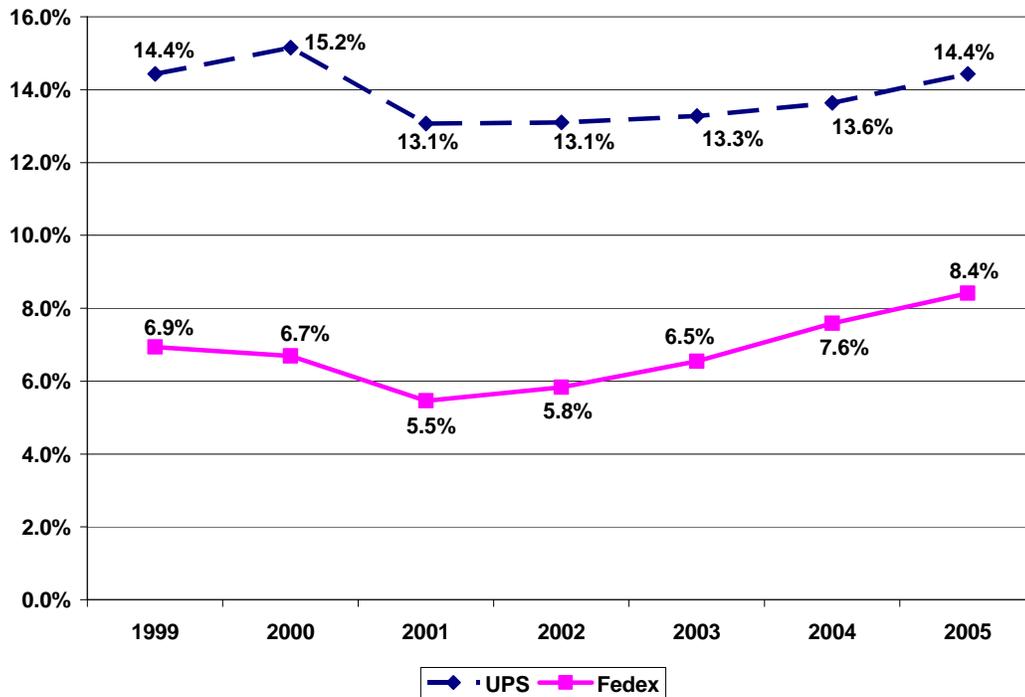
¹⁹ Presentation by Chief Executive Officer Michael Eskew, *op cit*.

²⁰ Note that the data contained in the charts are obtained from company filings with the US Securities and Exchange Commission. UPS data are for the fiscal year ended December 31 on the year presented. Federal Express data are for the fiscal year ended May 31 on the year presented. While the different dates may result in a slight confounding effect in any one year comparison, such effects will ultimately work themselves out and result in, over longer periods of time, comparisons of similar metrics.

Graph 2: EBITDA²¹ Margins, Federal Express vs. UPS



Graph 3: Operating Income Margin, Federal Express vs. UPS



²¹ Earnings Before Interest, Tax, Depreciation, and Amortization. EBITDA is generally thought of as a decent proxy for the company's cash flow generation.

The standardization push at UPS has impacted the company's competitive position in numerous ways. One of the key developments vis-à-vis this standardization strategy is that it lowers customer switching costs, something that can prove quite detrimental to a company's long-term strategy and performance as competitors may layer differentiated services on top of commoditized, standard offerings. In light of this risk, it is particularly interesting to note that the stellar UPS performance has resulted in the FedEx strategic initiative to focus on providing the "best customer experience in the industry" (Federal Express 2006 Form 10-K), a very direct attempt on their part to change the basis of competition to one in which scale drives success to one in which differentiated service is sought by customers.

Innovation in For-Profit Education: Standardizing Education at The Apollo Group

Rebel with a Cause: John Sperling's Creation of the Apollo Group

San Jose State University Professor John Sperling founded The Apollo Group in 1973. Sperling vehemently opposed the rigidity and lack of accountability of traditional non-profit education service providers and sought to create a new model for education targeting the needs of adult learners.

In 1972, the university asked him to teach a series of classes for police officers and teachers to learn how to deal with juvenile delinquents. Experimenting with a new pedagogical technique, he brought in working experts with relevant experience (rather than teaching classes himself). Further, he divided the class into groups and required the completion of a relevant project. Students loved the method and sought a degree program with similar practical relevance. Eventually, he and two of his students founded the Institute for Community Research and Development (ICRD), in direct reaction to academia's rejection of his ideas: "My university

said they didn't need no more stinkin' students, that they had all they can handle....They told me to go back and behave—be a professor”(Breen, 2003).

In March 1976, Sperling turned the operations over to his cofounders and began a new quest—the creation of a new, for-profit university dedicated to the needs of working adults. Sperling initially formed the Institute for Professional Development, Inc. as a university seeking accreditation. One of the main suggestions the accrediting body gave him in order to improve the chance of securing accreditation was to clarify the distinction between IPD and ICRD, Inc. “We chose to change the name of IPD, Inc. and, after long discussions and with much trepidation, the Board of Directors decided on University of Phoenix” (Sperling, 2000). Eventually, the University did gain accreditation.²² Overcoming regulatory barriers to establish a stable presence proved elusive.

Over the next twenty years, Sperling desperately struggled to grow the business, often pushing the company to the brink of bankruptcy. Sperling admits to making many mistakes, including overexpanding: “I can attribute all of them to frustration/boredom/naivete,” he notes. This “frustration/boredom/naivete,” however, is what also led Sperling to purchase a defunct distance learning company in 1989, a move that created the University of Phoenix Online. It took more than 5 years to move the classroom experience online, but the “factory” is now built. Today, the University of Phoenix Online generates several hundred million dollars in revenues a year and accounts for a substantial portion of the company's growth.

During the early to mid 1990's, Apollo looked at dozens of potential acquisitions, but consummated only two transactions—the purchase of Western International University, a small accredited college in Arizona that had about 900 students at the time, and the acquisition of the

²² Gaining accreditation is not a small accomplishment and involves extensive regulatory review of curricula, teaching standards, and general management processes. For a better understanding of accreditation processes and standards, please visit www.ed.gov.

College of Financial Planning, the country's leading provider of financial planning training and education service.

Background: Bringing Education to Working Adults

The Apollo Group is the world's largest private provider of higher education services and offers educational programs at 256 campuses and learning centers (as of Summer 2006) in 39 states, Puerto Rico, Mexico, the Netherlands, and British Columbia. As of May 2006, combined degree enrollment was in excess of 323,000 students. 2005 revenues were \$2.3 billion (up from \$770 million in 2001) and net income was \$445 million (up from \$107 million in 2001). The Apollo Group operates through four wholly-owned subsidiaries—The University of Phoenix (“UOP” or the “University”), the Institute for Professional Development (the “Institute” or “IPD”), the College for Financial Planning (the “College” or “CFP”), and Western International University (“Western” or “WIU”).

The University of Phoenix, a member of the North Central Association of Colleges and Schools, currently has a national footprint of locations that offer undergraduate, graduate, doctoral and non-degree programs in subjects including Accounting, Criminal Justice, Nursing, Finance, Retail Management, Education, and Business. The University of Phoenix also offers its educational programs online through the University of Phoenix Online, the world's leading online university. Approximately 60% of the University's students receive some level of tuition assistance, most from their employer. The 23,000 members of the professional faculty at the University of Phoenix all hold either masters or doctoral degrees. The University of Phoenix is constantly rolling out new degree and non-degree programs, having grown the list of available programs by more than 50% in the past 5 years.

The Institute for Professional Development, according to the most recent Apollo Group annual report, “provides program development and management consulting services to regionally accredited private colleges and universities (client institutions) who are interested in expanding or developing their programs for working adults.” Services offered by the IPD typically include curriculum development, market research, accounting/back office support, and program design. The Institute currently offers these services to regionally accredited client institutions at 22 campuses and 39 learning centers in 25 states. Its business model is somewhat unique in that it provides these services in exchange for a share of tuition revenues generated from the adult learning programs they help create or manage.

The College for Financial Planning, headquartered near Denver, CO, provides educational programs in the field of financial planning. Current programs include Certified Financial Planner (CFP) certification preparation, the Chartered Financial Analyst (CFA) certification preparation, as well as a Master of Science Degree in Personal Financial Planning. The College also administers and/or runs certificate and degree programs at various University of Phoenix locations around the United States.

Western International University is an accredited school that offers undergraduate and graduate degree programs via physical campuses in Arizona (Phoenix, Chandler, Scottsdale, and Fort Huachuca) and through joint venture agreements in India and China. Apollo acquired WIU in 1995 and it today is one of the fastest growing segments of the business. The Axia College of Western International University is a recent expansion by the Apollo Group to capture the business of working adults with little or no college experience via a computerized education delivery system. Axia offers associate degrees in business, criminal justice, general studies, IT, and other subjects worldwide.

The Competitive Landscape

The market for for-profit education is large and highly fragmented. Market definitions are murky at best, but Citigroup estimates the postsecondary education industry to have generated more than \$300 billion in revenues in 2005, with approximately \$17 billion of it being captured by the for-profit operators. Although a substantial majority of the revenues continue to fall to traditional not-for-profit community colleges, colleges, and universities, the for-profit sector continues to gain market share and has grown at significantly higher rates than the postsecondary education industry. This section of the chapter focuses upon the largest for-profit education companies, with special attention to their strategic orientations. In particular, only companies that had revenues greater than \$500 million in their latest reported annual results²³ are included in this section.²⁴ The list of Apollo's main competitors, after these adjustments, includes Career Education Corporation, Corinthian Colleges Inc., Education Management Corporation, and ITT Educational Services.

Career Education Corporation

Career Education Corporation is a postsecondary education provider focused on providing career-focused learning. The company is the “world’s largest *on-ground* provider of private, for-profit, postsecondary education” (Career Education 2006 Form 10-K) and has been increasingly focused on growing its online business. The company’s enrolled student population as of December 31, 2005 was over 100,000 students, including approximately 32,000 students in

²³ Note that all data are taken from each of the company’s Form 10-Ks, as filed with the US Securities and Exchange Commission. Data for each of the companies are as follows: Career Education Corporation, December 31, 2005; ITT Education Services Inc., December 31, 2005; Corinthian Colleges Inc., June 30, 2006; and Education Management Corporation, June 30, 2005.

²⁴ Note that one company that was excluded which meets this criteria is DeVry, Inc. The decision not to include it was driven by the company’s orientation towards professional, graduate education as well as professional certifications such as the CPA and CFA designation. In short, it was excluded because it more closely resembles a training and certification company than a postsecondary education services provider and competes for a different segment of customers.

online programs. The company operates more than 80 campuses in the United States, Canada, France, the United Kingdom, and the United Arab Emirates, as well as several “virtual campuses” on the Internet.

Career Education separates its operations into two business units: (1) the Colleges, Schools, and Universities (“CSU”) segment, which offers doctoral, master’s, bachelor’s, associate’s, and degree and diploma programs in business, visual communications, design technologies, healthcare, culinary arts, and IT via a physical, on-ground network of learning locations; and (2) the Online Education Group (“OEG”) segment, which offers degree programs in IT, computer science, business, visual communications, criminal justice, and education through the American InterContinental University Online (“AIU Online”), Colorado Technical University Online (“CTU Online”) and Stonecliffe College Online brands.

Although the company’s growth strategy has historically focused on acquisitions of “on-ground” education companies, the latest annual filings indicate the company is now focusing upon (1) growth in its OEG segment via the development of robust online curriculum delivery models, (2) growth in the CSU segment via the opening of additional locations and branches, (3) strategic acquisitions that might benefit from inclusion in the Career Education network, (4) international expansion, particularly via the online delivery model, and (5) the development of “new initiatives” in the online arena that can enhance the company’s growth trajectory in virtual, accredited, degree-oriented education.

Corinthian Colleges

Corinthian Colleges is a career-oriented postsecondary school operator that had more than 64,500 students enrolled in its programs on June 30, 2006. The company offers associate’s, bachelor’s, and master’s degrees via a network of 95 colleges in 26 US states and 33 colleges in

seven Canadian provinces. Corinthian Colleges' offerings are vocational in nature, and the targeted consumer of its services is a relatively young student (18-24 years in age) that has little or no college experience and is seeking an entry-level position in a white collar profession such as healthcare, business, criminal justice, or technology.

Corinthian operates via five divisions: (1) the Florida Metropolitan University division, which consists of 14 campuses focused on degree-granting programs in healthcare, business, criminal justice, and IT; (2) the Corinthian Schools division, which operates 45 diploma-granting schools focused on healthcare and business fields; (3) the Titan Schools division, which operates 36 campuses offering diploma and degree programs in aircraft frame maintenance, power plant maintenance, automotive repair, and diesel technology; (4) the CDI Education Postsecondary division, which operates the company's Canadian network of 33 colleges offering diploma programs in healthcare, business, and IT; and (5) the Pegasus division, which operates the company's two online properties – FMU Online and Everest Online.

Corinthian's operating strategy is focused, according to the company's 2005 Form 10-K, on four main elements: (1) enhancing growth at existing campuses, (2) establishing additional locations, (3) making strategic acquisitions, and (4) expanding the suite of online offerings. The first tactic is focused on the development and acquisition of new curricula that the company plans to distribute through its existing schools network. The second element of the Corinthian strategy is to expand the network through organic "newbuilds" or branch locations, thereby increasing venues for the curriculum distribution strategy. Although acquisitions remain a major element of the company's strategy, as well as its historical origins (of the company's current campuses, 95 were acquired), management is today focused on acquisitions that enhance the value of the network (i.e. the acquisition has curriculum that can be offered elsewhere, etc.).

Finally, because only 3,878 students were enrolled (less than 7%) in online degree programs, the company is looking to grow this element of the business as yet another distribution venue for the curricula.

Education Management Corporation

Education Management Corporation is a postsecondary education services provider that has been operating in the United States for over 40 years. As of June 2005, the company had 71 primary campuses located in 24 states and 2 Canadian provinces. Total student enrollment exceeds 66,000. The company began operations in 1962 and today offers a range of diploma and degree programs (associate's through doctoral) in media arts, design, fashion, culinary arts, behavioral sciences, health sciences, education, information technology, legal studies, and various business fields. During early 2006, the company was taken private by a group of private equity investors led by Goldman Sachs and Providence Equity Partners.

The company offers its academic programs through four distinct educational institutions: (1) The Art Institutes, (2) Argosy University, (3) Brown Mackie College, and (4) South University. According to the company's 2005 Form 10-K, "Art Institute programs are designed to provide the knowledge and skills necessary for employment in various fields, including graphic design, media arts and animation, multimedia and web design, game art and design, animation, video and digital media production, interior design, industrial design, culinary arts, photography, and fashion" (Education Management 2005 Form 10-K). Programs typically run 18-48 months. Argosy University offers doctoral and master's degree programs in (a) clinical psychology, counseling and education, (b) business administration, and (c) health sciences. Brown Mackie Colleges, which operates 22 campuses throughout the Midwest US, offers associate's degree programs in healthcare, business, IT, legal studies, and design technologies.

Finally, South University, with four campuses in the southeastern US, offers undergraduate and graduate degree programs in business, legal studies, IT, and healthcare.

Education Management's operating strategy is based on six elements: (1) emphasizing graduate outcomes and student career advancement, (2) developing new locations, (3) increasing the use of shared service locations, (4) creating new academic programs, (5) rolling out existing programs to additional schools, and (6) expanding the online business.

ITT Educational Services

ITT Educational Services, which was founded in 1969, is focused on offering technology-oriented postsecondary degree programs within the United States. As of December 31, 2005, the company had approximately 43,000 students enrolled in 81 ITT Technical Institutes in 32 states. Although ITT has historically targeted associate's degree candidates, 26% of the student body today is seeking a bachelor's degree. Further, the company has also begun to diversify away from its technical curricula and now offers degree programs in business and criminal justice.

The company's strategy has been, and continues to be, focused on achieving economies of scale. To do this, ITT focuses on six primary strategic efforts: (1) growing its core schools and programs by recruiting previously un-addressed student segments (i.e. working adults) while enhancing its presence among the traditional market (i.e. recent high school graduates); (2) broadening the company's geographic footprint by opening new campuses and learning centers; (3) vertically expanding the curriculum by offering more bachelor's and master's degree programs; (4) increasing the number of programs through acquisition or development in additional fields of study; (5) extending the total program duration through increases in the

percentage of students enrolled in bachelor’s programs, and (6) expanding economies of scale with new curriculum delivery efforts, most notably in the online space.

Summary & Comparative Data

As is clear from the data presented above, the four primary competitors to Apollo seem to have taken a more “downmarket” focus vis-à-vis their students’ educational objectives. For instance, it is noteworthy that more than 90% of Corinthian’s students and 70% of ITT’s students are pursuing either a diploma or an Associate’s degree, while more than 80% of Apollo’s students are seeking a Bachelor’s degree or higher. The summary table below segments the students at each of the companies by program type:

Table 13: Student Objectives by Company

Company	Students	Diploma	Associates	Bachelors	Masters	Doctorate
Apollo	300,000+	0%	16%	57%	26%	1%
Career Ed	100,000+	14%	38%	-- 47% --		1%
Corinthian	65,000+	64%	29%	5%	2%	0%
Ed Mgmt	66,000+	7%	35%	44%	5%	9%
ITT	43,000+	-- 73% --		26%	1%	0%

The other noteworthy insight that emerges from the above competitive discussion is that most companies are trying to rapidly develop their online offerings. Corinthian, Education Management, and ITT Education each have fewer than 5,000 students enrolled in their online curricula, while Career Education has slightly more than 30,000. Apollo, the clear leader in the online education market, has more than 100,000 students pursuing degrees via its virtual campuses.

The Apollo Strategy

The Apollo Group is arguably the most successful company in the history of for-profit educational service. It has more than 30 years of experience operating in the industry and has developed a strategy that is based on the following singular objective: “to be the leading provider of accessible, high quality education for working adult students and a preferred provider of workplace training to their employers. We are dedicated to improving the nation’s workforce by delivering measurable results, providing accessible programs, and developing efficient and effective education programs and solutions” (Apollo Group 2005 Annual Report).

In furtherance of this mission and vision, the Apollo Group pursues numerous strategies, each of which is designed to increase the size and scope of the company’s offering set. In particular, the company is trying to (a) establish new University of Phoenix campuses and learning centers, (b) expand its student base in Associates degree programs, (c) establish new IPD relationships, (d) expand the educational programs offered, (e) expand access to programs, and (e) pursue international expansion opportunities. While most of these strategies are self-explanatory, they do not explain how the company has successfully competed in a highly fragmented, highly regulated industry for many years. The company answers the question by pointing to four primary competitive strengths and advantages it uses to compete: (1) accredited degree programs, (2) experienced faculty resources, (3) current and relevant standardized programs, and (4) proven benefits to employers.

Because of the regulatory environment facing for-profit education, accreditation generates a host of competitive advantages against non-accredited institutions. In particular, if accredited, an institution is eligible to provide students with access to Title IV federal financial

aid programs. Further, accreditation allows the institution to grant credits that will likely be accepted at other accredited institutions.

Given the difficulty of finding experienced as well as capable faculty to teach in an untenured, contract environment, the Apollo Group's 30 years of operational history has given it a substantial jump on new entrants in terms of recruiting faculty. Further, because the University of Phoenix has such an established brand, it is also able to be more discriminating vis-à-vis faculty hiring criteria—resulting in a more accomplished and capable faculty. Because the curriculum development model is profiled below, I will defer discussion about it to the following section about service innovations at Apollo.

The proven benefits to employers again stems from the company's long operating history. Over the years, Apollo Group schools have developed working relationships with many of the largest employers near the schools, allowing qualified employers to both teach classes as well as provide input on the curriculum. As a result, the University of Phoenix is recognized as a valuable and useful training ground for companies to send their upwardly-mobile executives. Further, for those students who use their time at the University of Phoenix to transition professionally, the University of Phoenix brand has proven to be an asset due to these relationships with local employers.

Service Innovation as Standardization

The Apollo Group undertook two major service innovations: (a) the institution of centralized curriculum development and refinement and (b) the FlexNet hybrid online – onsite learning delivery model. In both of these cases, the essential change brought about by the service innovation was a standardization of the offering in a quest for scalability.

Given that each of these three cases has to do with the learning and teaching process (the “offering” of an education service provider), it is important to first understand the overall philosophy of teaching and learning at the Apollo Group, as embodied in the company’s teaching and learning model—one of the company’s key strengths. The company designed, tested, refined, and some might say perfected its teaching model to meet the needs of working adults. It allows students who hold full time positions to fulfill their personal and professional obligations while simultaneously achieving their educational objectives. According to the 2005 Form 10-K,

Students attend weekly classes. In addition, at University of Phoenix, students also meet weekly as part of a three to five person learning team. Learning team sessions are an integral part of each University of Phoenix course. They facilitate in-depth review of and reflection on course materials. Members work together to complete assigned group projects, and develop communication and teamwork skills. Courses are designed to facilitate the application of knowledge and skills to the workplace and are taught by faculty members who possess advanced degrees and have professional experience in business, industry, government, or other professions. In this way, faculty members are able to share their professional knowledge and skills with the students (Apollo Group 2005 Form 10-K).

Other components of the Teaching/Learning model are summarized in the table below, which is taken from the company’s 2005 Form 10-K and highlights the six key elements of the Apollo Group education delivery model: (1) curriculum, (2) faculty, (3) learning environment, (4) library and other learning resources, (5) sequential enrollment, and (6) academic quality.

Table 14: The Apollo Group Learning / Teaching Model for Degree Programs

Element	Details on Apollo Group Philosophy / Approach
Curriculum	Curriculum is designed to integrate academic theory and professional practice and their application to the workplace. The curriculum provides for the achievement of specified educational outcomes that are based on input from faculty, students, and students' employers. The standardized curriculum for each degree program is also designed to provide students with specified levels of knowledge and skills.
Faculty	Faculty applicants must possess an earned masters or doctoral degree from a regionally accredited institution and, in order to teach at University of Phoenix, faculty must have a minimum of five years' recent professional experience in a field related to the subject matter in which they seek to instruct (other than those teaching in general education or related subjects).
Learning Environment	Courses are designed to encourage and facilitate collaboration between students and interaction with the instructor. The curriculum requires a high level of student participation for purposes of enhancing learning and increasing the student's ability to work as part of a team.
Library and Other Learning Resource Services	Students and faculty members are provided with electronic and other learning resources for their information and research needs. Students can access these services directly through the Internet or with the help of Learning Resource Services research librarian.
Sequential Enrollment	University of Phoenix and Western International University students are enrolled year round and complete classes sequentially, rather than concurrently. This permits students to focus their attentions and resources on one subject at a time and creates a better balance between learning and ongoing personal and professional responsibilities. Axia College students are enrolled in courses that are nine weeks in length and are offered in pairs to complement each other. One week will emphasize reading and discussion; while the following week will emphasize a work project; the assignments alternate so that during each week the student will be reading in one class and completing a project in the other.
Academic Quality	The Academic Quality Management System at University of Phoenix was designed to maintain and improve the quality of programs and academic and student services. This system includes the Adult Learning Outcomes Assessment, which seeks to measure student growth in both the cognitive (subject matter) and affective (educational, personal, and professional values) skills.

Source: Apollo Group 2005 Form 10-K

Centralized Curriculum Development and Management

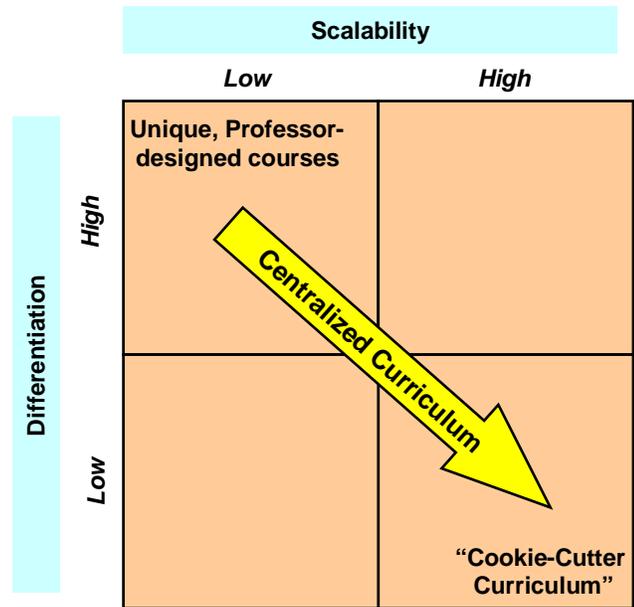
Founder John Sperling specifically designed the Apollo teaching model to meet the needs of working adults. However, it also allows the business to develop more scale than traditional education service delivery. Specifically, the teaching model allows the Apollo Group to standardize education into a “product-like” offering. A key component of the University of Phoenix teaching model is the utilization of centralized curriculum development experts. Rather than allowing for idiosyncratic and customized course content that caters to the whims of particular faculty, standard course modules that include class lesson plans, course objectives, desired outcomes, and specific assignments to reinforce course goals are centrally developed.

A “corporate” curriculum development group selects all textbooks and course materials, removing variability in service quality due to instructor differences (Cappelli & Sledgister, 2003; Childe & Newell, 2003). In addition to effectively acting as a service guarantee (students know before they take the class exactly what they will learn), the standard format allows product-like recurring profits. It also allows the company rapidly to bring faculty up to speed by effectively automating the teaching process. Further, because the curriculum is centralized, Apollo can reduce its dependence upon faculty members to arrive with courses in hand or possessing the raw intellectual capability to design and develop the course materials. As a result, the centralized curriculum has enabled its unique approach to faculty (i.e. the supply) management; Apollo has successfully avoided the burden of carrying underutilized people as pseudo-fixed costs. The company does not tenure faculty and courses are contracted for on a single class basis, providing Apollo greater management flexibility.

Thus, the centralization of the curriculum took what might have otherwise been a highly differentiated offering (based upon each individual professor’s style and judgment of what

material was most important to teach) and made it a standard, almost cookie-cutter offering. The approach was essential to make the business scale while maintaining a consistent offering. The figure below summarizes the centralized curriculum innovation in the familiar 2x2 quadrant.

Figure 9: The Centralized Curriculum Innovation



FlexNet: A Hybrid Online-Onsite Learning Delivery Model

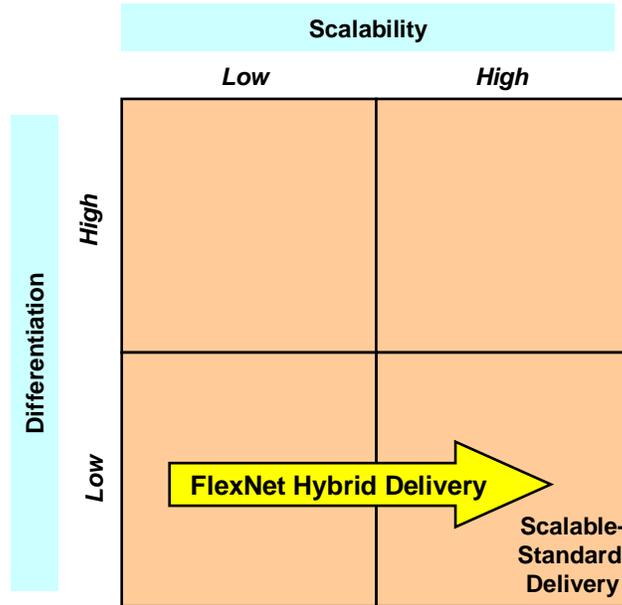
Another element of the teaching model that demonstrates the power of service innovation is the flexibility in location and time of service delivery. In particular, the company’s University of Phoenix FlexNet offerings have allowed it to decouple the simultaneity and collocation of service production and consumption. While not exactly “inventory,” catalogs of student-teacher interactions in an online threaded discussion “room” allow other students to consume the education anywhere in the world at anytime. FlexNet also allows the company to alter the time and location of the service delivery. It differs from the traditional classroom-only and online-only offerings by offering students a hybrid model: rather than attending all classes on site, students attend the first and last class in person and complete all other coursework online.

An ancillary benefit of this alternative delivery model is a reduction in the physical plant needed to support the students. Further, FlexNet multiplies the addressable market by an order of magnitude. In addition to attracting students from markets that do not justify a physical presence, altering the timing and location of service delivery creates a market that includes billions of potential adult students from around the globe. It is not impossible for a Japanese businessman to attend the first class of a course while in the US on a professional trip, return home and continue participating in the class, and then return for the final class and exam. As noted in the 2005 Apollo Annual Report:

2005 underscores an ongoing emphasis on innovation and its impact on enrollment. Part of the formula is finding new ways to leverage existing technologies and programs. Growth of the University of Phoenix FlexNet program, which combines the face-to-face and online modalities, is one of the year's major success stories. As of August 31, 2005, there were 15,400 students enrolled – a 54% increase over the previous year. During the year, nine campuses added FlexNet capabilities, for a total of 59 locations, including 10 that are FlexNet only (Apollo Group 2005 Annual Report).

When combined with the standard nature of the curricular offering, the FlexNet delivery model really breaks location constraints inherent in a physical classroom to provide for greater scalability. In evaluating the innovation relative to the differentiation – scalability framework, Flexnet takes an unscalable (i.e. only “x” students can fit in a classroom) and undifferentiated offering (i.e. the curriculum is standard) and makes it like a standardized product.

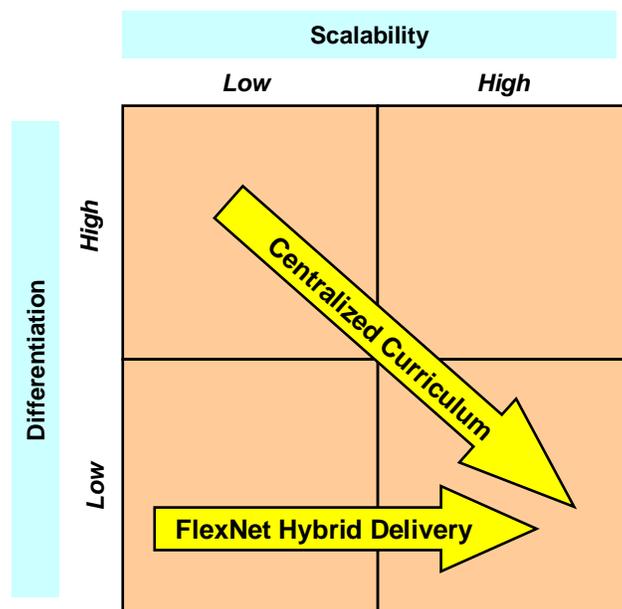
Figure 10: The FlexNet Hybrid Delivery Innovation



Summary: Standardizing a Historically One-Off Offering

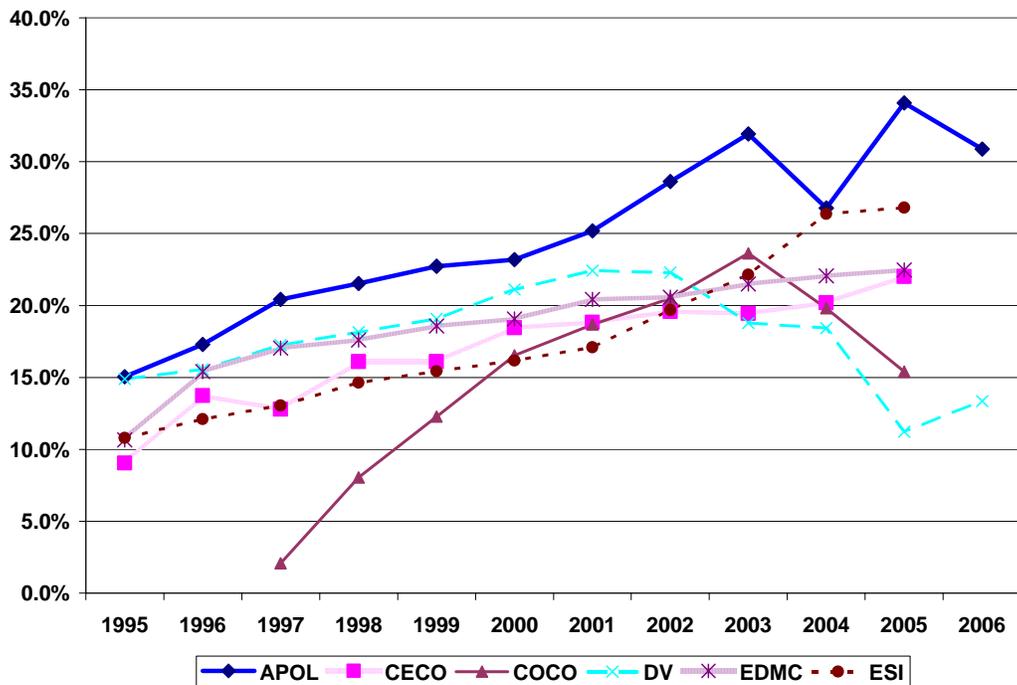
One consistent theme has emerged with respect to Apollo’s innovation efforts: it seeks to scale by distributing standard offerings via an increasing system of physical and virtual locations.

Figure 11: Contextualizing the Apollo Group Service Innovations

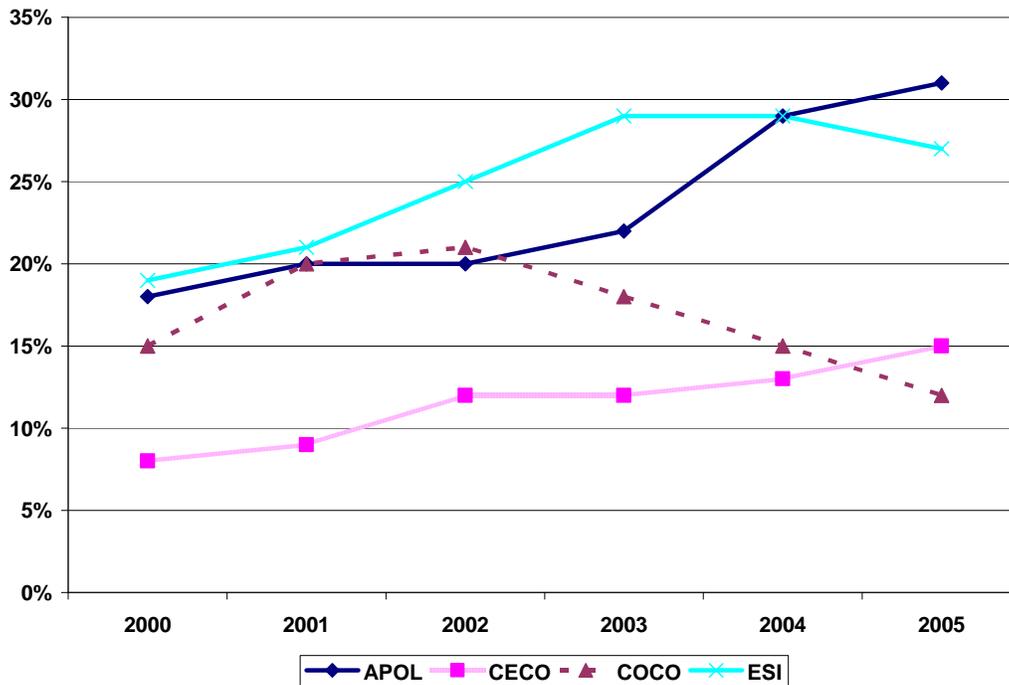


These two strategic service innovations have helped Apollo operate against its primary competitors, by increasing the company's scale and profitability. As the charts below demonstrate, Apollo has managed to generate greater profits from each dollar of revenues as well as each dollar of invested capital than its peers. Further, while many of the other competitors have achieved their growth and margin expansions via acquisition-driven strategies, Apollo has successfully grown its revenues and profitability through scale-enhancing service innovations like the standardized curriculum and FlexNet delivery model.

Graph 4: EBITDA Margins, Apollo vs. Leading For-Profit Education Competitors



Graph 5: Return on Invested Capital, Apollo Group vs. Industry Competitors



Source: Citigroup Equity Research report entitled "What's a Degree Worth?" dated February 17, 2006

The longer-term strategic impact of these two developments on the firm's prospects is less clear. In particular, it is possible that the standardization of the curriculum might have a cancerous effect: by creating an open and obvious standard education offering within a transferable credit system, the inherent nature of the offering is that it lowers switching costs dramatically and forces price-based competition. Thus, although the company has had tremendous initial success with the standardization of the curriculum, this may be in large part due to their meeting of unfulfilled needs within a virgin market. Over time, it seems inevitable that price-based competition will intensify, leading to commoditization of the offering.

Summary: Service Innovation as Standardization?

Although every manager in a service company would agree that an offering which was both scalable and differentiated is the objective of any strategic innovation or service

development process, very few have been able to “crack the code” that gets them to the holy-grail of service strategy – the scalable and differentiated service.

A review of the five strategic service innovations that took place at UPS and the Apollo group illustrates the inherent difficulty of accomplishing this objective. Perhaps because of the size and experiential backgrounds of its senior managers, UPS is focused on creating repeatable, productized solutions that leverage their existing network. Given the company operates a high fixed-cost global network, virtually every endeavor is focused on what several managers call “feeding the beast” by increasing the volume of delivery business. Understanding that customer needs are not all identical, the company has approached the quest for differentiated service by designing “configurable solutions.”

Although the concept sounds like it might entail some degree of individualization and/or differentiation, the reality is that these configurable solutions are merely mass customization (Pine, 1993) or menu-like configuration bundles of existing (and standardized) services. While they may influence customer behavior in the short run, these configurable solutions are subject to competitive pressures that will eventually result in dissipating profitability as competitors begin to replicate the suite of services. A quick glance at the Federal Express website indicates that the company is beginning to replicate various bundling / configurable solutions.

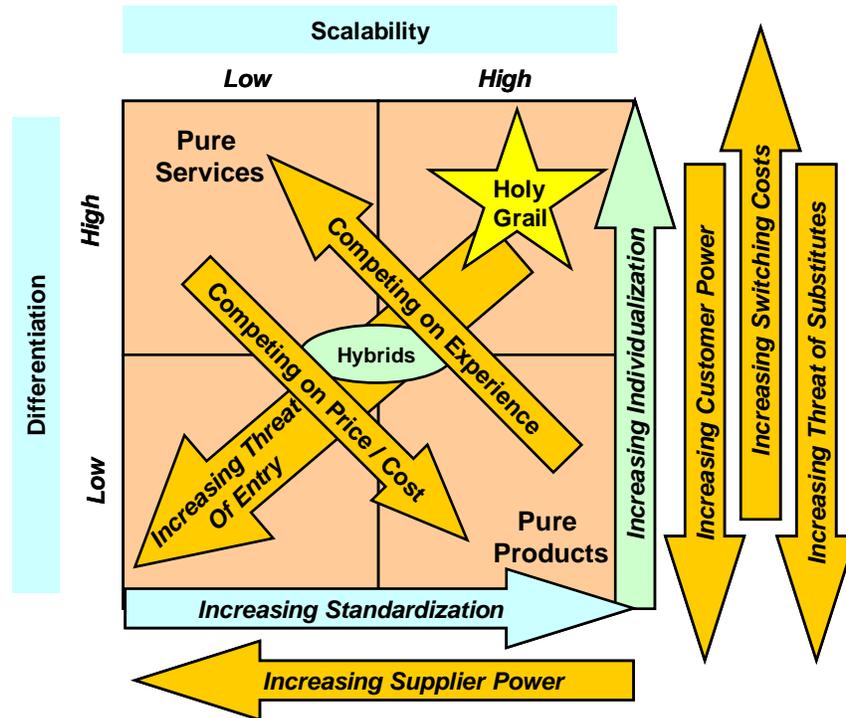
Likewise, the Apollo Group’s approach to service innovation is one focused on scale. Again, perhaps due to its size as the world’s largest education institution, the company is heavily focused on standardizing its offering to increase scalability. The company would rather have large scale distribution of cookie-cutter content than highly-differentiated educational offerings that are based on a handful of unique curriculums or superstar faculty members. Centralized curriculum development and management removes the variability associated with the latter

approach. Further, it enables the development of economies of scope as additional campuses bear no curriculum development costs and additional curricula can be “pumped” through the distribution network of campuses and learning centers. Likewise, the FlexNet offering mitigates the constraints of physical classroom space, as the “FlexNet only” learning centers accommodate many multiples (perhaps as many as 20) of the students accommodated by traditional campuses and also assure that testing and evaluation procedures are sound.

The quest is for “needle-moving” strategic service innovations that can help a company grow its business at a faster rate than its costs (i.e. scale) seems to be the objective of many service firm business development agendas. The easiest manner to accomplish this objective is to standardize an offering so that it may be “mass-produced” to participate in a large market. Standardization, however, is synonymous with commoditization and—barring other competitive advantages to combat competition—leads to eventual profit-dissipating pressure.

Revisiting the scalability – differentiation framework in generic terms is worthwhile at this point in a quest to answer the question of “Why isn’t scale enough?” After all, despite the concerns about commoditization, both UPS and the Apollo Group seem to have performed quite well. As mutual fund marketers know all too well, past-performance does not guarantee future results. So too is the case with both UPS and Apollo. A truly useful lens would allow managers and industry analysts to sense (if not predict) a priori the deterioration of performance. The figure below has the original scalability-differentiation framework presented above with gold arrows representing the nature of competition among firms.

Figure 12: The Scalability-Differentiation Framework with Competitive Dynamics



The above figure illustrates the fundamental problem of pursuing a scale-oriented strategy. Such an approach may produce a temporary competitive advantage, but is unlikely by itself to be the source of enduring profitability. Standardization by its very nature seems to reduce switching costs, increase customer power, and increase the threat of substitutes. Correspondingly, a differentiated strategy would result in decreased customer power, increased switching costs, and decreased threat of substitutes. Thus, it seems that standardization equals commoditization. Is it possible to have a scalable offering that is not commoditized? Harrah’s answers this question affirmatively, while debunking the notion that large companies are so focused on scalability that they willingly accept the eventual commoditization that accompanies scale. The chapters that follow investigate how Harrah’s chose to compete in a ruthlessly competitive “high-stakes” environment via a focus on the customer experience, and how that focus lead to a scalable service differentiation strategy.

Chapter 4 – Harrah’s Entertainment and the Gaming Industry

Before we dive into the detailed case study of Harrah’s Entertainment and its service innovation strategy, it is extremely important to understand the industry context in which Harrah’s operates. This chapter of the dissertation describes Harrah’s Entertainment’s position in the gaming industry with a particular focus on the company’s strategic stance vis-à-vis its peer companies. As a precursor, the chapter begins with brief profiles of the customer and the market for which casino companies compete. The chapter then turns to an overview of the “current-day” Harrah’s Entertainment before reviewing the main US casino operators and their respective strategies. A brief section on casino industry attitudes regarding technology precedes the chapter’s summary of the competitive dynamics that characterize the industry. The chapter concludes by comparing Harrah’s to its main US competitors vis-à-vis its operating performance as measured by return on invested capital.

Casino Gamblers: A Profile of the Customer

Many politicians and policymakers outside of the casino industry fear that casinos are accompanied by a host of social and public problems—primarily driven by the availability and possibility of big winnings. Problem gamblers, they assume, are the norm in environments near casinos and some might even go so far as to suggest that casinos create problem gamblers. As a result of these perspectives, the American Gaming Association and several other organizations representing the casino industry have conducted extensive studies investigating who actually gambles in casinos. Perhaps the most informative of these sources are the National Profile Study conducted by Roper Reports and the US Gaming Panel survey conducted by TNS. The National Profile Study includes a nationwide sample of 2,000 adult men and women who were surveyed

in their homes, and the US Gaming Panel includes a nationally representative sample of 14,437 of adults chosen from 57,205 respondents to a survey of adults age 21 and over. These two studies serve as the basis for a report composed by Harrah's entitled *A Profile of the American Casino Gambler*.²⁵ In most cases, non-gambler data is obtained from the US Census.

To begin, casino gambling is not as unusual as most individuals expect. A ten year study conducted by the Scripps Survey Research Center at Ohio University found that 58% of adults in the United States have gambled in a casino at least once. Further, almost 53 million US residents gambled in a casino in 2005, making an average of 6.1 trips to the casino. The TNS survey, as summarized in the Harrah's report, also found that

Casino gambling is a very popular entertainment for US adults. More than 25% of Americans age 21 and older gambled at a casino at least once during 2005, and Americans made more than 320 million visits to casinos. Adults with annual household incomes exceeding \$95,000 are the most likely to visit a casino. This group has a casino gambling participation rate that is 55% higher than that of the lowest income bracket [under \$35,000].

The report goes on to indicate that casino gamblers are also more likely than non-gamblers to have a white collar job and to have attended at least some college. In addition, "the median household income of casino gamblers is almost \$8,000 higher than the national median."²⁶

²⁵ Unless otherwise noted, all the facts relating to casino gamblers presented in this sub-chapter are from the Harrah's summary report, which is available via www.harrahs.com.

²⁶ *Harrah's Survey 2006: Profile of the American Casino Gambler*, page 18.

The surveys also asked many questions about the behaviors, value systems, and financial sophistication of the respondents. The findings of these differ across gamblers and non-gamblers, the most interesting of which are summarized in the table below.

Table 15: Casino Gamblers vs. Non-Gamblers

Metric / Issue	Casino Gamblers	Non-Gamblers
In control of spending and borrow only when necessary	57%	44%
Higher savings this year	23%	16%
Living day to day	17%	23%
Generally optimistic about the future financial situation	78%	68%
Asked by others for their opinion on how to invest	20%	12%
Have enough money to live comfortably in retirement*	46%	37%
Able to count on income from investments and savings**	50%	33%
Own High Definition TV	11%	8%
Own Digital Camera	37%	26%
Homeownership Rate	78%	72%
Purchased current car new	50%	44%
Like to be the first to try new restaurants	21%	12%
View work as a career	58%	48%
View work just as a job	42%	51%
Donated money to a social issue in the past 12 months	33%	20%

* Asked of non-retirees; ** Asked of retirees.

Source: National Profile Study conducted by Roper Reports, as cited in Harrah's Survey 2006: Profile of the American Casino Gambler.

The TNS survey results also have findings about casino gamblers preferences vis-à-vis the casino games. The table below summarizes what the casino gamblers declare as their favorite casino game.

Table 16: Favorite Casino Games, TNS survey results

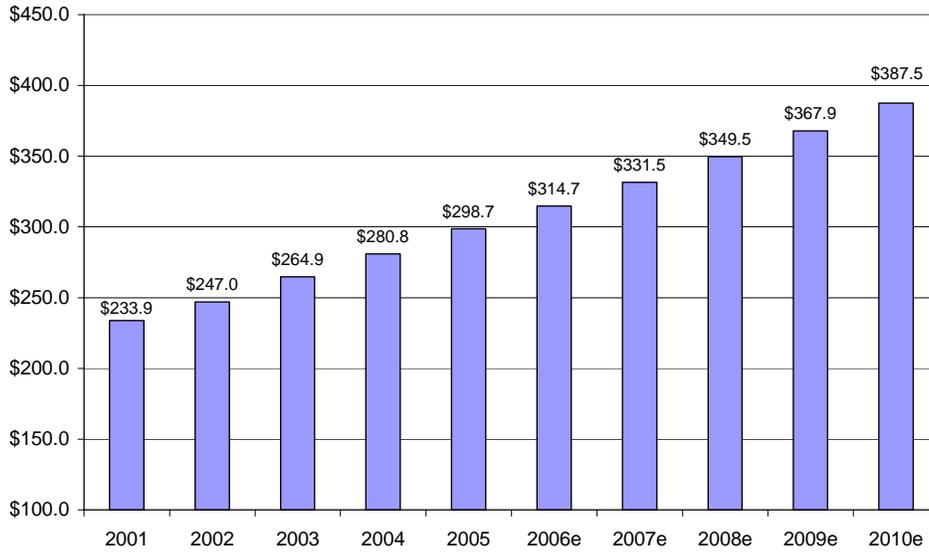
Game	% of Casino Gamblers	% of Male Gamblers	% of Female Gamblers
Slots/Video Poker	71%	63%	79%
Table Games	14%	21%	9%
<i>Blackjack</i>	9%	13%	5%
<i>Roulette</i>	2%	2%	1%
<i>Craps</i>	2%	3%	1%
<i>Live Poker</i>	2%	3%	1%
Other	5%	5%	5%
Don't Know	9%	10%	7%
Total	100%	100%	100%

Source: US Gaming Panel, as cited in *Harrah's Survey 2006: Profile of the American Casino Gambler*.

Global Casino & Gaming Market Size and Segmentation

The global casino and gaming market, according to DataMonitor, consists of “all forms of online and traditional betting on sports, lotteries and slot machines, as well as gambling in casinos or bingo halls” (Datamonitor, 2003, 2006). The value of this market, defined in this way, was \$298.7 billion in 2005 – following expansion at a CAGR of 6.3% over the 2000-2005 period. A primary driver of this growth has been the expansion of online gambling. Datamonitor also estimates this growth to continue, albeit at a slightly lower CAGR of 5.3% over the 2006-2010 timeframe.

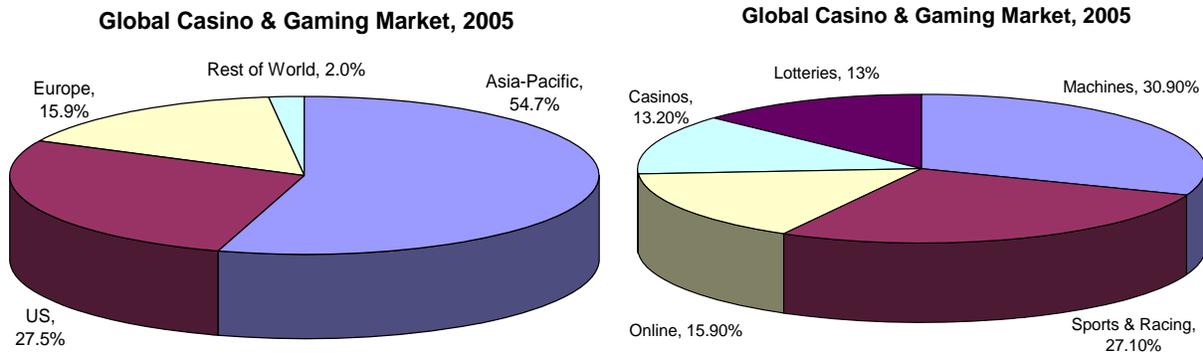
Graph 6: Global Casino & Gaming Market Size (US\$ billions)



Source: DataMonitor

The industry can be segmented in two primary ways – by geography and by type of game. From a regional perspective, the US represents ~28% of global gaming revenue and is approximately half the size of the Asia Pacific region. The traditional casino business falls into two sub-segments (casinos and machines) and in aggregate represents slightly less than 45% of the global market. The two graphs below summarize these market segmentations:

Graph 7: Global Casino & Gaming Market Segmentation by Region and Game Type

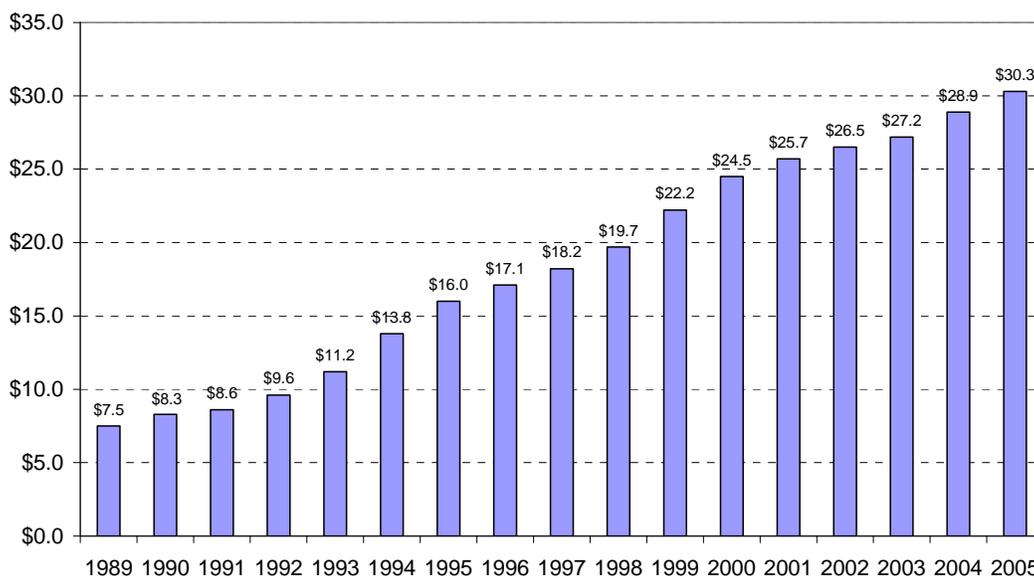


Source: Datamonitor

Source: Datamonitor

Even when one looks just at the United States, which is the largest gaming market as an individual country, the growth trends mimic the overall global industry trends. In the US as elsewhere, casino revenues grew due to (a) additional casinos, (b) expansion of existing casinos, and (c) increased betting (frequency and amount) within existing casinos. The emergence of “racinos” and Indian reservation casinos has also fueled the market. In fact, the overall trend towards increased gaming entertainment expenditures by global consumers is a generic outcome of the global economic expansion that has taken place over the past 20+ years.

Graph 8: US Commercial Casino Gross Gaming Revenues (US\$ billions), 1989-2005



Source: American Gaming Association

The map below, developed by the American Gaming Association, demonstrates the geographic footprint of the US casino industry by type of casino. As of December 2005, there were 11 states that offered traditional casino gambling, 11 states that had approved racetrack casinos, 28 states that had tribal casinos, 5 states with legalized card rooms, and 6 states with electronic gaming devices (primarily video lottery).

Figure 13: US Gaming Locations by Type

CASINO LOCATIONS BY CATEGORY

-  Commercial Casino
-  Tribal Casino⁴
-  Electronic Gaming Device⁷
-  Racetrack Casino^{1,2,3}
-  Card Room^{5,6}



US Gaming Locations, by Type	
Traditional Casino	455
Racetrack Casino	29
Tribal Casino	406
Card Room	545
Electronic Gaming Device	10,247

Source: American Gaming Association, State of the States 2005

Harrah’s Entertainment Today

Harrah’s Entertainment is today the world’s largest casino entertainment company with 2005 revenues of more than \$7 billion (over \$9 billion pro-forma for the Caesar’s acquisition). As of December 31, 2005, the company operated 20 land-based casinos, 11 riverboat or dockside casinos, 4 Indian reservation casinos, 2 cruise ship casinos, 1 greyhound racetrack casino, and 1 thoroughbred racetrack casino in two destination markets (Atlantic City and Las Vegas) and numerous frequency markets. Harrah’s employs more than 85,000 individuals.

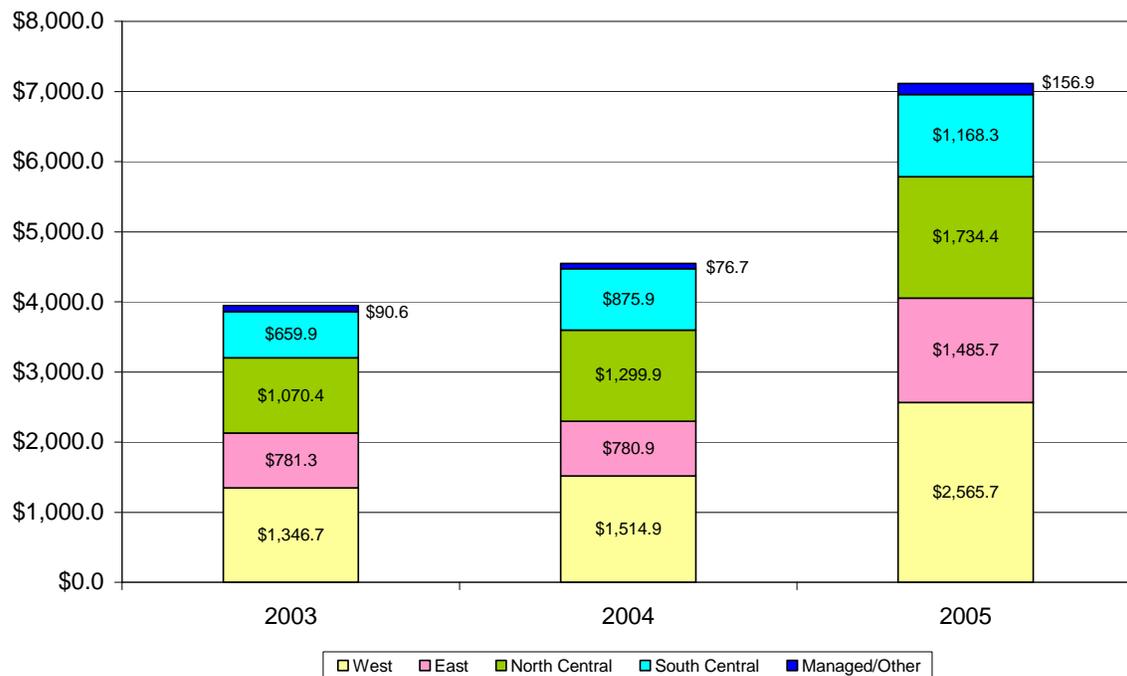
Although the company operates through three primary brands (Harrah’s, Caesars, and Horseshoe), Harrah’s also has some of the most prominent casino gaming brands in its portfolio—including the Flamingo (the first and original casino hotel located on what later became the Las Vegas Strip), Bally’s, Paris, the Rio, and Showboat. In addition, the company also owns *The World Series of Poker* brand. It has the broadest US presence of any gaming company and also currently operates a casino in Uruguay as well as Ontario. Recently announced plans include expansion into the United Kingdom via the acquisition of London Clubs International and the building of casino resorts in Slovenia, Spain, and the Bahamas. Although future growth will

Table 17: Harrah’s Entertainment Properties by Geographic Segment

<u>West</u>	<u>East</u>	<u>North Central</u>	<u>South Central</u>	<u>Managed/Other</u>
Harrah’s Reno	Harrah’s Atlantic City	Harrah’s Joliet	Harrah’s Lake Charles	Harrah’s Ak-Chin
Harrah’s Lake Tahoe	Showboat Atlantic City	Harrah’s Kansas City	Harrah’s New Orleans	Harrah’s Cherokee
Bill’s	Caesars Atlantic City	Harrah’s Council Bluffs	Harrah’s Louisiana Downs	Harrah’s Prairie Band
Harrah’s Las Vegas	Bally’s Atlantic City	Bluffs Run	Horseshoe Bossier City	Harrah’s Rincon
Rio		Harrah’s St. Louis	Horseshoe Tunica	Punta del Este (Uruguay)
Caesars Palace		Harrah’s Metropolis	Grand Tunica	Windsor (Ontario)
Paris		Horseshoe Hammond	Sheraton Tunica	SS Crystal Symphony
Bally’s Las Vegas		Caesars Indiana	Grand Biloxi	SS Crystal Serenity
Flamingo Las Vegas			Grand Gulfport	
Reno Hilton				
Flamingo Laughlin				
Imperial Palace				

Revenues over each of the past three years have grown in each of these segments with one exception – the East was basically flat for 2004. The chart below summarizes revenue trends over the past three years.

Graph 9: Harrah’s Entertainment Revenue by Segment (US\$ million), 2003-2005



Source: Harrah’s Entertainment

Further, in light of the competitive context outlined later in this chapter, the following table demonstrates the heavy focus of Harrah's upon slot players, as demonstrated by the significantly higher number of slots (relative to tables and/or casino square feet) than competition at properties of comparable size.

Table 18: Harrah's Property Statistics

Property	Rooms	Casino Square Footage	Slot Machines	Gaming Tables
Harrah's Reno	928	57,000	939	56
Harrah's Lake Tahoe	531	57,554	869	73
Harvey's Lake Tahoe	740	63,375	892	89
Bill's	-	85,000	236	23
Bally's Las Vegas	2814	66,367	1276	66
Paris Las Vegas	2916	85,000	1190	100
Rio All Suites	2522	106,971	1231	110
Harrah's Las Vegas	2526	90,941	1504	103
Flamingo Las Vegas	3545	76,763	1593	114
Caesars Palace	3364	128,980	1490	214
Harrah's Laughlin	1545	47,000	2940	34
Imperial Palace	2640	75,000	980	51
Ak-Chin	148	48,000	950	31
Rincon	653	69,949	1598	60
Harrah's Atlantic City	1630	147,077	3416	108
Showboat Atlantic City	1331	124,159	3637	112
Bally's Atlantic City	1744	225,756	5466	215
Caesars Atlantic City	1220	130,917	2826	136
Joliet	204	39,160	1188	23
Metropolis	258	30,985	1177	30
Harrah's Council Bluffs	251	28,006	1072	25
Horseshoe Council Bluffs	-	78,811	1875	62
North Kansas City	392	60,133	1851	62
St. Louis	502	120,000	2833	94
Cherokee	576	88,000	3400	40
Prairie Band	297	34,878	1158	32
Horseshoe Bossier City	606	29,860	1591	62
Louisiana Downs	-	14,918	1399	0
Horseshoe Tunica	507	63,000	1806	154
Grand Casino Tunica	1356	136,000	2185	160

Sheraton Tunica	134	31,000	1121	72
Lake Charles	263	-	-	0
Harrah's New Orleans	-	125,119	2113	117
Caesars Indiana	503	87,000	2058	136
Horseshoe Hammond	-	48,273	1993	55
Punta del Este	296	44,500	493	63
Casino Windsor	389	-	-	0

Source: Harrah's Entertainment

An Overview of the Main US Casino Operators

Although the US casino market is highly fragmented and has hundreds of competitors, seven major casino and gaming competitors have emerged as a result of the tremendous consolidation that has taken place over the past 10 years: (a) MGM Mirage, (b) Wynn Resorts, (c) Las Vegas Sands, (d) Station Casinos, (e) Ameristar Casinos, (f) Boyd Gaming, and (g) Harrah's Entertainment. This section provides an overview of Harrah's six primary competitors, with brief discussions about their current operating strategies and their approach to attracting (and retaining) customers. These competitors vary on several dimensions of strategic orientation which will be discussed below.

MGM Mirage

Overview

MGM Mirage is one of the largest gaming companies in the world with concentrated exposure to the Las Vegas destination market. The company has a heavy real-estate development component to its operations. As declared in the MGM Mirage 2005 Form 10-K filed with the Securities and Exchange Commission in the spring of 2006, "we believe we own the world's finest collection of casino resorts." MGM Mirage was formed through the April 2005 merger of the Mandalay Resorts Group and MGM Grand. The company employs over

70,000 individuals and reported 2005 revenues of \$6.5 billion. MGM Mirage today has a market capitalization of over \$11 billion.

The company is today the largest owner/operator of casinos on the famed Las Vegas strip and generates more than 80% of its operating earnings from the Strip; the table below summarizes key statistics about the company's Las Vegas Strip properties.

Table 19: MGM Mirage Property Statistics, Las Vegas Strip

Property	Rooms	Casino Square Footage	Slot Machines	Gaming Tables
Bellagio	3,933	155,000	2,409	143
MGM Grand	5,044	156,000	2,593	172
Mandalay Bay	4,756	157,000	1,949	127
The Mirage	3,044	118,000	2,056	109
Luxor	4,403	100,000	1,778	88
Treasure Island	2,885	90,000	1,800	64
New York, NY	2,024	84,000	1,867	85
Excalibur	3,990	100,000	1,762	73
Monte Carlo	3,002	102,000	1,726	74
Circus Circus	3,764	133,000	2,364	92

Source: MGM Mirage 2005 Form 10-K

In addition to eight other Nevada properties located in Primm, Reno, Jean, Laughlin, and Henderson, the company also operates casinos in Mississippi, Michigan and Illinois. In addition to these owned and operated casino resorts, the company has equity interests in four casinos in Nevada, New Jersey, Illinois, and the United Kingdom. Further, the company has a 50%

ownership stake of MGM Grand Macau. In total, MGM Mirage owns, operates, or has significant investments in 26 casino resorts.

Strategy

Given the heavy focus on a destination market (Las Vegas), MGM Mirage's strategy is heavily based on creating desirable destinations for casino gamblers. After acknowledging the highly competitive nature of the market(s) in which it competes, the company's 2005 annual report declares that its means of operating in these environments is based on 5 primary methods:

- (1) Locating our resorts in desirable leisure and business travel markets, and operating at superior sites within those markets,*
- (2) Constructing and maintaining high-quality resorts and facilities, including luxurious guest rooms along with premier dining, entertainment, and retail amenities,*
- (3) Recruiting, training, and retaining well-qualified and motivated employees who provide superior and friendly customer service,*
- (4) Providing unique, "must-see" entertainment attractions, and*
- (5) Developing distinctive and memorable marketing and promotional programs.*

Given these stated methods of competitive strategy, it is not surprising that the company conceptualizes its market in a manner far different from many of its non-Vegas centric peers.

The 10-K states that

our company's facilities also compete for gaming customers with hotel-casino operations located in other areas of the United States and other parts of the world, and for leisure and business travelers

with non-gaming tourist destination such as Hawaii, Florida, and cruise ships. Our hotel-casinos compete to a lesser extent with state-sponsored lotteries, off-track wagering, card parlors, and other forms of legalized gambling in the United States.

MGM Mirage is also a major Las Vegas real estate developer with interests in residential, commercial, hotel, retail, and casino developments currently underway. The largest of these projects is Project CityCenter, a mixed-use development on 66 acres located between the Bellagio and Monte Carlo on the Las Vegas Strip. According to the company, Project CityCenter will feature a 4,000 room casino resort, two 400-room non-gaming boutique hotels, 470,000 square feet of luxury retail shops, restaurants, and entertainment venues, and almost 2.3 million square feet of residential space in over 2,900 luxury condominium units. As stated in the 10-K, “as currently contemplated, we believe Project CityCenter will cost approximately \$7 billion, excluding pre-opening and land costs.”

Wynn Resorts

Overview

Wynn Resorts is a two property casino company that has 100% ownership of the Wynn Las Vegas and Wynn Macau properties. Founder Steve Wynn is a Las Vegas legend who has been involved with the development of the Golden Nugget, The Mirage, Treasure Island, and the Bellagio (among other properties). From 1973 until 2000, Wynn was Chairman, President & Chief Executive Officer of Mirage Resorts. The Wynn Las Vegas opened in April 2005 and was the most expensive casino resort ever built, with a price tag exceeding \$2.7 billion for a one-location property. The Wynn Macau in the Macau Special Administrative Region of the People’s Republic of China opened in September 2006 and is aimed at tapping the fastest

growing casino market in the world. Steve Wynn is thought to be one of the most experienced casino hotel executives in the world, and his two-property company today has a market capitalization of over \$6.5 billion.

In addition to the offerings listed in the table below, the Wynn Las Vegas has 36 fairway villas on an adjacent 18 hole golf course, 6 private-entry villas, a baccarat salon, private VIP gaming rooms, 22 food and beverage outlets, a nightclub, Ferrari and Maserati dealerships, and several entertainment venues.

Table 20: Wynn Resorts Property Statistics

Property	Rooms	Casino Square Footage	Slot Machines	Gaming Tables
Wynn Las Vegas	2,674	111,000	1,960	137
Wynn Macau	600	100,000	N/A	350

Strategy

Four key tenets of the Wynn Resorts strategies are listed in the company’s latest 10-K: (1) capitalize on the ‘Wynn’ brand, (2) attract and deliver high-quality service and amenities to high-end gaming customers, (3) utilize extensive marketing mechanisms to attract high-roller and premium customers, and (4) capitalize on the Macau opportunity.

With respect to the Wynn brand, the company believes the name ‘Wynn’ is now firmly associated with ‘luxurious surroundings, upscale design, distinctive entertainment and superior amenities, including fine dining and premium retail offerings’ (Wynn Resorts, 2005 Form 10-K). The second strategy is clear – focus on the high-end, premium customer. The third element, marketing to the high-end customer, is driven by the fact that this two-property casino company has satellite marketing offices in Tokyo, Hong Kong, Macau, Singapore, Taiwan, Vancouver,

and Southern California. The fourth strategy—relating to Macau—merits special attention, primarily due to the market’s potential. Wynn Resorts describes the opportunity in its 10-K:

The government of Macau has expressed its desire to transform Macau into the tourist destination of choice in Asia. The Chinese government has also gradually relaxed its travel and currency restrictions, allowing mainland Chinese citizens from certain urban centers and economically developed areas to visit Macau without joining a tour group and increasing the amount of renminbi that Chinese citizens are permitted to bring into Macau. With approximately 100 million people within a three hour drive and nearly 1 billion people within a 3-hour flight from Macau, Wynn Macau is located in what we believe will be one of the largest and fastest-growing gaming markets in the world.

Fundamentally, Wynn Resorts epitomizes the “build it and they will come” strategy to casino development. It is telling that the company’s discussion of strategy does not even mention the gaming experience, and one of the first slides in the company’s investor presentation is entitled “Follow the Non-Casino Revenues.” The slide highlights the “beautifully appointed rooms,” “prize winning chefs,” “showrooms,” “unique high-end retail,” and “on-site golf course.” The slide concludes with Steve Wynn’s strategic philosophy: “casino revenues are a result of the overall experience.”

Las Vegas Sands

Overview

Las Vegas Sands is an integrated casino resort property developer that currently owns three properties: The Venetian Resort Hotel Casino and The Sands Expo and Convention Center

in Las Vegas and The Sands Macau Casino in the Macau Special Administrative Region of the People’s Republic of China. It is also in the process of developing additional properties on the Las Vegas Strip, the Cotai strip in Macau, and recently won a concession from the Singapore government for development of an integrated resort at Singapore’s Marina Bay. Further, the company is working with the Zhuhai Municipal People’s Government in China to masterplan the development of a leisure resort complex on Hengqin Island. Founder Sheldon Adelson, a respected serial entrepreneur who had his first big success with the founding, growing, and eventual sale of the trade show COMDEX, entered the Las Vegas market in 1989 with the intention of revitalizing demand in the city by attracting conventions and trade shows. Las Vegas Sands is today the most-valuable gaming company in the world with an equity market capitalization in excess of \$30 billion. Key statistics about the company’s two existing properties are listed in the table below.

Table 21: Las Vegas Sands Property Statistics

Property	Rooms	Casino Square Footage	Slot Machines	Gaming Tables
The Venetian	4,027	116,000	1,728	140
Sands Macau	50	172,000	930	440

Strategy

The Las Vegas Sands 2005 annual report summarizes the company’s strategy succinctly and directly: “Our primary business objective is to become a leading worldwide operator of premium destination resorts with significant casino components and uniquely branded gaming entertainment properties in order to drive superior returns on invested capital, increase asset value and maximize value for our stockholders.” The report continues onward to describe the

company's strategies for achieving these objectives in two markets: (1) Las Vegas, and (2) globally.

The Las Vegas Sands strategy in Las Vegas is based upon the creation of “a unique, world-class, ‘must-see’ destination resort complex that caters to premium clientele.” To do this, Las Vegas Sands – not unlike Wynn Resorts—focuses on the non-gaming activities. In addition to the general expansion of facilities at the company's Venetian in Las Vegas, the list of activities being pursued to implement the strategy in the company's 2005 10-K filing includes the following:

(1) Drive recurring, predictable high hotel occupancy...through events held at our convention facilities which also generate significant non-hotel traffic; (2) Capture superior hotel room rate through...first class services and high-end resort facilities; (3) Target higher-budget customers; (4) Attract world-famous chefs, prestigious art collections, premium retailers, and first class leisure facilities; and (5) Develop Asian-focused offerings to meet the expectations of high-end Asian customers.

While much of the global expansion strategy described by the company caters to the Sands Macau's first-mover status in China, the strategy extends beyond the Macau market and includes the United Kingdom, Japan, and Singapore. Fundamentally, the global expansion strategy being pursued by Las Vegas Sands attempts to capitalize on Adelson's successful strategy of utilizing convention-driven destination resorts as a means of economic revitalization. The strategy is best summarized in a single bullet-point buried in the company's 10-K: “Showcase our successful Las Vegas properties to position ourselves as a casino developer and operator of choice and win

new development opportunities in jurisdictions that are turning to large scale casino resorts as catalysts for economic expansion.”

Station Casinos

Overview

Stations Casinos, founded in 1976, is an owner and operator of casinos in the Las Vegas metropolitan market and caters to the non-tourist, locals market. As a frequency-market operator situated in a geography that historically has catered to destination market customers, Stations has been a primary beneficiary of the growth of Las Vegas and indirectly, the Las Vegas Strip, as the major casinos have spurred major population inflows. The company is an owner/operator of 8 major hotel casinos (one of which is 50% owned) and 6 smaller hotel casinos (two of which are 50% owned) in the greater Las Vegas metropolitan area. Station also manages casinos and development projects for Indian tribes in California and Michigan. Station Casinos is known for its loyalty program, value-oriented gaming experience, and high quality of service. The Company currently has a land bank that is the largest collection of undeveloped gaming-licensed real estate in the Las Vegas metropolitan area. Station Casinos reported revenues of \$1.1 billion in 2005 and employed more than 14,000 people. The company today has a market capitalization over \$3.5 billion.

Key statistics about the company’s 9 owned hotel casino properties in Las Vegas are listed below (note the emphasis on parking spots rather than casino square footage due to the frequency market strategy):

Table 22: Station Casinos Property Statistics, Major Hotel Casinos in Nevada

Property	Rooms	Parking Spots	Slot Machines	Gaming Tables
Palace Station	1,007	2,600	1,845	55
Boulder Station	300	4,800	2,967	42
Texas Station	200	5,900	2,450	37
Sunset Station	457	5,500	2,556	52
Santa Fe Station	200	2,500	2,591	39
Red Rock	415	5,000	3,200	62
Green Valley	496	2,800	2,330	54
Fiesta Rancho	100	2,700	1,627	13
Fiesta Henderson	224	1,700	1,423	17

Strategy

The company's operating strategy is based upon three primary principles: (1) Focusing on a targeted customer base of high-frequency gamblers, (2) Providing a high-value experience, and (3) Employing an innovative marketing strategy to attract customers and establish a high-level of name recognition. Thus, the company is a great example of a prototypical frequency market casino operator, as the following quote from the company's 2005 Form 10-K highlights: "our operating strategy emphasizes attracting and retaining customers primarily from the local and repeat visitor markets." Given the repeat nature of the customers, the strategy is squarely focused on delivering outstanding gambling experiences to loyal customers, as captured in the following excerpt from the company's 2005 Form 10-K:

Because we target the repeat customer, we are committed to providing a high-value entertainment experience for our customers in our restaurants, hotels, casinos, and other entertainment amenities. We develop regional entertainment destinations for locals that include other amenities such as movie theaters, bowling centers, ice skating, live entertainment venues and child-care facilities. In addition, we believe the value offered by restaurants at each of our casino properties is a major factor in attracting local gaming customers, as dining is a primary motivation for casino visits by many locals. Through their restaurants, each of which has a distinct style of cuisine, our casino properties offer generous portions of high-quality food at reasonable prices. In addition, our operating strategy focuses on slot and video poker machine play. Our target market consists of frequent gaming patrons who seek not only a friendly atmosphere and convenience, but also higher than average payout rates. Because locals and repeat visitors demand variety and quality in their slot and video poker machine play, our casino properties offer the latest in slot and video poker technology.

As part of our commitment to providing a quality entertainment experience for our patrons, we are dedicated to ensuring a high level of customer satisfaction and loyalty by providing attentive customer service in a friendly, casual atmosphere. We recognize that consistent quality and a comfortable atmosphere stem from the collective care and friendliness of each employee. We began as a family-run business and have maintained close-knit relationships among our management and we endeavor to instill in our employees the same sense of loyalty. Towards this end, we take a hands-on approach through active and direct involvement with employees at all levels.

Despite this frequency-market focus, the company also maintains a large real-estate development exposure as well and clearly states in its 2005 annual report that “our strategic focus over the next five to seven years is to take land held for development and other non-cash producing assets (primarily advances to Tribes with whom we have management contracts) and convert those assets into cash-producing assets.” Thus, going forward, it appears Station Casinos will be more focused on real-estate development than recent history might suggest.

Ameristar Casinos

Overview

Ameristar Casinos is a US centric casino owner/operator originally founded in Jackpot, Nevada. The company today caters to avid local gamblers in non-destination cities such as St Charles and Kansas City, Missouri; Jackpot, Nevada; Council Bluffs, Iowa; Vicksburg, Mississippi; and Black Hawk, Colorado. The company was formed in 1954. Ameristar reported 2005 revenues of \$961 million and today has a market capitalization in excess of \$1.4 billion. Details on the company’s seven properties in six markets are listed in the following table.

Table 23: Ameristar Casinos Property Statistics

Property	Rooms	Casino Square Footage	Slot Machines	Gaming Tables
Ameristar St. Charles	-	130,000	3,244	90
Ameristar Kansas City	184	140,000	3,073	99
Ameristar Council Bluffs	444	38,500	1,651	36
Ameristar Vicksburg	149	44,500	1,502	36

Mountain High (Black Hawk)	-	67,000	1,456	26
Cactus Petes & Horseshu (Jackpot)	416	29,000	1,009	36

Strategy

Ameristar describes its casinos as “different” than typical casinos, highlighting the fact that “our casinos include the most spacious floors and typically have the greatest number of games in our markets...we generally emphasize competitive minimum and maximum betting limits based on each market...and we do not depend on high-stakes players.” (Ameristar Casinos, 2005 Form 10-K). Further, Ameristar properties tend to have more dining options than other casinos in their markets, and “signature restaurant concepts include warm and intimate steakhouses, elaborate buffets with interactive display cooking, and 24-hour casual dining restaurants” (Ameristar Casinos, 2005 Form 10-K). It is interesting to note that the Ameristar annual report also emphasizes the non-gaming options, describing how “our dynamic sports bars feature the most advanced audio-visual technology in their markets” and the various entertainment options at the properties.

Ameristar Casinos distinguishes itself from the competition via a competitive strategy based on four key tenets: (1) developing the highest quality, state-of-the-art facilities in chosen locations with a wide variety of amenities; (2) being an early adopter of slot-based technology to enhance the customer experience; (3) emphasizing branding and marketing, and (4) taking a hands on approach to centralized management. It is interesting to note that Ameristar effectively seeks to be a “local destination” that offers a wide range of amenities to frequent gamblers. Management’s belief is that superior facilities with cutting-edge technologies will provide guests an exciting and dynamic entertainment experience that will generate return visits:

We feel that the number and diversity of our amenities is key to attracting customers and developing repeat business. We seek to broaden our appeal by offering more amenities than our competition. We believe that more choices attract more types of customers. Our properties offer restaurants ranging from casual to upscale, and customers can choose from entertainment options ranging from cabaret lounges and sports bars to outdoor amphitheaters and multipurpose entertainment pavilions. Some examples of our non-gaming amenities that have proven successful are our high-tech Amerisports Bars (Council Bluffs, St. Charles and Kansas City), our signature steakhouses, the Falcon and our unique Bottleneck Blues Bars. In addition, our properties regularly feature nationally known entertainers, including Tony Bennett, Boys II Men, Bill Engvall, Merle Haggard, Heart, BB King, Martina McBride, Meatloaf, REO Speedwagon, Smokey Robinson, Keith Urban, Damon Wayans and ZZ Top (Ameristar Casinos, 2005 Form 10-K).

Fundamentally, the Ameristar approach is not dissimilar to that taken by Wynn Resorts with respect to having non-gaming activities driving the casino business, albeit within a frequency market and with slots-oriented customers.

Boyd Gaming

Boyd Gaming is a diversified casino operator with 18 wholly-owned gambling entertainment venues spread throughout nine distinct gaming markets in five US states. The company may be the only competitor to have as geographically diversified a footprint as Harrah's. In addition to properties in both Atlantic City and Las Vegas, the company also owns and operates casinos/racinos in Indiana, Illinois, Mississippi, Louisiana, and Florida. Boyd

Gaming focuses on both the local frequency markets as well as destination market customers within Las Vegas (via the company's ownership of the Stardust...which is incidentally being torn down for the forthcoming Echelon property development). The company has disproportionate exposure to Las Vegas via its seven frequency/local market properties, its destination market property on the Las Vegas Strip, and several downtown Las Vegas casino properties. Some of the company's brands include Sam's Town, Barbary Coast, Gold Coast, and the Borgata (a 50%/50% joint venture with MGM Mirage). The company was formed in 1952 and began trading on the NYSE in 1993. Boyd Gaming reported 2005 revenues of \$2.2 billion and today has a market capitalization in excess of \$4.0 billion.

Table 24: Boyd Gaming Property Statistics

Property	Rooms	Casino Square Footage	Slot Machines	Gaming Tables
Sam's Town	648	133,000	3,035	40
Eldorado	-	16,000	498	6
Jokers Wild	-	22,500	518	7
Barbary Coast	197	30,000	590	36
Gold Coast	711	87,000	2,057	54
Orleans	1,885	135,000	3,102	68
Sun Coast	419	82,000	2,434	52
South Coast	647	80,000	2,366	52
Stardust (LV Strip)	1,552	75,000	1,299	57
California	781	36,000	1,104	34
Fremont	447	32,000	1,090	25
Main Street Station	406	28,500	900	19

Sam's Town (MS)	1,007	75,000	1,358	39
Par-A-Dice	208	26,000	1,130	24
Blue Chip	184	42,500	1,719	47
Treasure Chest	-	24,000	967	40
Delta Downs	206	15,000	1,462	-
Sam's Town (LA)	514	30,000	1,122	26
Borgata	2,000	124,000	3,572	133

Strategy

Management of Boyd Gaming believes that their successes in the past have been driven by a five-pronged strategy that has emphasized (1) slot revenues, (2) comprehensive marketing and promotion, (3) the Las Vegas locals market, (4) downtown properties focused on Hawaiian visitors, and (5) a geographically diversified footprint. Fundamentally, the company is a slots-focused company that has recently been attempting to grow its focus upon destination markets (Vegas and Atlantic City) while maintaining a prominent role in the Las Vegas locals market.

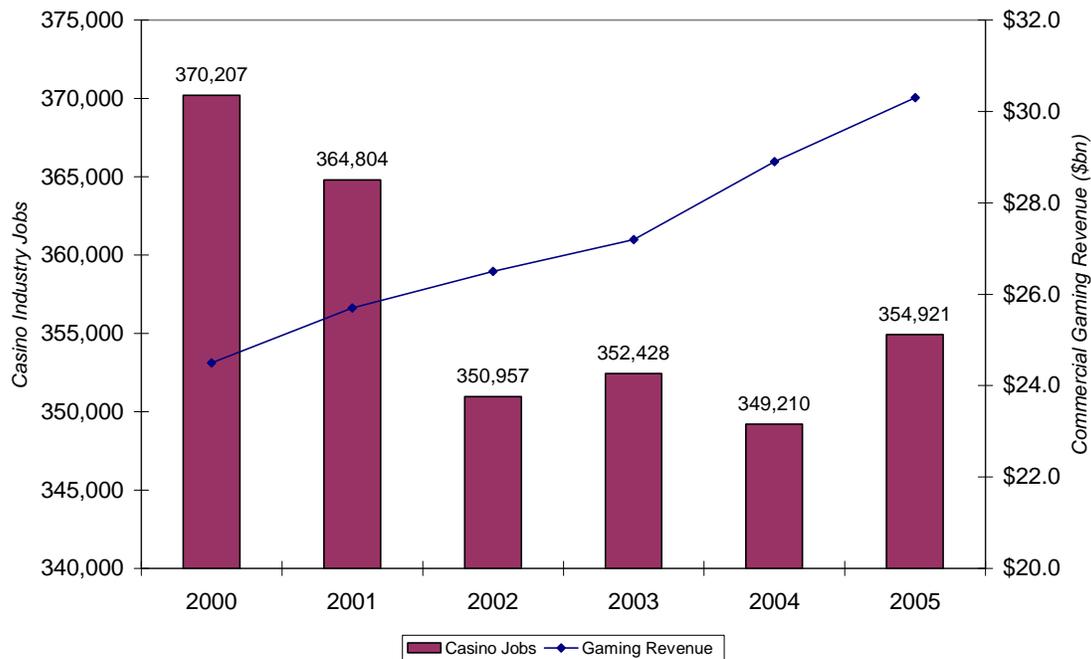
Nevertheless, with that said, the company is in the midst of a major development project on the current site of the Stardust on the Las Vegas Strip. Echelon Place, as the project is currently known, will offer 5,300 guest rooms, a 140,000 square foot casino, 25 restaurants and bars, extensive meeting facilities, and a 300,000 square foot retail promenade. The property will cost more than \$4 billion to develop and will include the Echelon Las Vegas (Boyd-owned and operated casino resort) as well as four other branded hotels, ranging from a Mandarin Oriental to a Morgans Hotel as well as 1 million square feet of convention center / meeting space. Clearly, Boyd Gaming is in the midst of becoming a more substantial player in the Las Vegas destination market.

Gaming Industry Attitudes on Technology and Casinos

Given the heavy use of information technology at Harrah's Entertainment to develop scalable differentiated service, an understanding of the industry's perspective vis-à-vis technology use in the casinos is essential contextual information. I believe it is also important to understand these attitudes prior to examining the competitive dynamics that characterize the industry, which are discussed in the following section. Fortunately, a recent industry survey sought this perspective, the findings of which were presented at the Global Gaming Expo in November 2006. In a quest to understand the future path of technological developments in the casino industry, the American Gaming Association (AGA) recently conducted a survey of leading gaming industry insiders and technologists.

The survey's findings suggest that technology is an essential part of the gaming industry and that its use going forward will only become more central. An overwhelming majority of survey respondents (~94%) indicated that the use of technology is critical to a casino's success. 6 percent of the respondents went even further and indicated that technology "will determine the success of a property more than anything else" (AGA Executive Summary of Future Watch Survey). The research also indicates that successful technology use to date has focused more on cost-reduction and revenue generation (33% and 28%, respectively) than on enhancing the guest experience (25%). This is not surprising, given the increasing productivity exhibited by the industry over the past several years.

Graph 10: Increasing Casino Industry Productivity, 2000-2005



Source: American Gaming Association, Annual Survey

When looking ahead, respondents indicated that the most important goal for technology in a casino is to improve the customer experience (53% rank it as the first priority); only 7% of respondents indicated that the use of technology to lower expenses is their first priority, and 0% of respondents said that technology based property-differentiation was their top technology objective. Interestingly enough, despite this focus upon customer experiences, respondents did not seem to believe this would actually happen:

While [respondents] firmly believe that enhancing the quality of the customer experience should be a major goal for technological innovations in the coming years, there is a debate about the extent to which this will in fact happen. Indeed, nearly two-thirds of respondents (63%) agree that innovations over the next 5 to 10

*years will do more to improve back of the house operations than to appreciably change the customer experience.*²⁷

While the survey report goes on to discuss findings with respect to downloadable and central-server based slot machines, the use of RFID in the casino, and the use of wireless hand-held gaming devices while in a casino, the most interesting finding (with respect to this dissertation) is that “fully 37% of respondents believe that implementation of technology to serve functions previously performed by employees can make it more challenging for a particular casino resort to create customer loyalty through first-rate customer service.”²⁸ Given this is precisely the focus of Harrah’s strategy of scalable service differentiation, it is particularly noteworthy that more than one-third of senior executives and technologists in the gaming industry find it to be potentially of negative value.

Competitive Dynamics & Harrah’s Performance

From the above discussion of Harrah’s Entertainment’s six primary competitors, it is clear that each has adopted a different strategy to draw its customers. One of the most important distinctions between the casino companies is the choice of market focus: destination market vs. frequency market. Destination or major market operators include MGM Mirage, Wynn Resorts, and Las Vegas Sands. These companies cater to customers who are visiting a destination (i.e. Las Vegas, Atlantic City, Macau, etc.) that is known for casino gambling and presents these customers with various options in terms of casino venues. Several of Harrah’s properties are in the destination markets of Atlantic City and Las Vegas.

²⁷ The G2E Future Watch Series: Executive Summary, Las Vegas, NV: American Gaming Association, 2006.

²⁸ The G2E Future Watch Series, *op cit*

Customers of destination markets generally make fewer multi-day trips to casinos than do customers of frequency markets that visit more regularly such as drive-in or local customers. The primary frequency market competitors are Station Casinos, Boyd Gaming, and Ameristar Casinos. The typical frequency market customer visits casinos on weekend evenings, on special occasions, or when friends or family are visiting. Frequency market customers are drawn by local amenities such as high-value restaurants, convenient locations, and friendly staff. Many of Harrah's casinos are in frequency markets.

Two other casino operator distinctions merit attention. The first, type of player targeted, is a simple distinction. While most destination market operators tend to target high-rollers and "big-betting" table players, most frequency market operators tend to focus on the low to mid level slot players. Most of the frequency market competitors realize that this player focus requires them to constantly be offering the latest and greatest slot gaming opportunities as well as high-quality "value for money" gaming experiences (i.e. higher payout ratios, etc.) . In this regard, Harrah's is unique as it is a company clearly focused on slot players, yet has a large presence in both of the two primary US destination markets – Las Vegas and Atlantic City.

The last distinction relates to the suite of services used to entice customers to visit a casino property. This distinction has a lot to do with the conceptualization of the casino's offering to customers and tends to align with the market focus. In the case of major destination market casino operators (i.e. MGM Mirage, Las Vegas Sands, and Wynn Resorts), the suite of services includes entertainment offerings such as shows, a multitude of restaurants, exclusive golf course availability, vogue spas, spectacularly ornate and engaging environments, etc. Destination market operators tend to have high-end shopping boutiques (such as the Forum Shops at Caesar's Las Vegas), attention-grabbing public spectacles (such as the fountains in front

of MGM Mirage’s Bellagio in Las Vegas), or award winning restaurants (such as Tao Restaurant at Las Vegas Sands’ Venetian in Las Vegas). Fundamentally, destination market casino operators are usually competing for attention and therefore need to go “over-the-top” to create a sense of novelty, energy, and enticement that draws visitors into the casinos.

While most frequency market competitors are focused on the gambling experience and tend to provide basic, but not spectacular environments within which customers gamble, Ameristar Casinos attempts to distinguish itself in frequency markets with a broader suite of amenities and more ornate, spacious casinos. Harrah’s Entertainment is heavily focused on the gaming experience and does not attempt to entice customers with spectacular surroundings or award-winning spas. Rather, the company focuses on delivering a high-value gaming experience accompanied by friendly, helpful high quality service.

The table below summarizes the different operating strategies pursued by Harrah’s six primary competitors in a perhaps-overly simplified manner. Nevertheless, the table does lay out the competitive context in which Harrah’s operates.

Table 25: Casino Industry Competitive Dynamics

Company	Market Focus	Player Focus	Geographic Focus	Operating Strategy
MGM Mirage	Destination	Mid – High End Customers	Las Vegas	“Must-See” Destinations; Premier Non-Gaming Amenities
Wynn Resorts	Destination	High End Customers	Las Vegas, Macau	Premier Non-Gaming Amenities (Shopping, Golf, Spa, Restaurants)
Las Vegas Sands	Destination	High End & Asian Customers	Las Vegas, Macau	“Must-See” Destinations;

				Convention-driven Traffic
Station Casinos	Frequency	Low-Mid End Slot Customers	Las Vegas	Local Amenities (Restaurants, etc); High Value Gaming Experience
Ameristar Casinos	Frequency	Low-Mid End Slot Customers	Secondary US Markets	High End Local Amenities (Entertainment, Restaurants, etc.)
Boyd Gaming	Frequency	Low-Mid End Slot Customers	Las Vegas, Secondary US Markets	Local Amenities; Geographic Footprint
Harrah's Entertainment	Frequency & Destination	Low-Mid End Slot Customers	Las Vegas, Atlantic City, Secondary US Markets	High Value Gaming Experience; Customer Service

As evident from the above descriptions of Harrah's six main competitors, competition exists in virtually every market and for every type of customer. When it comes to the Vegas market (about 50% of Harrah's business), it competes with all but one of these players (Ameristar does not have a Las Vegas presence). When it comes to non-Nevada gaming, there is occasional competition that usually exists in the form of one or two competitors to a particular property. Finally, the international (primarily Macau) market is extremely crowded with Las Vegas Sands as the leading competitor and numerous non-US companies fighting for market share (Galaxy Casinos, Emperor Entertainment, Melco, PBL/Crown Casinos, Genting, etc.).

Despite the seemingly endless supply of companies willing to enter the casino gaming business, competition seems to be rational with each company pursuing a slightly different strategy. Outside of the "competing for attention" destination markets in which the definition of

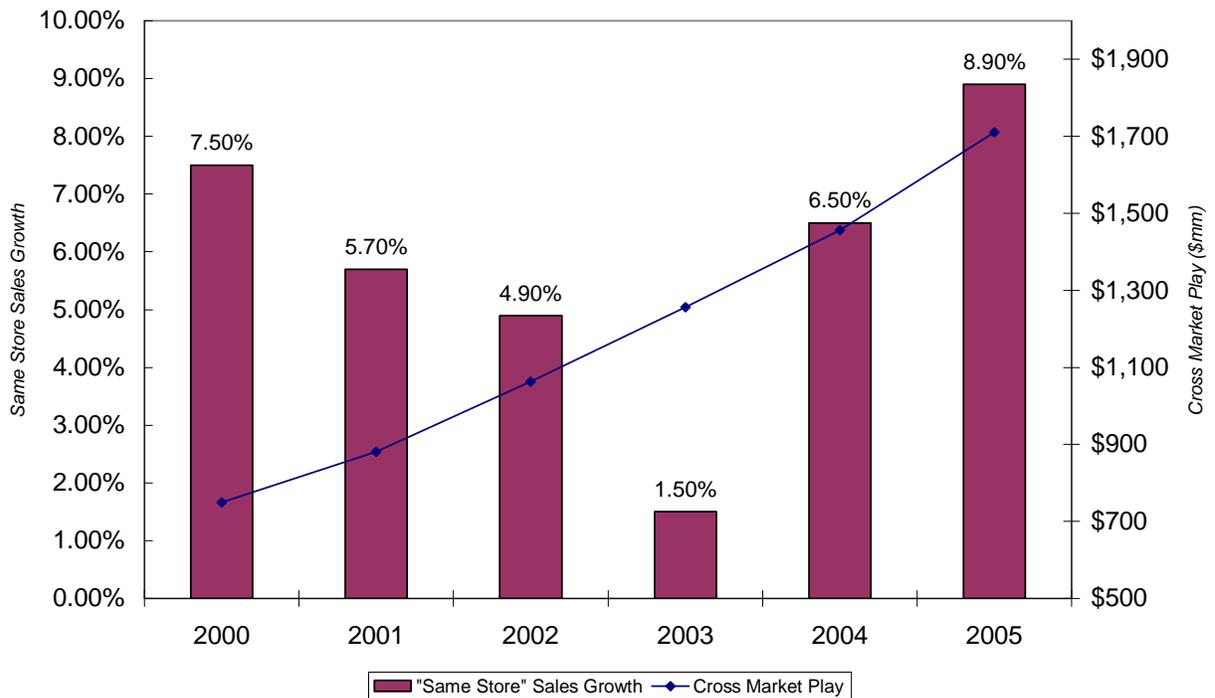
(and cost of achieving) “must-see” status is continually rising, competition seems quite rational and well-behaved with no two competitors pursuing the same strategy.

Within this context, Harrah’s is the only national casino company with a presence in most major gambling markets (frequency and destination) while catering to the low to mid end slot-playing customer. The company focuses on delivering a high-value gaming experience and offers a network of properties in which customers can be treated similarly well. This Harrah’s strategy distinguishes the company from its competitors – resulting in a complimentary dynamic that seems to be increasing the gaming pie by offering more interesting value propositions to customers; Loveman notes:

As each of us goes off to pursue a strategy that everyone understands to be relevant to each other but in most cases different from one another: MGM Mirage is a real estate/ development convention oriented hotelier in Las Vegas with some interests in Asia, Steve Wynn builds the greatest mousetraps around in just a few places, Sheldon is into the convention business in just a few places, Stations is a locals operator in the state of Nevada, and we are the only business that has any interest or any capacity to be an international distributor of brands in a way that a consumer products company often is and the way that we’ve evolved. And that is exactly where we want the industry to be. Where rather than being directly head to head, we find ourselves moving in broadly complementary directions, where we can all do well, our share prices can all do well, our executive teams can all do well, the consumer can benefit, as all of these trains move off in different directions (Loveman, 2005c).

In terms of the overall Harrah’s strategy of competing on customer experience via outstanding service (versus the “must-see” destinations, or exclusive non-gaming amenities such as award winning spas, ultra-luxury retail, etc.), the results speak for themselves. Across virtually every metric that one might use to judge the success of Harrah’s scalable service differentiation strategy, the company has been wildly successful. The company has managed to grow same store sales over the past six years, cross market play is up almost 50% in that same period, and employee productivity has skyrocketed – revenues per employee are up over 100% since Loveman arrived in 1998. As highlighted in the introduction, such gains have outpaced the industry.

Graph 11: Strengthening Base Business at Harrah’s Entertainment, 2000-2005

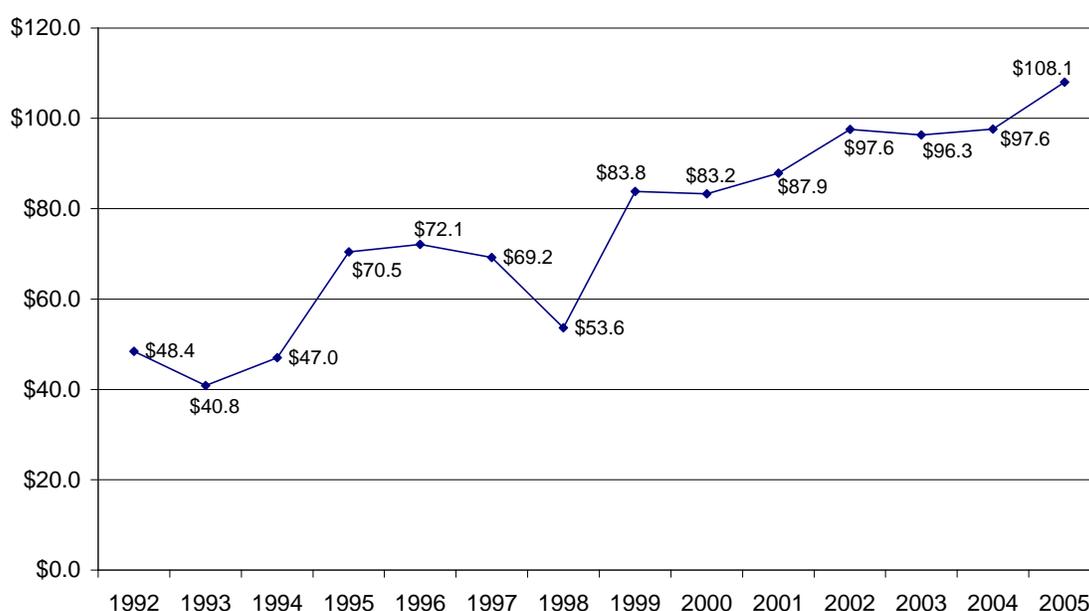


Source: Harrah’s Entertainment

As Harrah’s effectively applied technology to automate several elements of the business, productivity also increased dramatically. The strategy set by Loveman resulted in a substantial

increase (>100% between 1998 and 2005) in revenues per employee, something that Showboat General Manager Jay Snowden says is “attributable to the Total Rewards program and our tier-based service differentiation more so than to anything else.”²⁹ The company effectively generated more play from its most valuable customers, resulting in disproportionate gains in profitability, employee productivity, and financial results.

Graph 12: Improving Employee Productivity at Harrah’s Entertainment, 1992-2005



Source: Harrah’s Entertainment, Analysis of Financial Statements

Loveman gives credit to the tiered, aspirational Total Rewards for part of the success: “If you look at our same-store-sales growth and our overall revenue growth, it is disproportionately among those who have advanced through the tiers and consolidated their business with us. It’s exactly what we set out to do” (Becker, 2003).

²⁹ Interview with Jay Snowden, General Manager of the Harrah’s Showboat Atlantic City, via telephone on September 1, 2006.

Finally, the ultimate measure of success vis-à-vis a company's strategy is how it fared relative to its competitors. Choosing a metric with which to measure such performance is no trivial task, given the different asset mixes of each company. In consultation with several leading gaming industry analysts, a consensus seemed to emerge that the single best metric through which to gauge a casino management team is return on invested capital (ROIC). According to head gaming analyst Joseph Greff of Bear Stearns, ROIC (see the Appendix for a definition) is the best measure for determining the strength of a management team:

We believe that ROIC, which measures the un-leveraged cash returns generated per dollar invested in the company, is the most accurate gauge of a company's ability to create value. ROIC measures the cash-on-cash returns generated by a company independent of its financing and accounting strategies.

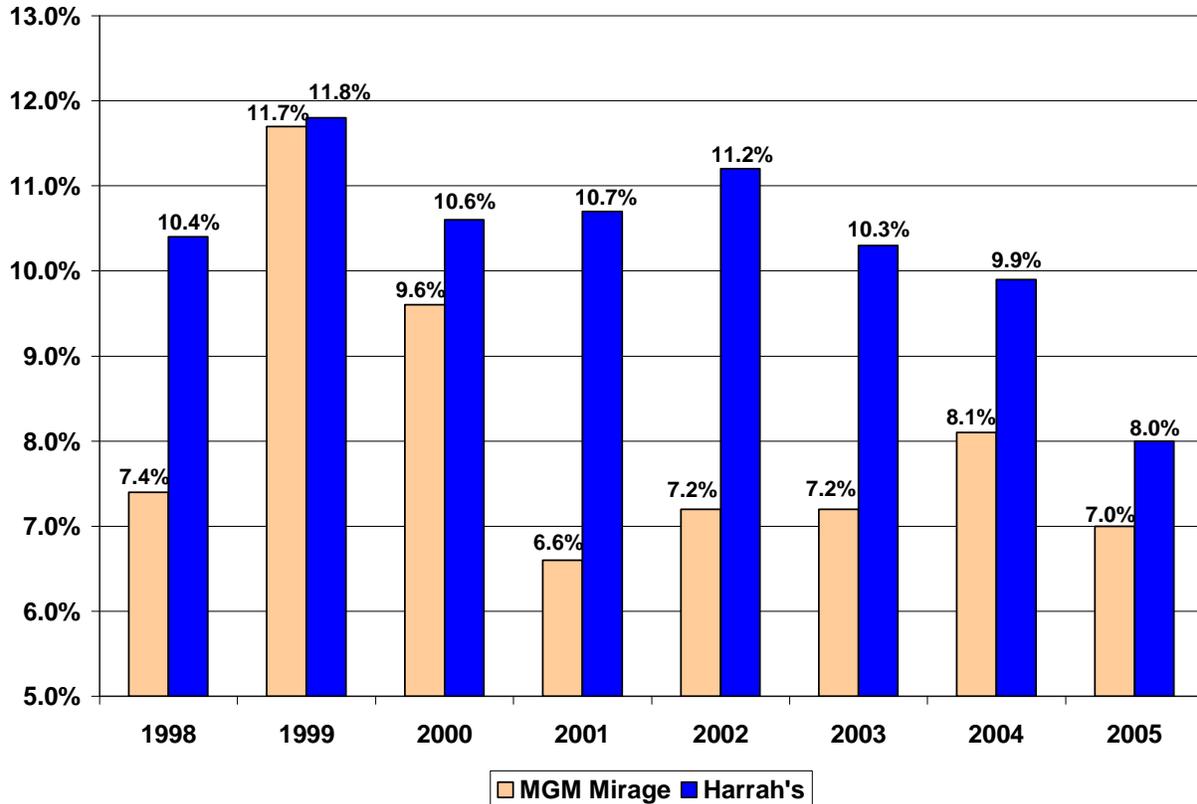
While other performance measures, such as Return on Equity, EBITDA returns, and project returns can prove useful and serve as proxies for value creation, ROIC...is more effective. Whereas the aforementioned statistics can be skewed by leverage, stock buybacks, and/or accounting strategies ROIC is relatively immune to these manipulations.

Looking at ROIC enables an investor to determine how efficiently a management team runs its assets independent of how it chooses to finance those assets. ROIC affords the investor the opportunity to look through various financial strategies and accounting procedures and identify the real economic return a company's management is able to generate.

Given the diverse footprint that Harrah's exhibits, the competitor that appears most comparable to the company in terms of breadth, scale, and size is MGM Mirage. As seen in the

chart below, which compares the ROIC metric for Harrah’s and MGM Mirage since 1998,³⁰ the management of Harrah’s Entertainment has been able to consistently extract more value from the assets at its disposal than MGM Mirage management was able to achieve:

Graph 13: Return on Invested Capital (“ROIC”), Harrah’s vs. MGM Mirage, 1998-2005



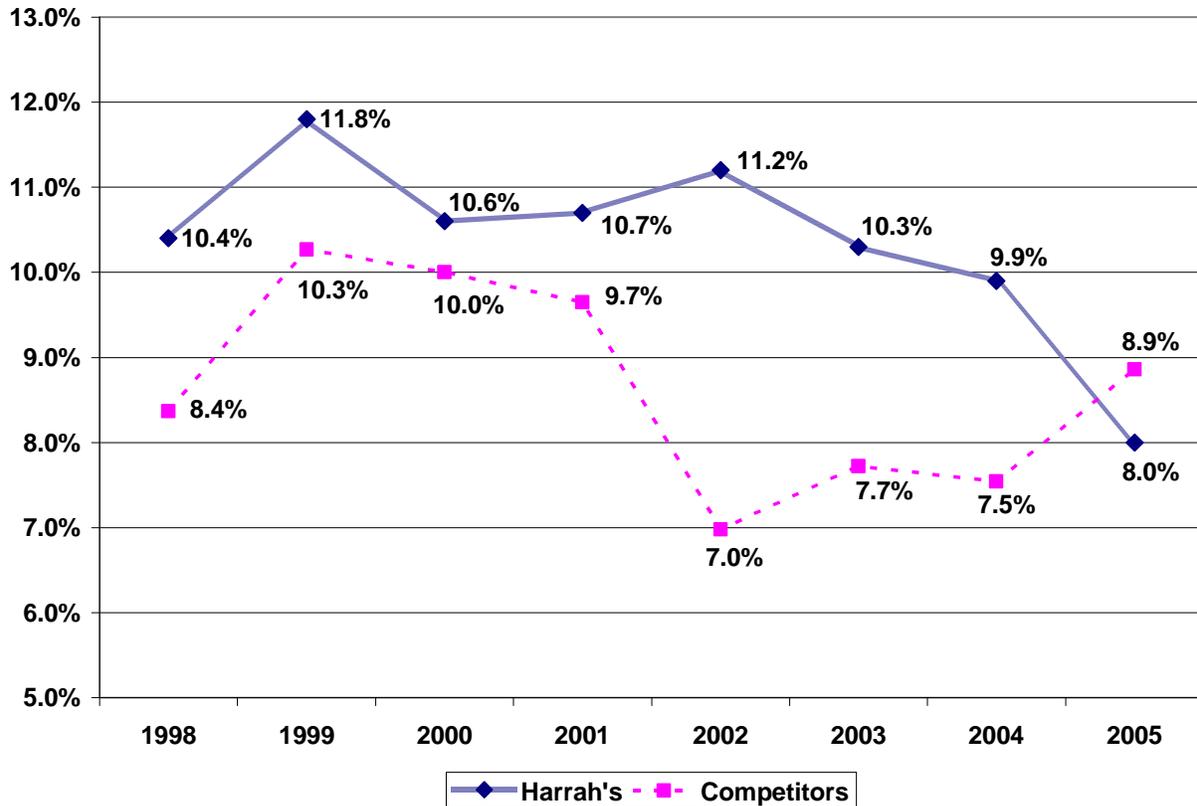
Source: Bear Stearns & Company August 2006 Gaming & Lodging Report.

Some might argue that comparing Harrah’s against one particular company may not accurately represent the management team’s true capability and Harrah’s should therefore be compared against the entire universe of industry competitors profiled above. Unfortunately, data limitations (several of the companies were not public in 1998) prevent a complete apples-to-

³⁰ While the company today is the leading destination Las Vegas casino operator (with Harrah’s in a close number two position), both MGM Mirage and Harrah’s grew into these positions via major acquisitions in 2005. Prior to the 2005 acquisitions, MGM and Harrah’s were more similar in terms of their property footprints and revenue streams.

apples comparison, but the chart below compares Harrah’s to an industry composite of gaming operators analyzed by Bear Stearns (*note the 2005 metric is influenced by expenses associated with Harrah’s acquisition of Caesars Entertainment as well as Hurricane Katrina*):

Graph 14: Return on Invested Capital (“ROIC”), Harrah’s vs. Competitors 1998-2005



Source: Bear Stearns & Company August 2006 Gaming & Lodging Report.

Thus, it seems that the Harrah’s strategy of competing on customer experience is working. By focusing on enhancing the overall gambling experience of a gaming customer, Harrah’s was able to squeeze more profits out of its existing asset base by generating loyal customers who returned to Harrah’s because of the service they received, not the “must-see” spectacle adjacent to a casino.

Chapter 5 – Harrah’s Service Strategy

The evidence presented in the prior chapter about Harrah’s performance versus its competitors is compelling evidence that the company has developed an effective competitive strategy. While the prior chapter showed that the strategy of competing on customer experience proved effective, this chapter will focus on understanding how Harrah’s executed this strategy. Before describing the Harrah’s service strategy, however, it is important to understand how the company grew from a single-location bingo parlor operator into the world’s largest gaming company as well as how it conceptualizes what it is offering its customers.

From Bingo Parlor to Gaming Giant: A Brief History of Harrah’s Entertainment

The Harrah’s brand was established in 1937 when Bill Harrah opened a bingo parlor in Reno, Nevada. His initial success at this location led him to open Harrah’s at its present location in downtown Reno in 1946. During the 1950’s, the company went on to purchase several other “card clubs” at Lake Tahoe. In 1970, the company issued 450,000 over-the-counter shares and one year later was listed on the American Stock Exchange. In 1973, 36 years after the establishment of Bill Harrah’s first branded operation, Harrah’s became the first casino company to be listed on the New York Stock Exchange.

Harrah’s continued to thrive as a public company and in 1980, Holiday Inns acquired the company. At the time, Holiday Inns had over 1600 hotels and ownership interests in two casino properties. By 1985, the combined Holiday Inns – Harrah’s company had a growing and diverse list of offerings: Harrah’s casinos, Holiday Inn Hotels, Embassy Suites hotels, and Hampton Inn hotels. To reflect this diversity, the Board of Holiday Inns approved a name change to Holiday Corporation. Bass Plc ended up acquiring the Holiday Inn Hotels in 1989 from the Holiday

Corporation, and the remaining collection of brands (Harrah's, Embassy Suites, and Hampton Inn) and assets were spun off into an entity named the Promus Companies.

In 1995, the Promus Companies again restructured – this time spinning off its hotel brands (Embassy Suites and Hampton Inn) into a separate entity. The remaining business – which consisted only of the Harrah's casino properties – was renamed “Harrah's Entertainment” and again began trading on the NYSE. The mid 1990's were characterized by heavy investment in the gaming industry by all of Harrah's competitors, and by 1998, the company was facing significant operating difficulties. As recalled by the *McKinsey Quarterly*:

When Gary Loveman arrived at the headquarters of Harrah's Entertainment in 1998 as Chief Operating Officer, most of its employees weren't prepared to wager that the Harvard Business School professor had what it takes to succeed in the gaming business. “Most people thought I'd leave after 2 years and go back to Harvard,” Loveman recalls. “They thought this would be like a kidney stone: it would hurt for a while and then it would pass...”

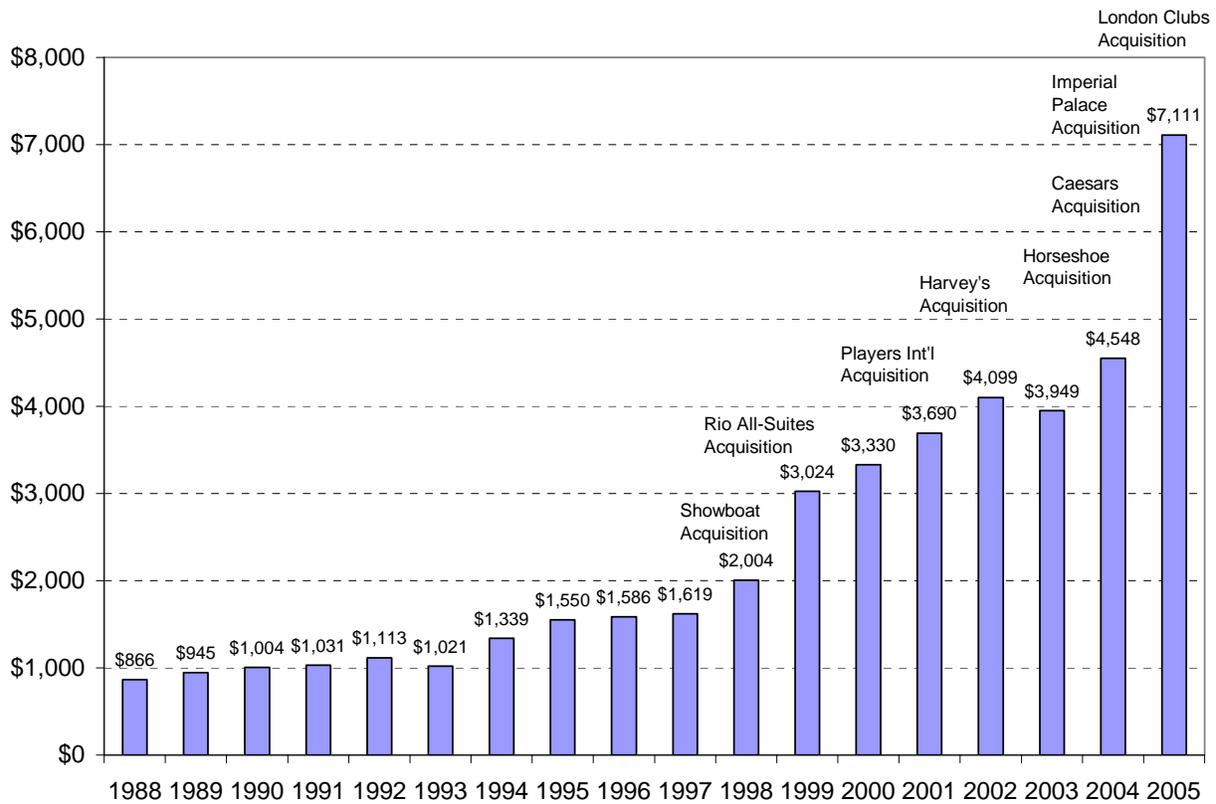
A decade ago, as a handful of states began to liberalize their gambling regulations, Harrah's seemed to be on a roll: it quickly expanded outside of Nevada, opening casinos and riverboat-gambling venues in several Midwestern and Eastern locales. But as the opening of new jurisdictions ground to a halt, competitors noticed the profits Harrah's was making outside its traditional Nevada and Atlantic City markets. They soon entered the arena with attractive casinos, hotels and amenities. With most of Harrah's markets under increasing competition, the company began to struggle (Becker, 2003).

In 1997, however, the company launched Total Gold, a loyalty program designed to mimic the frequent flyer programs developed in the airline industry. At the time, few if any executives understood how the program would evolve into the engine that would drive the company's success in the years to come. In retrospect, the launch of Total Gold proved to be a truly-enabling development in the company's approach to understanding its customers—one that facilitated numerous service innovations in the following years.

Then CEO Phil Satre convinced then Harvard Business School professor Gary Loveman to join the company as COO – which turned out to be a major turning point in the company's performance. Loveman, who had taught service operations to MBA students and brought a brand loyalty and marketing perspective to the company, was an expert in retail industry operations and strategies. In addition to “fixing” the base business, Loveman went on to grow the company's physical footprint – broadening the company's “distribution” network.

Between 1998 and 2005, the company grew steadily through regular acquisitions, including Showboat, the Rio All-Suite Hotel & Casino, Players International, Harvey's Casino Resorts, Horseshoe Gaming Holdings, Caesars Entertainment, and most recently, Imperial Palace. The graph below displays how acquisitions have helped fuel Harrah's growth over the past 8 years, particularly during the Loveman era.

Graph 15: Harrah' Entertainment Revenues (US\$ millions), 1988-2005



March 2000 marked another important milestone in the development of the company's strategy – the re-branding and re-launch of the loyalty program as Total Rewards, the first tiered loyalty program in the gaming industry. The ability to segment customers according to worth to Harrah's was unique in the industry and became the root capability enabling service differentiation. Ultimately, however, it was customer motivation for comps and recognition that generated customer transaction and behavior data from which customer value and worth insights could be obtained. The fact that slot machine technology allowed for easy tracking of play and that Harrah's was a slot-centric company all supported the success of Total Rewards as the primary enabler for customer experience oriented strategy through which Harrah's approached the market. In short, Total Rewards and the data it gathered enabled the service innovations.

Very recent history (i.e. developments in 2006) includes Harrah's announcement of its intention to acquire London Clubs International. The company also did not get selected for the Singapore Marina Bay resort development project – competitor Las Vegas Sands (operator of the Venetian in Las Vegas as well as the Sands in Macau) won the concession as it successfully executed on its strategy of promoting economic development via casino resort development. Harrah's continues to view Asia as a hole in its footprint and plans to enter the market as soon as practical. Finally, October 2006 brought an unsolicited takeover bid from several private equity firms at an unprecedented price of \$83.50/share, valuing the total enterprise (including debt) at more than \$26 billion. Rumors in late November 2006 also began circulating about a potential merger of Harrah's Entertainment with Penn National Gaming. On December 20, 2006, Harrah's formally announced that it had accepted a revised \$90/share offer for the company from the private equity group led by Apollo Management and Texas Pacific Group.

The Harrah's Service Offering: Resolution of Uncertain Outcomes

It is meaningless to discuss Harrah's service strategy if we do not have a good understanding of what Harrah's thinks it is selling. What is the offering that Harrah's produces for its customers? What are Harrah's customers coming to buy? Although seemingly trite questions, understanding the answers to these questions is essential to appreciating fully Harrah's service strategy and its approach to differentiating its offering.

Las Vegas legend Steve Wynn is probably most representative of the traditional conceptualization of a casino's offering: "People come and want to go to a casino because of the high energy, the animation of the space. Casinos are animated, razz-mataz entertainments... I try to give people a space that they and their companions will respond to, and I believe if I do that, they will award me with their patronage..." (Wynn, 2005). Thus, Wynn believes that he is

selling ornate, stimulative environments that engage the senses, emotions, (and wallets) of customers seeking such stimuli and environments. Customers are drawn to locations, and as typically described by industry pundits, the Las Vegas motto became: “if you build it, they will come.” Wynn is describing a destination market, must-see, high-end focus approach to generating casino traffic. Generating gaming from the patrons is a secondary thought that follows from first generating the traffic.

Harrah’s Entertainment however, conceptualizes the gaming offering in very different terms, namely as one in which a customer seeks the thrill of the actual gambling outcome. The offering the company, therefore, is selling is the anticipation of the resolution of an uncertain outcome, the thrill one receives from the process of resolving an unknown. As Loveman notes, Harrah’s is selling an entertainment experience:

The essence of the gambling experience is for our guests the realization of an uncertain outcome...a slot machine could easily be programmed to give the result of the pull instantaneously--it need not cycle through one reel, then a second, then a third. But of course it does that because that’s what builds our anticipation... We see a seven, and then a seven, and in that last moment, the world is better, the women are better, the men are more handsome, we’re alive, we breathe. That’s why your guests are there.

When we deal blackjack, we don’t deal two cards to each person first. There’s no mystery in that. We deal one, and if you get an Ace, all of a sudden just as you see the Ace, you’re filled with anticipation...or if the dealer pulls a 6, you’re hoping with all your heart that she gets a ten. That’s what we sell, that’s the energy that brings a person to a casino.

They're not there to make an investment decision. They're not saying to themselves: 'you know honey we could do two things tonight, we could go to a casino or we could buy the Vanguard index fund.' That's not it. They're buying a form of entertainment and our customers know it better than anyone else (Loveman, 2005a).

Playing the Cards You're Dealt: Harrah's Focus on Existing Customers

Given the conceptualization of the service offered in terms of an actual gaming experience (the resolution of an uncertain outcome, versus the “razz-mataz” environments of high-end retail, exclusive restaurants, and spectacular environments), it should not be surprising to learn that Harrah's decided to compete on customer experience – versus the above described strategies of creating “must-see” destinations or offering an extensive suite of high-end amenities. Further, it should also seem obvious that this conceptualization of the offering leads to a belief that attempting to “grow the market” is a fool's game, one in which billions must be spent to generate “must-see” spectacles that will draw greater and greater pools of gamers.

At the very root of the Harrah's strategy, then, is a belief that the company should be able to drive additional business from its existing customers. The strategy was not focused on obtaining new customers, but rather on developing greater loyalty of those customers who already were visiting Harrah's properties. As Loveman notes: “We said that you don't primarily need more gaming; you need more loyalty among players who already know you. That meant orienting the company towards influencing consumer choice. So the whole strategy was about modifying consumer behavior” (Becker, 2003).

The 2005 Harrah's Entertainment Annual Report summarizes this strategy quite eloquently, noting that Harrah's does not attempt to compete on the basis of anything other than customer experience:

What distinguishes one casino company's properties from another's? In physical terms, not much. The hardware – slot machines, table games, restaurants, hotel rooms, and so on – may vary slightly from one place to the next, but the differences are mostly negligible from a consumer's point of view. That's why Harrah's has long worked to create a decisive preference for our brands through superior service and compelling marketing, both of which are enabled by Total Rewards, the gaming industry's first and most successful loyalty program....the relationship-marketing and other business intelligence capabilities fueled by Total Rewards are constantly bringing us closer to our customers so we better understand their preferences, and from that understanding we are able to improve the entertainment experiences we offer accordingly (Harrah's Entertainment 2005 Annual Report).

Setting the Objective: Monogamous Customers

To measure the success of the customer experience strategy as it unfolded, as well as to provide other managers with mechanisms to gauge progress, Harrah's management decided to focus on three key metrics: (1) **same store sales growth** – which was intended to be a measure of the underlying health of the collection of properties, un-obscured by the effects of acquisitions, new “store” openings, etc.; and (2) **cross market play**, a metric that measures the amount of gaming revenue that was earned from players not in their “home market.” Several

investment analysts have claimed that cross market play³¹ can be argued to be an indicator of customer loyalty when they're traveling; and (3) **wallet-share**, or the percent of a consumer's budgeted expenditure on casino entertainment services that Harrah's manages to capture.

In services, wallet share is a measure of both loyalty and trust in a service provider's ability to consistently deliver a quality experience. Given what he found upon arriving at Harrah's, Loveman immediately used wallet share as a metric upon which he tried to focus even frontline employees. Loveman recounted the dismal state of Harrah's wallet-share metrics when he joined the company in 1998 to employees on the day after the company closed its acquisition of Caesar's Entertainment:

I spent three shifts a day, day after day in employee dining rooms talking to employees about the number 36. . .that Harrah's customers across the country gave us only 36% of their spend out of their gambling budget. That is a TERRIBLE number. You think about other services you all buy. People go to hair salons. . .they don't go to six different hair salons, they don't wait to see who has a coupon at a hair salon. They don't say now I got to get my hair cut today, "Where is there a sale?" They go to a place they trust. They go to the auto mechanic they trust, they go to the dry cleaner they trust, they go to the cobbler they trust.

Why is it that nobody shows any loyalty to casinos? The reason was we'd never given them any reason to be loyal. So, we made this our mantra. . .that if we could do just a little better. . .get from 36 to 37 and by the way 37 STINKS. . .we could take a \$14 share price and make it \$15 or \$16 and then when we got to 38 we could make it \$17 or \$18 and we could then go fix all these

³¹ Thus, if an individual player who is a regular customer at Harrah's Joliet visits Las Vegas, the gaming revenues earned from this customer while in Vegas are considered "cross-market" revenues.

buildings that needed so much attention and that's what we did...(Loveman, 2005a).

The emphasis that Loveman placed upon building customer loyalty cannot be overstated. Having studied the power of brands from an academic perspective, he focused the company upon generating a virtuous cycle of brand building driven by customer loyalty that in turn built the brand further. The mechanism through which to do this was differentiated service. Thus, the focus on loyalty generation and brand-building rapidly emerged as objectives by which to measure the company's operating strategy of competing on customer experience; to rally employees and managers alike around the development of a successful outcome of having service → loyalty → customer transaction data → analytics → customer value determination → differentiated service → loyalty, etc. As part of the rallying call, Harrah's management began to describe customers not exhibiting loyalty behaviors as suffering from a "promiscuity" problem:

[W]e referred to it as the customer promiscuity problem, the fact that customers were playing with everybody. And we needed them to be monogamous and be true just to us so that we could begin to get from 1/3 of their trips maybe to something more like a 1/2. And if we just made that little progress, we would have ourselves one spectacular business. So the strategy began to emerge at that time around the things that we knew we could control to influence that problem.

We had to focus on the gaming experience because really that's all we had across all of the business. We didn't have a hotel in Joliet at that time; we didn't have hotels in lots of our places; we didn't have great restaurants in many of our places; we certainly didn't have resorts. The only thing that was common in all of them was we had a casino where we could treat people well.

So we had to focus on creating an experience which was highly oriented towards great gaming. We had to treat our guests extremely well when they were there. And then we had to use the information we could gather about them to make them want to come back and see us as we got to know them better (Loveman, 2005c).

Assuring Scalability through Robust Information Technology

To accomplish the lofty objectives of building brands and gaining customer intimacy, the company had to build the appropriate IT systems to support this strategy – systems that supported the objective of being able to influence customer behavior by altering the customer experience. The basis upon which the customer experience was to be differentiated was driven by the customer's value and profitability. Further, the systems needed to project a consistent strategy and brand that emphasized high-value gambling experiences accompanied by great service that would get to know the customer:

So we worked to build systems that could routinely, against millions of customers, do three things. The first was to attach them to a brand – the Harrah's brand... We have been the only brand with a nationwide footprint to pursue traditional consumer brand advertising. It's been very effective. Now notice we couldn't promise people we had the prettiest buildings – like Caesars. We couldn't tell them we have the most beautiful amenities – like Paris. All we could tell them was that they would have a great gambling experience and we would surround them with the highest quality service...and that was the second piece. We set about the notion that if we could take good care of people, we would build their loyalty.

Finally, we recognized that all across America, companies collect information about us and then they don't use it. What if we collected that information, and we used it carefully to get ever closer to the interests of each of our customers – learning whether they liked hotel rooms or restaurants, or cash or gifts, whether they traveled with a spouse or without, whether they made their trip to Vegas always at the same time or were prone to making spontaneous decisions to visit when we needed them to—all kinds of information that would craft our relationship.

These were the three things we did to envelope guests to come and see us at places that sometimes were not that great. But it was sufficient to begin a process now six years old of driving substantial growth in same store sales (Loveman, 2005a).

As described above, growing the size of the market was not part of the strategic plan; rather, deeper knowledge of and greater intimacy with existing players became the over-riding objective, and correspondingly, systems were designed to develop customer insight and to better understand the player's behaviors, actions, wagering patterns, and preferences:

We set about building a bunch of self-reinforcing mechanisms that enveloped players, as we call customers, with reasons to be more loyal. Part of this effort was to create a brand that they would be attached to, and that required a significant improvement in service quality. And part of it was using relationship marketing tools that constantly try to develop closer and more valuable interactions with players (Becker, 2003).

Capturing Reciprocal History via the Total Rewards Loyalty Program

Underlying Loveman's customer experience based strategy was a dependence upon a robust loyalty system (powered by information technology) designed to collect and analyze information about the customer. Ultimately, this strategy was a reflection of the circumstances in which Loveman found the company when he joined in 1998 – specifically that Harrah's had two distinguishing elements: (1) locations and (2) customer information:

A lot of the strategies of business, a lot of the great strategies in warfare, as I'm told, come from recognizing what you don't have. And we knew what we didn't have; we knew we didn't have the most beautiful facilities. We had places that were in some very awkward locations; we had places that made it very difficult for the customer to buy what we had for sale. . . .So we started to look and see, "What do we have?" Well we have one thing nobody else did. We had a lot of casinos around the country that had the same name.

And even today we are the only company that operates a number of casinos under the same brand name across the country. That's a very important benefit, a very important attribute. And we had one other very important thing. We knew more about our customers than other people did. Due to some very thoughtful ideas from John Boushy and Phil Satre and others back in the middle 1990's we started collecting information about customers when they used our recognition program, then called Total Gold. And we began to amass a bunch of information about them and we had to then figure out what to do with it. . . . We recognized we had two big assets. We had lots of places people could go under the same name and we had lots of information about those who visited us. . . .(Loveman, 2005c).

The Total Gold system, referenced in the above quote, was designed as a means to reward customers for playing at Harrah's. At the time of inception, it was not intended to serve as a data gathering mechanism or a means through which to track customer transactions. It was simply a tool to provide a "rebate" to a customer for giving Harrah's their business and hence functioned more as a system by which to reward customers rather than to generate different customer behavior. Senior Systems Architect Patti Lee, who was involved in building the initial Total Gold system, observed that

*The idea came about that we need a loyalty program, something to help encourage cross-market visitation, and a way to reward our customers. And we're going to give them, as they play on the slot machine, a very clear, concise way to earn rewards that they can earn at any one of our properties, and redeem them at any one of our properties. And so, if you go to eight of our properties, you could accrue them for a big trip to Las Vegas.*³²

The conspicuous absence of any mention of "customer value", "transaction data", or "customer understanding" is noteworthy. In fact, Loveman notes that the rewards and recognition element of the program dominated, without any focus on loyalty generation or customer behavior modification. At the time, the system did not have any customer analytic elements and did not use captured customer transaction data in any strategic manner. The emphasis of the program shifted quickly after his arrival:

It was a customer-recognition program then, not a loyalty program. It did not have loyalty incentives. If you were a \$500

³² Interview with Patti Lee, Senior Architect – Information Technology; Las Vegas, NV; April 25, 2006.

customer, we would give you \$100 in goodies. But if you didn't come for a year and meantime visited competing casinos, still, the next time you came in again we treated you like a \$500 guy and gave you \$100 in goodies. We changed the program by building in loyalty incentives so that as a customer, each time you think about visiting a casino, you end up visiting Harrah's because it's better for you. So there's this clear pecuniary and non-pecuniary signal that influences decision making (Becker, 2003).

Recognition by Harrah's senior management team that the data captured in the Total Gold system was valuable in understanding customer preferences and behaviors led them to realize that Total Rewards was a powerful means of understanding the customer. In fact, Flippen noted that "Total Rewards is today **THE** data gathering mechanism to understand the customer."³³ Fundamentally, the Total Rewards program emerged as a powerful mechanism to gain knowledge of customer behaviors and preferences, an essential activity in developing the reciprocal history which would later generate customer switching costs, thereby reducing customer power and increasing the company's "edge" over its competitors:

The foundation of our loyalty-building efforts is Total Rewards, the pioneering tiered-card program Harrah's developed in the 1990s, which today boasts nearly 40 million members, and nearly 8 million active members. The relationship-marketing and other business-intelligence capabilities fueled by Total Rewards are constantly bringing us closer to our customers so we better understand their preferences, and from that understanding we are able to improve the entertainment experiences we offer accordingly (2005 Harrah's Entertainment Annual Report).

³³ Interview with Joseph Flippen, Director of Consolidated Operations Analysis; Las Vegas, NV; April 25, 2006. Emphasis added.

Using Differentiated Service to Increase Customer Switching Costs

Understanding the customer, while valuable, was not going to help achieve the goal of increasing customer loyalty or of generating phenomenal customer experiences. In fact, the power of Total Rewards goes beyond understanding the customer and lies in the service differentiation capability it enables. Through Total Rewards, Harrah's is able to focus intensely on its most valuable customers with the explicit objective of gaining a larger share of their gaming dollars. As Director of Consolidated Operational Analysis Joe Flippen notes, "We have built our whole culture around categorizing our customers and focusing on the customers from whom we make money – who are our business."³⁴

The best customers receive the best service and many of the service innovation efforts at Harrah's targeted this singular objective: enabling service differentiation. In all cases, the foundation of this capability is the reciprocal history resident in the loyalty management program and the tremendous customer data capture capabilities it possesses. As Flippen notes, "we could not differentiate service without Total Rewards because we would not have an evaluation of every customer."³⁵

Players also earn the traditional complimentary amenities (the "comps") based on the amount of their regular play; these "rewards credits" accrue in a methodology not dissimilar to that of earning tier credits. This desire for "comps" has resulted in over 80% of the gaming transactions that take place in Harrah's casinos being captured in the Total Rewards system.³⁶ By tracking each member's gaming transactions (amount wagered, frequency of play, amount of play, type of play, etc.), the Total Rewards database became the engine powering service

³⁴ Interview with Joseph Flippen, *op cit.*

³⁵ Interview with Joseph Flippen, *op cit.*

³⁶ Interview with Jason Pashko, Director of Database Reinvestment & Analytics; Las Vegas, NV; April 25, 2006.

differentiation by enabling a calculation of customer worth. In fact, by creating different tiers to acknowledge the differing values of customers to Harrah's, Total Rewards provides the basis upon which the company can treat customers differently. It has the further benefit of producing loyalty among its customers via an aspirational element of the program:

Total Rewards is now [2003] a three-tiered loyalty program with gold, platinum, and diamond levels. You can consolidate all of your gaming with us in any of our casinos. The more of your gaming you give us, the bigger the rewards, and you go up the tiers. The results of that program have been stunning. People who are close to a gate – from gold to platinum, from platinum to diamond – aspire to get over those gates by consolidating their business with us. They know that if they make ten visits to Atlantic City – they used to give us three of those visits – they know that to get a diamond card they have to give us six visits, and they do so (Becker, 2003).

The following table, taken from the Total Rewards website, indicates the different services reserved for the different tiers.

Table 26: Total Rewards Tier Benefits

BENEFITS	 GOLD	 PLATINUM	 DIAMOND
Ability to earn comps, cash, and offers based on play	★	★	★
10% discount at Harrah's-owned gift shops	★	★	★
Ability to earn bonus comps with Total Rewards Visa partner program	★	★	★
Special birthday gift		★	★
Monthly Reward Credit Multiplier Days (Platinum - 2x or more & Diamond - 2x or more)		★	★
500 Bonus Reward Credits each month		★	★
Tickets to Harrah's shows in Las Vegas, Lake Tahoe, Reno, Laughlin and New Orleans (Platinum - 2 for 1 & Diamond - 2 free)		★	★
Monthly Reward Catalog discount - 30% off exclusive merchandise		★	★
Exclusive gift during yearly tier status renewal period (March/April)		★	★
Free tournament entry and hotel stay for the Summer Fest and Winter Fest slot tournaments (Platinum and Diamond member events in Las Vegas) (Platinum - 2 Nights & Diamond - 3 Nights)		★	★
Members-only access to Diamond Lounges			★
Guaranteed priority service at all restaurants, clubs, hotel front desk, Total Rewards center, cashier cage and slots services			★
Invitations to exclusive events and tournaments at Harrah's, Rio, Showboat or Harveys casino			★

Source: <https://www.harrahs.com/TotalRewards/RewardsAndBenefits.do?page=benefits>

The ability to qualify for tiers has also been made quite transparent to customers, as an incentive to help them consolidate their play with Harrah's. While anyone can qualify for Gold status simply by registering, it requires 4,000 and 10,000 tier credits³⁷ to qualify for Platinum and Diamond status, respectively. This means that a video poker player who risks \$40,000 during one calendar year will qualify for the Platinum status; \$100,000 of "coin-in" would get this same player Diamond Status. Note that for a traditional "reel-slot" player, these amounts would be cut in half. In addition to the three tiers listed above and in all of the marketing

³⁷ Tier Credits definition: \$5 of coin-in (i.e. money deposited) into a reel slot machine = one tier credit; \$10 of coin-in on video poker = one tier credit; and according to the Harrah's website, "For table games and other game types you will earn Tier Credits based on your length of play, average bet and the type of game."

materials from Harrah's, there is also a semi-secret fourth tier known as the Seven Stars Club (*see next chapter for a full description*). This idea for this tier originated because customer data suggested there was huge variation within the Diamond tier and that once customers had achieved the highest tier, they then would spread their business to other companies in an effort to get recognized. Thus, the Seven Stars tier was designed to recognize the absolutely most valuable customers.

Although Harrah's treats its customer value calculations as confidential and proprietary, several interesting metrics were revealed during the course of my research. Using the 40 million members that are part of the Total Rewards system, the company is able to calculate the theoretical value of each customer based upon their gaming behavior (wager amount, game played, time played, etc.). Segmenting by tier then creates theoretical customer values for the "typical" customer in each tier. According to senior executives, "one Seven Stars customer is worth 555 Gold members" and "one Diamond is worth 50 Gold members,"³⁸ while a "Platinum is worth a dozen or two Gold members."³⁹

Having these relative value calculations is very helpful in training employees and demonstrating the importance of differentiated service. Training visual aids often display 555 bodies that take up a poster-sized sheet and are compared to one body that occupies less than 2% of a piece of paper. The key message delivered regarding this value differential to employees is simple and straightforward: "you have to go out and find 555 new customers if you piss this customer off."⁴⁰ Combined with the fact that more than 80% of the company's gaming revenues originate from less than 20% of the company's customers,⁴¹ it is easy to understand the

³⁸ Interview with Karin Matthews, Director of Gaming Operations, via telephone on August 26, 2006.

³⁹ Interview with Steven Pinchuck, Vice President of Revenue Management; Las Vegas, NV; April 25, 2006.

⁴⁰ Interview with Karin Matthews, *op cit*.

⁴¹ Interview with Greg Gamsky, Director of Information Technology Solutions; Las Vegas, NV; April 25, 2006.

motivation driving differentiated service. Katrina Lane, Vice President of Channel Marketing, notes that “We want to offer everyone great service but we want to offer some people super-great service.”⁴² A final motivation for differentiated service quality is driven by an acknowledgement of the company’s asset base: “you know basically we have very fixed assets, and so really what we have to differentiate is the service.”⁴³

This emphasis on scalable differentiated service is diffused throughout the organization and into virtually every customer facing department of the casino. Although one’s Total Rewards status is still determined only by gaming value, a valuable customer receives differentiated service throughout his/her entire experience interacting with Harrah’s. Seven Stars and Diamond members check-in at a different location than others, they have more qualified and experienced staff helping them, they then get placed in a different room, they queue in different areas at the restaurant, they are offered different beverages at the buffet, etc. As Karin Matthews, Director of Gaming Operations, notes:

We have what we call the “Diamond Lounge” where our best customers who are Diamond and Seven Stars get to lounge and eat, and there are televisions in there; sometimes there’s entertainment. But it’s just exclusivity all around; it’s a privilege and a benefit of being a Diamond or Seven Stars that allows you to enter these particular places. Every one of our Harrah’s branded properties has them. We also have what we call “Diamond Registration”, which is a separate check-in area, limo services, and special valet parking areas.⁴⁴

⁴² Interview with Katrina Lane, Vice President of Channel Marketing, via telephone on August 15, 2006.

⁴³ Interview with Jason Pashko, *op cit.*

⁴⁴ Interview with Karin Matthews, *op cit.*

Ultimately, notes Director of Food & Beverage Walter Coffey, it's about "making some people more equal than others. It really is about differentiating service and finding ways to make it more valuable for the customer so they stay loyal..."⁴⁵ The differentiated service is also intended to motivate an aspirational and simultaneously punitive message to the customer. John Bruns, Senior Vice President of Customer Satisfaction Assurance, notes that

*Gary gave them a reason to play up and consolidate their play through Total Rewards. You got more goodies. And he also put a pain point on there that if you don't play with us, that it will start hurting in terms of what you don't get—taking risk at going to that competitor, and therefore have that service failure, causing pain to you at another property.*⁴⁶

The quote above captures the essence of generating customer switching costs. This customer switching cost concept is taken a step further because differentiated service that initially causes a "wow" slowly turns into an expectation. This one-way ratchet in expectations is something that Food & Beverage director Walter Coffey describes as a "yellow rose":

*If I give you a yellow rose today when you go to the restaurant, you think it's great. I give it to your wife tomorrow the next time you're in the restaurant, she still thinks it's great. But it's not as important. The third time I do it, it's still great but it becomes an expected thing. And after a while, I can never take it away from you.*⁴⁷

⁴⁵ Interview with Walter Coffey, Director of Food & Beverage Design, via telephone on August 25, 2006.

⁴⁶ Interview with John Bruns, Vice President of Customer Satisfaction Assurance; Las Vegas, NV; August 21, 2006.

⁴⁷ Interview with Walter Coffey, *op cit*.

While one interpretation of this “yellow rose” phenomenon is that it creates a constant pressure on the service delivery staff to generate service “wows” and differentiate the experience given to the best guests, another possibility is that it is the manifestation of a customer switching cost. Although the yellow rose does in fact become an expectation, it may not even be a possibility at a competitor’s property. Thus, by generating customer insight that is deployed in a consistent, constantly evolving manner and is shared across multiple properties, Harrah’s has created customer switching costs. The fact that Harrah’s can differentiate its service is not unique; many local restaurants are able to do so. The fact that Harrah’s can do this consistently across 40 properties and more than 85,000 employees via its scalable service differentiation strategy is unique.

Future Plans: Feeding the Data-Intensive Service Differentiation Strategy

What about the customer who spends a great deal of money on non-gaming activities at the casino? Currently, their worth is not recognized by Harrah’s. A customer may buy \$1000 bottles of wine, spend hundreds of dollars on spa services, and entertain dozens of friends in casino restaurants – and still not get acknowledged as valuable. Given the plethora of other (non-gaming) services that are offered at a casino, it should come as no surprise that, according to Senior Vice President of Relationship Marketing David Norton, incorporating non-gaming transaction data is “the single biggest priority for the Total Rewards team.”⁴⁸ With over 50% of the dollar value of transactions in Las Vegas occurring in non-gaming activities, the company needs to acknowledge and understand transaction patterns and customer behaviors in non-gaming domains:

⁴⁸ Interview with David Norton, Senior Vice President of Relationship Marketing; Las Vegas, NV; April 25, 2006.

*We want to create the same kind of loyalty as we have created for gaming for non-gaming. We want to recognize our customers. Today our Total Rewards loyalty program is only for the gamers. We don't have anything for the non-gamers. So we are actually looking at creating that loyalty program, and that's going to be a focus for us this year, because if you look at even the trend, you realize that only 45 percent of revenue generated from Las Vegas will be from gaming this year...*⁴⁹

The emphasis on incorporating non-gaming transaction data into the loyalty program was driven in large part by the acquisition of Caesar's Entertainment. Unlike Harrah's core customer who is a traditional gamer, Caesar's had attracted a wide variety of customers and had a far more diverse customer base – including customers that visited their properties only for the dining, shopping, and entertainment services. Director of IT Solutions Greg Gamsky notes that

*Caesar's was good at many, many things that we are not good at. They were good at table games and they're good at retail, they're good at hotel, they're good at spas, they're good at restaurants, they're good at entertainment. They're good at a whole host of things we didn't focus on. So the end game for us is to really manage on their worth to the company, one parameter being gaming, another parameter being non-gaming.*⁵⁰

In addition to incorporating non-gaming transactions into the Total Rewards database functionality, Harrah's strategy includes capturing data wherever possible. Table games represent a huge opportunity, as data capture in table games has historically been more “art” than “science” and based on a casino host's visual monitoring of player betting behavior.

⁴⁹ Interview with Sunny Tara, Director of Enterprise Architecture and Integration; Las Vegas, NV; April 25, 2006.

⁵⁰ Interview with Greg Gamsky, *op cit*.

Transactions captured by a host were never completely accurate – resulting in incomplete information about customer worth and value. Noting the “lagging” state of technological sophistication in table games, Harrah’s Vice President for Table Games Gerry Tuthill – a 30 year veteran of the casino industry – notes that

Today, in a slot machine, you come up to a slot machine, you put your card in and there’s some visibility to what happens. Immediately it says, “Hi, how are you?” It starts recording, and you have visibility to your reward credits. You understand what that process is. You pull the card out, it says, “Thank you very much,” it gives you an updated tier score and off you go over to the Total Rewards Center to redeem, or you go to a host desk. Or, in future technology, you redeem right at the slot machine. In table games, you came up, somebody came around to you at some point, took your card, and then gave you his back and walked away from you. He probably then went to a centralized piece of furniture in the middle of a pit and did something mysterious. You do not know what he is doing. And when you are done playing, you hoped that he watched your play and that I calculated it correctly and that when you were done playing I correctly closed out this manual piece of paper, gave it to a input data clerk that inputted that data correctly in a relatively efficient amount of time. Unfortunately, it wasn’t always relatively efficient, so it might be hours before your information was uploaded, hopefully correctly, to our host computer system where then you’d be able to go stand in line at a Total Rewards Center and get credit for that play. It was a very cumbersome, inaccurate, inexact, inefficient process.⁵¹

⁵¹ Interview with Gerry Tuthill, Vice President of Table Games; Las Vegas, NV; August 21, 2006.

In an effort to address this inefficient and confusing process, multiple technologies were evaluated from leading gaming equipment manufacturers and Harrah's executives ultimately chose the Intelligent Table System, a technology product offered by a consortium of Progressive Gaming International, Shufflemaster, and International Gaming Technology. The system is intended to replace the art of table management with a science similar to that currently used with slot machines. In particular, the Intelligent Table System will have three primary components: a Table Manager technology ("Table Touch") allowing for automated data management table-side, Chip Manager technologies designed to capture the exact amount bet by each player via RFID embedded chips, and Card Manager capabilities designed to track and identify which player has what cards – and to link bet amounts with exact odds for each player each bet. Harrah's has already implemented the Table Manager technologies. Gerry Tuthill notes the dramatic improvement from a customer perspective:

Today you come up to the table and I don't walk away from you anymore; I conduct the transaction at the table. "Hello. How are you? Nice to see you Mr. So and So" I swipe your card, you see me do that. I enter some information, I hand you the card right there. So, in your mind you know you're getting credit immediately. I'm staying there, watching your play, doing my transactions, my estimation. The presence of technology, fairly or not, gives the customer the impression that this is improved process because we're using technology. What ends up happening is when you're done playing, just like a slot machine, we immediately settle you up, and that data is immediately uploaded to our host system. There's no more wait. You can request your

*tier score at the table, you can request comp consideration at the table, and we will service you right there.*⁵²

What Tuthill has described is the first step in what will be the complete automation of customer data capture at the tables. Next steps will likely include the use of bet and card recognition technologies to accurately gauge player worth. Noting that card and bet recognition are on the agenda for 2007 implementation, Tuthill admits that today's system still has room for improvement:

*As we calculate customer worth, it's a very inexact science. It relies on manual and estimated calculations. We're moving towards duplicating a slot environment that we absolutely capture 100% accuracy and no estimation.*⁵³

Bet recognition will likely be based upon a specialized table equipped with RFID readers that will capture transmissions from chips embedded with RFID tags. Card recognition will be based upon optical recognition of cards as they are dealt from the shoe. Given the uncertainty of player betting in a situation with constantly varying odds, card recognition may actually enable Harrah's to gain even greater understanding of customer behavior than is possible in the world of slot machines; Ken Weil, senior VP of Gaming Operations, noted his excitement for this possibility:

Card recognition, which is coming, and this is not out yet, but within the next year we'll start to see it...and the most interesting part is I get to figure out what kind of a player you are. So if I know the cards, and I know how you play – we know theoretically

⁵² Interview with Gerry Tuthill, *op cit.*

⁵³ Interview with Gerry Tuthill, *op cit.*

our house advantage in black jack might be 1.2 percent. And we might know that people generally don't play perfect strategy, so really, maybe, it's 1.6 percent...But you know what? There are some players that are just shitty players, and we'd like to know that...because we'd like to invite them back. So with card recognition, if I find out that you're a perfect player (you're 1.2 percent) and the guy next to you is a 4 percent, well, guess what? The four percent guy is getting comped tonight... We want to be able to reward the person who deserves it more. So that's the next phase...⁵⁴

New technologies—such as the card and bet recognition described by Ken Weil above—will enable greater and greater differentiation capabilities and possibilities. Further, other new technologies will likely also increase the means through which Harrah's can distribute its offering to customers. The earlier description of how Harrah's conceptualizes its service offering also creates numerous future opportunities that will enhance the company's ability to further differentiate its service. Loveman notes that his customers are not rash or in pursuit of irrational risks: rather, players are in pursuit of “safe risks,” which equates to a service offering that should be broadly appealing in a variety of distribution formats:

Our research shows that casino customers really like to pursue “safe risks.” They like uncertainty and the excitement of being on the edge. They aren't for over-the-top risks, however: for example, they like reading mysteries and watching Survivor, not bungee jumping. The recent success of reality-TV shows demonstrates that there is broad pent-up demand for the type of entertainment we offer.

⁵⁴ Interview with Ken Weil, Senior Vice President of Gaming Operations; Las Vegas, NV; April 25, 2006

But unlike other forms of entertainment, gaming is hard to buy. It's legal only in a limited number of states, and even there supply is constrained. I want to create a world where Harrah's competes with other forms of entertainment to satisfy these desires. For example, I want to have gambling on cell phones and interactive TV. I want to distribute the ability for consumers to take safe risks (Becker, 2003).

Chapter 6 – Scale and Differentiation at Harrah’s

As described above, Harrah’s opted for a strategy based on differentiated customer experiences. In layman’s terms, Harrah’s wanted to understand what its customers were buying, the profits generated from those customers, and then give the best service to the best customers. The unique element of Harrah’s strategy was scalable service differentiation; effectively treating customers as individuals while dealing with hundreds of thousands of customers interacting with the company through over 40 properties simultaneously.

Differentiated Service equals “Luckiness”

Given the relatively “commodity-nature” of the technologies used to deliver this service (with relatively few exceptions, slot machines are similar among all casinos and table games are likewise very similar among casinos), it became paramount for Harrah’s to provide offerings that would enable the customer to feel as lucky as possible. Before the emphasis on tier based service differentiation really took hold, customer surveys indicated that many players felt that Harrah’s casinos were not particularly lucky. John Bruns, head of Customer Satisfaction Assurance at Harrah’s, explains how the company measures the customer’s feelings about the luckiness of a casino.

So we have three questions on the survey related to luck. So that would be “I feel lucky at this casino,” “Action and excitement,” and “My budget lasts longer.” Those are three things that relate to how the customer feels. Because they’re coming, feeling lucky. They didn’t get up this morning and say, “Gee, I feel unlucky, I think I’ll go lose some money.” They said, “Gee, I feel lucky today” or “This is my chosen form of entertainment. I’m going to

go out there and have some fun today and hope to win.” It’s the chance to win. So all that adrenaline, that anticipation that gets going when they’re coming to a casino – these are the three things that measure that.⁵⁵

Given the insight regarding extended time at a casino as an indication of its luckiness, Harrah’s realized that one of the things to do to increase the perceived “luckiness of a casino” was to keep the customer engaged and entertained for a longer period of time, helping them take their gaming budget further in a temporal sense. According to George Dittman, head of Customer Insight for Harrah’s Entertainment, keeping the customer engaged became the innovation agenda:

...the more things you can do around the slot machine to keep them there and to keep them entertained and involved, the more likely they are to have a good experience and because they’re playing longer—they’re “luckier” at that particular casino. The more you can keep the customer involved and uninterrupted and the better service that you can have with these people, the longer they’re going to stay with you and the less they’re going to think about losing...even though they ultimately do.⁵⁶

Melissa Price, Vice President of Slot Services and Operations, notes that the company came to adopt a holistic approach to managing perceived luck. This meant going beyond the guests’ perceptions of luck while on the gaming floor; in fact, the whole interaction experience with Harrah’s became the subject of interest. The goal became to eliminate anything anywhere in the customer’s experience that might be interpreted to have “busted” their luck.

⁵⁵ Interview with John Bruns, *op cit.*

⁵⁶ Interview with George Dittmann, Director of Customer Insight, via telephone on August 15, 2006.

One of the things that customers tell us is luck is really important to them. And one of the things that busts their luck is when things are hard. And it could be anything; it doesn't even have to be the slot machine. It's could be that I just had a bad experience at the hotel desk or I had to wait in line—all of a sudden I'm not lucky anymore.⁵⁷

Thus, from a very general perspective, the strategy of delivering high quality and memorable services became about the elimination of any hassle in the interaction experience – in short, remove all possible “luck-busting” events so that gamers felt the casino was lucky. Combined with a tier-based differentiation strategy of providing exceptional service to the best customers, the company’s focus was essentially to make the most valuable customers feel the luckiest by minimizing their exposure to “luck-busting” events or scenarios.

The Strategic Service Innovations: Scalable Service Differentiation in Action

In pursuing a strategy of competing based on customer experiences, Harrah’s has developed several new services over the past decade that are worthy of investigation. This section evaluates 3 new services that have been developed, designed, and delivered within the Harrah’s network of properties: (1) The Slot Service Dispatch System and the capability of delivering differentiated slot service on the casino floor, (2) the Seven Stars program for delivering the absolute highest tier of services to the company’s absolutely highest value customers, and (3) the Operational Customer Relationship Management capability designed to enable real-time service differentiation while customers are still in the casino

⁵⁷ Interview with Melissa Price, Vice President of Slot Service and Operations; Las Vegas, NV; August 21, 2006.

For each of these innovations, I provide (a) a detailed description of the new service, (b) a contextualization of how it fits into the Harrah's core strategy of IT-powered service differentiation, (c) the impact of the service in terms of its performance (using Harrah's provided performance metrics), and (d) a summary of how the innovation fit into the prior scalability-differentiation framework.

The Slot Service Dispatch System (SSDS)

Description of the SSDS Capability

Historically, slot machines were run by inserting coins. In recent years, most slot machines have been converted to coin-less systems that take currency bills or tickets (representing a cash amount) from other machines. A historical vestige of this system, however, is a "candle" on top of the machine that is lit up by pushing the "change" button. Recent additions to the machines include a card reader that allows the player to insert a loyalty card (the Total Rewards card) which will monitor the customer's play.

Despite these recent advancements, the machines are still not 100% autonomous. There are a handful of events that may occur at a slot machine necessitating the need for service or attention from casino staff. These events include (a) jackpots that require federal tax paperwork prior to payment, (b) paper jams related to the ticket printer that dispenses "ticket money" at the end of play, (c) player requests for change, (d) problems with the bill-validator through which money is inserted into the machine, or (e) simply a malfunctioning machine. Player requests for service had historically been focused on the need for change (needed more quarters, etc.), but today have evolved into change requests (need to break a \$100 bill so he/she can insert \$20 into the machine) or service requests (such as the need for an ashtray).

The Slot Service Dispatch System (SSDS) was designed to help organize these slot service requests in an orderly manner. The idea for SSDS arose from operations staff who regularly and frequently interact on a day-to-day basis with customers at the “moment of truth.” The combination of the haphazard running from “candle to candle” and the Harrah’s service culture focused on differentiation by tier led to the belief on the part of marketers and operators associated with the slot floor that things could be done better.

The fundamental objective of the system was to enable employees to prioritize the best customers and deliver to them the best service. Consistent with the overall Harrah’s strategy of competing on customer experience and service quality, the goal of SSDS was actually quite objective: reach the best customers within 2 minutes of a service request. Because the slot machines have card readers for players to insert their Total Rewards cards, it’s possible to identify the customer at the machine from which a request for service is being made. Top tier customers were to be served first, followed by the next tier, etc. down to the player who did not insert a Total Rewards card. Thus, the system was designed to create waterfall prioritization – with Seven Stars first, Diamonds next, Platinum third, and Gold just above the retail customer without a card – making the likelihood of a service failure for a Seven Stars extremely unlikely while slow service would be more likely for Gold members.

Players needing service historically would push a button indicating their need, and a light would illuminate on top of the machine. The main problem with this method of communicating service needs, as Jay Snowden, General Manager of the Showboat Atlantic City notes, is that “No one ever sees it [the light]...and employees never react to it because people inadvertently hit them all the time.”⁵⁸ Further, VP of Gaming Operations Karin Matthews describes how the goal of SSDS was to also standardize the delivery of quality service to slot patrons, removing the

⁵⁸ Interview with Jay Snowden, *op cit.*

variability of service delivery that is associated with frontline employees that are dispersed throughout the gaming floor:

We wanted technology to do the thinking—take it out of the hands of the employees so you don't have the inmates running the asylum so-to-speak—which traditionally happens when you don't have management in a confined area with employees. I liken that to a front desk environment or a cage where it's very easy to see exactly what your employees are doing, hold them accountable, and raise the bar for quality service delivery. Slots and beverage are more difficult to manage because they're mobile; and they're scattered all over the floor, and they're going to random events that happen on a slot floor.⁵⁹

In describing the manner in which these service requests were handled prior to the installation of SSDS, VP of Slots Service and Operations Melissa Price notes that another objective was to improve service quality, so that the random methodology of handling service requests on a “first seen, first serviced” basis would be replaced with an organized algorithm based technological dispatch system that would bring some order to the process:

The fact was that at Harrah's Las Vegas we would handle 100,000 events in the course of a month. Because there was so much activity going on on the slot floor...a slot host out there servicing guests...would see a sea of the candle lights on top of a slot machines telling him/her that there's an issue with that slot machine. So he/she would just run from one to the other—with no idea if you've been waiting for 30 seconds or you've been waiting

⁵⁹ Interview with Karin Matthews, *op cit.*

*for ten minutes...so the concept of slot dispatch was to queue all those and organize those based on tier.*⁶⁰

Finally, the SSDS was designed and implemented in a manner that enabled service differentiation by tier. Because the dispatch system also receives data on a player's Total Rewards tier, the system is able to prioritize the service requests so that the most valuable players receive service before less valuable players. Before the prioritization methodology linking Total Rewards data with the service requests, the methodology to handle service requests was "event to order" meaning that "whatever happened regardless of tier, first in first served...and it created a big old mess on the floor many, many times."⁶¹

Implementing the capability, however, was not without issue. Service ambassadors (casino personnel on the slot floor) soon found that because customers were not knowledgeable about the service differentiation that was embedded in the dispatch system, customers would not understand why an attendant could not help them while they were walking to their next service destination. Further, employees did not realize the full rationale for the dispatch system and would accommodate these "manual" requests for service. With time, training materials were modified to accommodate this situation:

SSDS eliminates the need to chase lights!!! Because SSDS prioritizes the events on the slot floor automatically, it is very important to take care of the customers that are dispatched FIRST. Occasionally, you will be stopped by other customers while you are on the way to your dispatch assignment. If they require assistance with an SSDS event (jackpot, paper jam, or coin jam), the following script can help you: "We have an electronic dispatch

⁶⁰ Interview with Melissa Price, *op cit.*

⁶¹ Interview with Karin Matthews, *op cit.*

system that automatically tells us which customers need service. I have been dispatched to take care of another customer right now, but someone will be dispatched to take care of you right away.”⁶²

Today, the SSDS functions as a tool through which service requests are organized and prioritized as well as a tool through which to differentiate service delivery based on a customer’s value. Higher value customers receive better service. Seven Stars customers will always be served (regardless of whether the request is for a change or a jackpot payment) before Gold customers.⁶³ This is true, claims John Bruns, until the Gold cardmember is so upset by the lack of service that she/he begins to affect the service experience that others around her/him are having.⁶⁴ The performance data, however, suggests that this is rarely a problem and is more likely to be addressed with additional staffing rather than in re-prioritization of service dispatch.

SSDS Fit with Strategy

Given Harrah’s core strategy of IT-powered service differentiation, SSDS fits squarely within the company’s strategy. In fact, it is part of the automation process used in the background to help differentiate service to customers in a relatively hidden manner. While Harrah’s always tries to deliver quality service to all of its guests, the objective of delivering the best service to the best customers would not be possible without SSDS. Melissa Price, Vice President of Slot Service and Operations, who heads the corporate team that oversees the service and operation of the company’s entire slot machine footprint across 40 properties, notes that SSDS was originally conceived as “cost-saving technology” that would allow each property to reduce its headcount by allowing its service staff to be more efficient. With time, however,

⁶² Slot Service Dispatch System training materials; provided by Melissa Price at the Caesar’s Palace (Las Vegas) Slot Dispatch Control Room.

⁶³ Interview with Ken Weil, *op cit.*

⁶⁴ Interview with John Bruns, *op cit.*

SSDS became recognized not only as a back-office efficiency increasing tool, but it also became the enabling technology for differentiated service that “squarely fit with the overall Harrah’s strategy of providing the best possible service to our best customers.”⁶⁵

Thus, the SSDS capability is highly consistent with and an enabling capability for Harrah’s IT-powered service differentiation strategy. Reviews of internal reports used to manage SSDS illustrate it has accomplished the objective of automated differentiation – Seven Stars members get served within 2 minutes of their service calls more frequently than Diamonds get served within 2 minutes of service requests, etc. In short, if there is a “service failure” (i.e. inability to meet the service standard), the highest tier (and most valuable) customers are most insulated from them. Further, the fact that these metrics hold regardless of time of day, day of week, or business of the casino indicate the system also scales. Thus, it seems that SSDS has successfully automated service differentiation, thereby helping Harrah’s escape the historical scalability versus differentiation trade-off (or balancing act) described in the dissertation’s literature review.

SSDS Performance

The best measure of success for the SSDS system is the ability of the slot service system to accomplish the objective of providing differentiated service by customer value/tier. In an effort to measure the performance of the system, Price and the rest of the slots operations team partnered with folks from the IT group to design a workflow that allowed data capture on the system’s success. Here’s how the system measured the data: upon the indication of a service request or event, a timer begins to monitor the time until resolution. Upon successful resolution of the system, the service ambassador electronically notifies the system that the issue is resolved

⁶⁵ Follow-up interview with Melissa Price; Las Vegas, NV; November 9, 2006.

and the event is archived in the system. Because data is captured on customer tier, event type (jackpot, printer jam, etc), and time to resolution, it is possible to see if the system has indeed enabled differentiated service. As can be seen from the table below, the system is working swimmingly as Seven Stars customers are receiving quicker service than Diamonds, who in turn receive better service than Platinums, which in turn get more rapid assistance than Gold members, who likely get better treatment than retail (i.e. “No card”) customers.

The diagram on the following page is a sample report (the actual February 2006 report) generated by Melissa Price and her slot service team. As you can see from the “Avg” column on the right hand side of the slide, the service differentiation strategy is absolutely occurring, with Seven Stars members consistently receiving better service than other members. For instance, 97% of Seven Stars slot service requests were handled within 2 minutes on Mondays in February 2006. This compares with 95% of Diamond requests and 79% of all other requests. Further, a glance down the entire column shows the data for the performance of the service differentiation by tier across the days of the week. As visible from the data, there is not one day of the week in which Seven Stars customers do not receive the absolute best service available.

Figure 15: Slot Service Dispatch System Performance Metrics



Response Time Service Standard Performance - Day of Week

This report shows, by hour by day of week by tier, if the slot service standard has been met. To exceed the service standard, 90% of all service requests must be responded to in under 2 minutes. To meet the service standard, 80% of all service requests must be responded to in under 2 minutes. When less than 80% of all requests were responded to in under 2 minutes, the service standard was NOT met.

Property: RIN

From: 02/01/06 To: 02/28/06

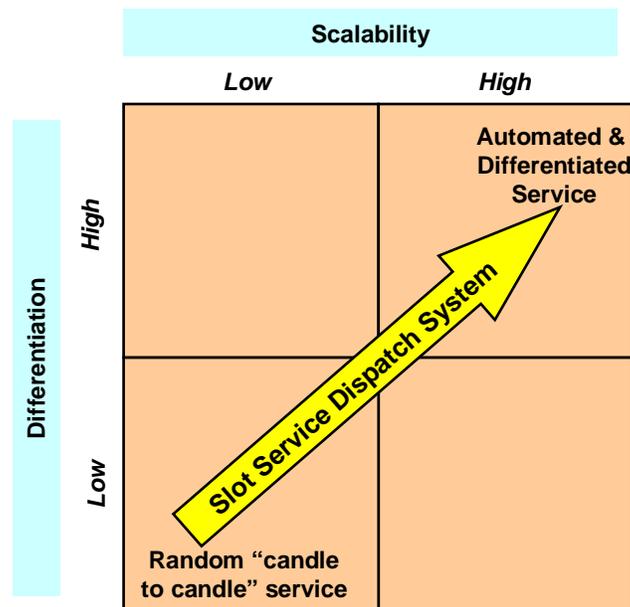
EDW Standard Report

Date	Tier	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Avg	Req.#	
Sun	SEV	90%	91%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	96%	434
	DIA	87%	88%	100%	85%	100%	91%	100%	100%	100%	100%	94%	86%	94%	86%	94%	95%	92%	98%	96%	96%	94%	96%	94%	94%	100%	93%	1,011
	OTH	66%	73%	73%	30%	60%	71%	72%	74%	74%	77%	73%	64%	53%	69%	70%	73%	75%	76%	76%	75%	90%	81%	76%	73%	87%	72%	3,690
Total For: Sun		74%	81%	83%	52%	69%	74%	76%	77%	82%	81%	71%	64%	75%	80%	79%	80%	81%	83%	80%	93%	86%	84%	81%	91%	78%	5,135	
Mon	SEV	83%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	97%	197
	DIA	97%	96%	87%	93%	83%	30%	100%	100%	93%	89%	91%	83%	100%	93%	97%	96%	100%	98%	100%	100%	100%	100%	100%	100%	100%	95%	537
	OTH	71%	76%	82%	53%	37%	41%	51%	38%	41%	38%	80%	70%	84%	81%	82%	88%	84%	88%	88%	70%	88%	90%	82%	85%	83%	78%	2,347
Total For: Mon		80%	83%	84%	67%	44%	45%	65%	69%	89%	83%	72%	86%	84%	85%	91%	91%	91%	88%	91%	91%	93%	85%	87%	88%	83%	3,081	
Tue	SEV	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	95%	121
	DIA	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	96%	440
	OTH	76%	84%	83%	72%	34%	38%	47%	60%	73%	85%	82%	79%	81%	79%	84%	95%	88%	94%	84%	91%	83%	82%	81%	79%	78%	81%	2,117
Total For: Tue		80%	87%	89%	77%	63%	55%	67%	62%	84%	87%	83%	81%	83%	83%	87%	96%	89%	95%	87%	90%	84%	84%	84%	83%	82%	84%	2,678
Wed	SEV	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	97%	93
	DIA	87%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	94%	411
	OTH	72%	69%	67%	35%	39%	33%	73%	70%	89%	90%	70%	80%	79%	82%	80%	93%	83%	82%	85%	86%	91%	86%	94%	76%	80%	80%	1,987
Total For: Wed		79%	76%	73%	46%	70%	35%	76%	72%	91%	92%	73%	83%	80%	85%	82%	92%	87%	86%	87%	88%	93%	88%	93%	85%	83%	2,491	
Thurs	SEV	91%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	94%	139
	DIA	87%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	93%	535
	OTH	53%	77%	86%	60%	36%	41%	88%	69%	78%	88%	69%	60%	71%	76%	78%	85%	90%	82%	76%	91%	87%	87%	90%	87%	80%	76%	2,483
Total For: Thurs		62%	81%	87%	67%	67%	53%	90%	71%	81%	80%	71%	63%	74%	80%	82%	87%	91%	86%	81%	92%	90%	91%	92%	89%	80%	3,137	
Fri	SEV	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	98%	265
	DIA	94%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	93%	585
	OTH	92%	96%	92%	73%	34%	34%	66%	93%	63%	82%	79%	83%	80%	79%	81%	82%	81%	89%	80%	91%	90%	88%	82%	88%	85%	83%	2,143
Total For: Fri		93%	97%	93%	78%	60%	85%	96%	78%	81%	83%	83%	83%	83%	83%	83%	90%	84%	92%	93%	91%	93%	91%	91%	89%	86%	2,993	
Sat	SEV	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	95%	455
	DIA	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	92%	1,005
	OTH	77%	83%	86%	66%	74%	80%	67%	83%	74%	83%	74%	62%	70%	76%	78%	79%	84%	81%	83%	74%	81%	79%	74%	78%	70%	76%	3,240
Total For: Sat		85%	88%	90%	71%	81%	71%	85%	74%	84%	80%	68%	72%	81%	82%	84%	87%	84%	85%	81%	86%	85%	79%	83%	79%	82%	81%	4,700
Property Total:		76%	82%	84%	61%	64%	61%	75%	78%	81%	81%	72%	71%	78%	81%	82%	86%	84%	86%	82%	89%	85%	84%	85%	84%	82%	81%	33,745

Contextualizing SSDS

In the language of the scalability-differentiation framework presented earlier, SSDS took a totally random process (neither scalable nor differentiated) of chasing candles atop the slot machines and generated an automated and differentiated service from it.

Figure 16: The Slot Service Dispatch Service Innovation



Seven Stars Club

Description of the Seven Stars Club Tier

The Total Rewards loyalty program has historically had three primary tiers: Gold, Platinum, and Diamond. These tiers are based on a customer's value to the company—which is determined by the amount of capital that they insert into a slot machine or expose on a gaming table. \$5 of "coin-in" on a reel slot machine earns a player one tier credit; \$10 of "coin-in" on a video machine earns a player one tier credit; and table play earns tier credits based upon the odds of the game and amount of the bets. 4,000 tier credits earns a player Platinum status, and 10,000 tier credits earns one the Diamond Status. Gold status is available to anyone who signs up for a

card. Feeling unable to consistently address the needs of its most valuable customers, several managers at Harrah's realized that a fourth tier was needed...and they proposed the "Seven Stars Club," a tier requiring 100,000 tier credits. Senior VP of Relationship Marketing David Norton describes how this quasi-secret fourth tier was introduced, noting that the real impetus was to segment customers into bands of value that justified differentiated service and attempted to motivate customers to spend an even greater share of their wallet with Harrah's:

For one, there's a huge range within Diamond. There are some people that spend \$5,000 a year with us, and there are some people that spend \$200,000 a year with us. And it's really hard to deliver consistent benefits and rewards and incentives to that broad a group...The other thing that we noticed was that within the Diamond tier, even though we earned a lot of revenue from this highest tier—in terms of the player's gaming budget, it was about 50%. So even though they reached Diamond with us, they were spending as much with somebody else.⁶⁶

Norton goes on to describe how the best customers have learned to "game" the system. They know what it takes to be recognized as the best possible customer at Harrah's, and once they achieve that status, they then begin spreading their gaming entertainment budget elsewhere in an effort to get acknowledged by other casinos as a valuable customer. Norton notes:

We knew we were getting still only about half of the gaming budget of our Diamond customers...[We also knew that] once they had achieved Diamond status, they had the Diamond services but there was no clear hurdle or goal for them to hit going forward. We also learned [from looking at behavior patterns] that perhaps they

⁶⁶ Interview with David Norton, *op cit.*

*were trying to earn the equivalent at a competitor—much like an airline, once you're in that 25,000 miles on American maybe try to get it on Delta as opposed to try to get the 50,000—so you have more choices.*⁶⁷

Thus, the Seven Stars club was the implementation of an aspirational motivation marketing strategy designed to gain wallet share among Harrah's absolute best customers.

Implementing a fourth tier, however, within the Harrah's enterprise was not a trivial task. To truly differentiate service in a meaningful manner, every customer facing or customer-touching employee had to be trained in the value of this customer. As noted above, the gaming analytics folks determined that one Seven Stars member was the equivalent (in terms of value to the firm) to 555 Gold members. This was information that needed to be conveyed and taught to everyone from the Housekeeping team through the Valet and Restaurants. Even such mundane functions such as Laundry were involved and therefore needed to understand how each customer is to be treated.

There was also going to be a bunch of customers who would no longer occupy the highest rung on the tier totem pole, and the marketing team was particularly concerned about how they might react, so those customers were also involved in the process.

*We also talked to Diamonds who had no shot—necessarily, to the best of our knowledge, analytically—of achieving Seven Stars. And, our big concern was we didn't want to alienate the Diamond customer who would no longer be the top tier. And what they said was "Well, as long as you don't take anything away from me, then I'm fine."*⁶⁸

⁶⁷ Follow-up interview with David Norton via telephone on November 6, 2006.

⁶⁸ Follow-up interview with David Norton, *op cit*.

Nevertheless, the conservative element of customer management philosophy (and the stakes of offending valuable customers) led Norton and his team to design Seven Stars as a “covert” tier—necessitating customer education about how to participate in the production of this differentiated service:

We decided to roll-out Seven Stars as a covert tier—meaning that the differentiation was going to be pretty subtle, and we actually trained the customers: “Okay, go to the side of the cage, and this is where you get your differentiated service.” So we did that a little bit based on a conservative approach. We’re also listening to the lower level Diamonds to make sure we didn’t alienate them because they contribute a lot of revenue.⁶⁹

Once implemented, however, the game switched towards very clear service differentiation. If a Seven Stars member calls up at 800pm on a Saturday and requests a table at the completely-full steakhouse, “we’ll get them in within 30 minutes” notes David Norton. As one might imagine, such an approach to restaurant management may produce a great deal of difficulty in the ability to honor reservations, etc. The data analytic approach that is deeply embedded within the Harrah’s culture also reared its head with respect to Seven Stars. Steven Pinchuk, head of revenue management at Harrah’s, noted that a simple benefit such as honoring the 8pm Saturday night table request can disrupt the restaurant’s functioning, but with appropriate data gauging the frequency and likelihood of such events, the company can proactively assure top quality service for its top value guests:

⁶⁹ Follow-up interview with David Norton, *op cit*.

*Seven stars—great customer, top value customer. He’s in. Doesn’t matter what the restaurant looks like. What we want is for the Revenue Management system to know how often that happens and the propensity, and it becomes part of our demand forecast and we proactively save that [table] for the customer, and that’s proactive guest service. That Seven Stars member knows that suddenly everywhere he goes around Harrah’s – he called in Saturday afternoon and got a room. He called at 8:00pm and got into the steakhouse. He noticed that there’s a boxing match the next night; he got tickets. All of that is revenue management behind the scenes...*⁷⁰

Fundamentally, notes David Norton, “the goal is give everybody good service, but Diamond customers need to be great, and Seven Stars is whatever you want, within reason.”⁷¹ In addition to the personalization of benefits conducted at the property level, the company-wide benefits that the Seven Stars Club offers its members include the following 7 articulated entitlements:

Table 27: Seven Stars Company-wide Benefits

1. Complimentary Room Guarantee (no advance notice)
2. Complimentary Annual Trip or Royal Caribbean Cruise Credit
3. Guaranteed Gourmet Restaurant Seating (no advance notice)
4. Guaranteed Priority Service
5. Seven Stars Club Private Selection
6. Seven Stars Club Logo Merchandise
7. Complimentary Birthday Dinner

⁷⁰ Interview with Steven Pinchuk, *op cit.*

⁷¹ Interview with David Norton, *op cit.*

Seven Stars Fit with Strategy

The fundamental premise behind the tiered approach to Total Rewards was to simultaneously achieve standardization of services (within a tier) while also differentiating the offering (across tiers). Given the criteria for entering a particular tier is based solely on value to the enterprise, and the tiers are designed to differentiate services, the Seven Stars tier is the embodiment of the Harrah's strategy of competing on customer service.

The motivation for the Seven Stars tier strikes at the very root of the Harrah's strategy. If the company's very best customers are continuing to give some of their gaming expenditures to other companies, then Harrah's needs to compete for those dollars with a better customer experience and with more lavish service differentiation. Seven Stars does exactly that and is the essence of the Harrah's strategy.

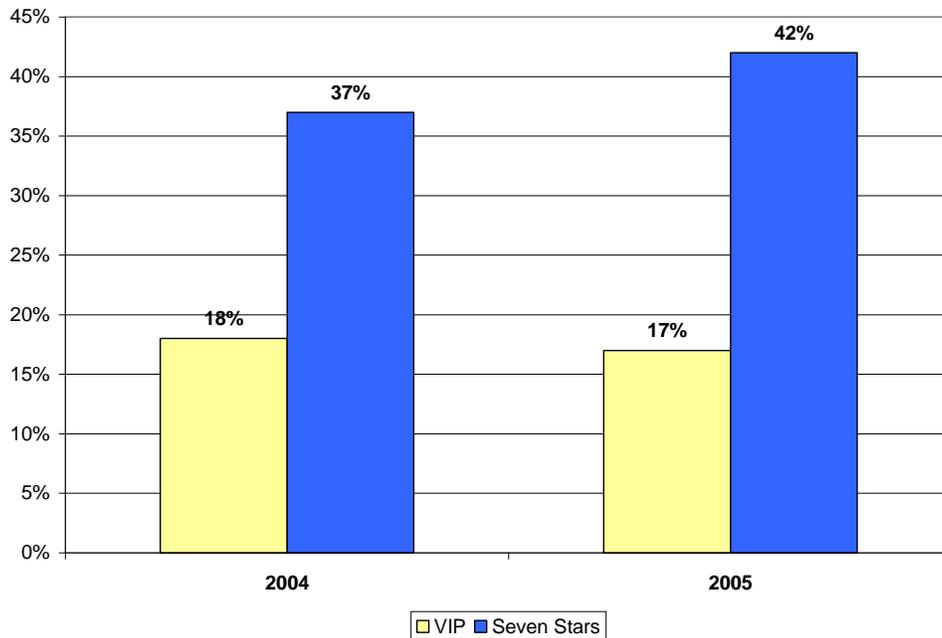
Performance of the Seven Stars Club

Given that the Seven Stars tier was only rolled out in 2004, there is only limited data on the performance of the new service. Nevertheless, the performance metrics that do exist indicate that the service has been fairly successful, albeit with a few exceptions. At the very highest levels, an analysis of the number of customers who were playing in 2005 at a level that would earn them Seven Stars status is higher than the number of players who would have earned the status in 2004 (there is only one year of awardees given the program just started).

Further, each of these players is worth more (the annual theoretical value to Harrah's for the Seven Stars group rose by more than 22% (compared to the theoretical value of the 2004 "Seven-equivalent" group). The group is returning to Harrah's more frequently, with the number of trips up over 12% and the number of days playing is up over 11%. Enterprise wide, the group of Seven Stars customers today represents approximately \$1.0bn of theoretical revenue to

Harrah's (up more than 20% vs. the Seven-equivalents for 2004). Just to make sure that these trends were not the result of an overall growth in VIP gaming, David Norton shared additional data with me on the overall trends of the VIP market (i.e. Platinum and above). The chart below summarizes how VIP gaming has grown in 2004 and 2005 compared with the growth of Seven Stars (and Seven-equivalent) customers. Note that the theoretical value from Seven Stars (and Seven-equivalent) members has grown approximately 100% between 2003 and 2005.

Figure 17: Growth in Annual Theoretical Value to Harrah's (VIP vs. Seven Stars)



A chart for the growth in the number of trips made per year across the two categories yields similar results: Seven Stars trips grew 56% and 45% in 2004 and 2005, respectively while VIP trips grew 16% and 14% in 2004 and 2005, respectively.

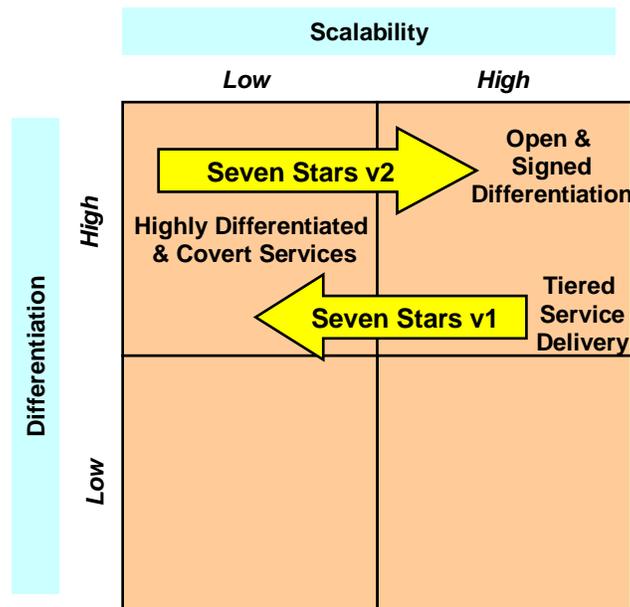
Further, in some geographic regions, the ratio of value to Harrah's for a Seven Stars member (vs. Diamond, Platinum, and Gold members) has risen from the numbers discussed above. In Las Vegas, for instance, one Seven Stars customer generates the same revenue to

Harrah's as 670 Gold members, 50 Platinum members, or 14 Diamond members.⁷² Clearly, the Seven Stars program seems to have had a demonstrable impact upon the customer experience and has resulted in greater loyalty from the best customers.

Contextualizing The Seven Stars Program

The Seven Stars program was effectively two separate service innovations. The first, which is based upon the introduction of a separate tier for the very high-end customer spending a great deal more than your average Diamond customer, was a service innovation that sought to maintain a more finely tuned differentiation (which would imply a movement within the upper right quadrant). Because the service innovation was initially done on a covert basis, however, it effectively degraded scalability. The second service innovation is the “opening” and removal of the covert status to regain scalability.

Figure 18: The Seven Stars Innovation



⁷² Seven Stars Program presentation, David Norton, November 2006.

Operational Customer Relationship Management (OpCRM)

Description of the OpCRM Capability

Operational CRM is a service innovation that has evolved over many years within Harrah's and is based on the belief that the slot machine is a valuable customer touch-point that can (and should) be utilized to deliver an expanded suite of services. Harrah's recognized that, as a company, it was effective at direct marketing – primarily via the mail and telephone. Because all such marketing occurred after a customer's visit to a casino, the marketing department thought it might be possible to apply those same direct marketing skills to a customer while they were actually in the middle of their visit.⁷³ It differs from analytical CRM which focuses on incentivizing another trip from a customer who recently visited a casino.⁷⁴

Perhaps the key functionality of the Operational CRM capability is the newfound ability of the slot machine to recognize the guest and via business rules, spur an action of some sort. Tim Stanley, Chief Information Officer for Harrah's, noted that the overall objective of Operational CRM was to “use business rules against current and historical data to offer real-time offers and incentives...that were delivered to customer or employees via operational touch-points for a ‘WOW’ or ‘You Know me!?!’ effect.”⁷⁵ In some cases, this may be recognition of a customer who has not visited a property in a while. Sandeep Khera, Director of the Operational CRM program, notes that the operational CRM capability would also be of great assistance to employees in enabling them to deliver high value, customized, and personalized service:

*...the opportunity here is in making the customer's
experience better while they're on property, so it can be as simple*

⁷³ Interview with Marc Oppenheimer, Vice President of Marketing at the Harrah's Joliet property, via telephone on August 14, 2006.

⁷⁴ Interview with Sandeep Khera, Director of Operational CRM; Las Vegas, NV; April 25, 2006.

⁷⁵ Tim Stanley 2005 All-IT presentation.

as we know that they're sitting at a slot machine, it's April 26th of whatever year and their birthday is on April 26th so we can send somebody out to bring them a card and flowers and balloons and that's a surprise for the customer...[or]...we know the customer used to be a regular visitor and this is their first time on property in three to four months.

Now this may be a person who, you know, was previously casino-hosted and fell out of that or they were a regular visitor but maybe some of the staff moved on, so for whatever reason they come on property and ordinarily they wouldn't be recognized and now we have a system-based approach to know "Here's a person who was very valuable to us and a loyal guest. They haven't visited for us for a while" and a chance to go out and meet them, so it becomes less important who is the person doing it and more important that whoever is doing it has the right information that can go up to this guest and introduce themselves and welcome them back.⁷⁶

Building on the success of SSDS, operational CRM was designed to help guests navigate a casino's suite of services from the slot machine. The concept was to enable the slot machine – a primary interaction touch-point for many of Harrah's most loyal customers – to treat the customer with differentiated service. Mary Dossett notes that Operational CRM is

looking at offering beverage service, potentially hotel reservations, dinner reservations, valet, we are looking at all of these capabilities as services that we can service to a guest at a number of touch-points, with the slot machine being key among them, because that's where the guest spends the most time.⁷⁷

⁷⁶ Interview with Sandeep Khera, *op cit.*

⁷⁷ Interview with Mary Dossett, Director of Gaming Technologies; Las Vegas, NV; April 25, 2006.

One of the basic premises that drove the development of Operational CRM was that customers should be recognized in a consistent manner by all company touch-points⁷⁸ and that the customer information should be updated real-time. In addition to the obvious positive opportunities such information would present for marketing, this real-time information would also prevent reinvestment marketing offers (also known as “comps”) from being duplicated in a multi-property market:

So and the other thing we want to make sure is we understand – we need to know that someone incented – the left hand needs to know what the right hand, the right hand needs to know what the left hand, right? So if I incented someone on our property, and then the person walks over to the next property, I want to make sure that that person – that property B has the visibility that something was done to this person at property A. Because we don’t also want to overcomp the guest.⁷⁹

Tara continues, noting that the real time touch-point allows Harrah’s to deliver offers deemed by a customer to be valuable even when the costs to Harrah’s are minimal. In fact, it may even help with demand smoothing for some of the casino’s other services, by channeling customers to a venue when lines are particularly short, or giving away perishable tickets to a show at the last minute to a particularly unlucky guest:

What we want to be able to do is recognize that [unlucky experience] and see how we can make a difference. So I know I have a show that Vikram likes. And I have extra seating capacity.

⁷⁸ Interview with Sunny Tarra, *op cit.*

⁷⁹ Interview with Sunny Tara, *op cit.*

*I want to ask you, Vikram, right now, do you want four tickets for this show?... Or if I know that the buffet lines are short and if you're a gold customer, I may want to push you to a buffet. Or I know that you like this restaurant, so I can push [you to the restaurant] if there's availability.*⁸⁰

The actual Operational CRM functionality was implemented via a series of “rules” that were designed to automate a service experience. These rules were designed to prompt casino hosts to interact with valuable customers in a way that differentiated the service delivered to the customer and made them feel particularly special. One explicit goal of the Operational CRM service was to make the player feel lucky: as Khera notes, “things that we can do on the floor like recognizing birthdays, celebrating winning and things like that add to the perception of luck...”⁸¹

Creating such automated service interactions runs the risk of creating a “big brother” feeling among customers. As such, it becomes extremely important to manage customer perceptions of how employees know the information that spurred an interaction. Director of Enterprise Architecture and Integration Sunny Tara notes that

*... there's a difference between if I'm a VIP customer and a host wishes my wife or my significant other or me a happy birthday – [because on the gaming floor] it's a personal relationship between host and player – but I may get offended if I get into a restaurant or the spa or at the hotel check in, and a clerk wishes my son happy birthday ...*⁸²

⁸⁰ Interview with Sunny Tara, *op cit.*

⁸¹ Interview with Sandeep Khera, *op cit.*

⁸² Interview with Sunny Tara, *op cit.*

Because of this highly sensitive nature of the Operational CRM effort, understanding the actual “rules” or “services” is absolutely essential to understanding the system. As such, the following sub-sections of this section profile the various rules that have been developed and implemented via the Operational CRM capability.

A Selection of the OpCRM “Rules”

Given it is better to think of the OpCRM capability as a platform from which to deliver differentiated services (rather than a differentiated service by itself), the following paragraphs will elaborate on a handful of the service interaction “rules” that have been designed, deployed, and delivered on the casino floor using the OpCRM platform. In the interests of demonstrating both successful and unsuccessful “rules,” three rules are described below: (1) the birthday greet, (2) the unlucky visit, and (3) the lucky visit.

BIRTHDAY GREET

Perhaps the simplest of the Operational Customer Relationship Management rules is the “birthday acknowledgment” rule that spurred a casino host to visit a card member on their birthday if they were playing in the casino. Given the popularity among avid players of spending their birthday being entertained in a casino, and the perception that someone unsolicitedly wishing you well on your birthday is particularly lucky, the technology was easily modified to alert casino hosts of important customers that were present on the slot floor on their birthday.

A special birthday gift would be delivered to a guest shortly after they arrived on the floor, but usually long enough after they sat down that it did not appear as obviously technology driven. Sandeep Khara, Director of the Operational CRM program, notes that “the Birthday

guest greet rule existed for all tiers above Gold...it was implemented with great success and provided an opportunity to utilize otherwise reactive (and passive) staff into proactive service ambassadors.”⁸³

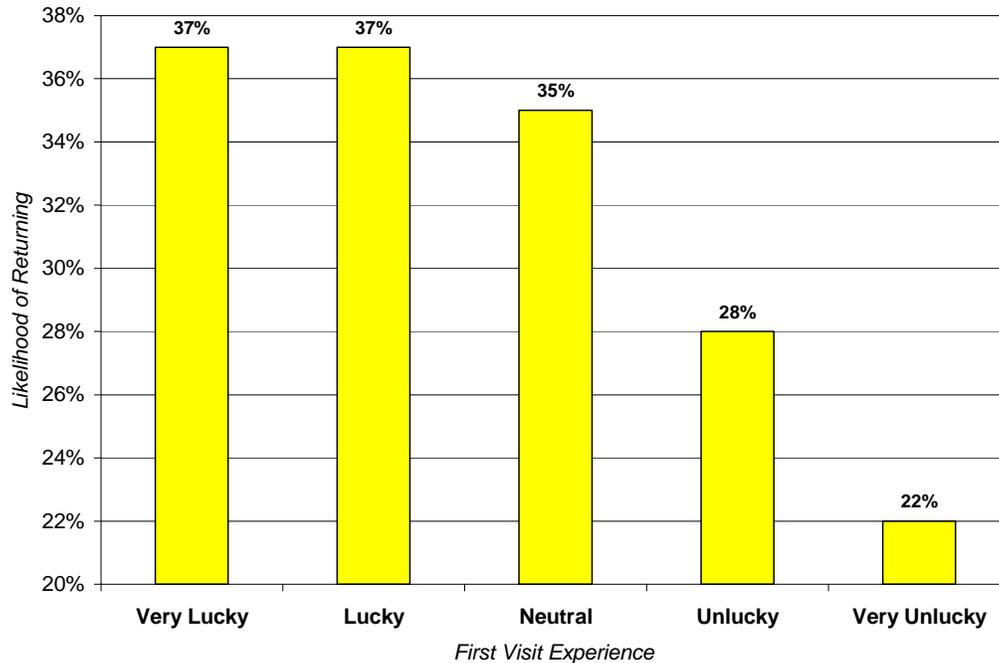
UNLUCKY VISIT

Given the stochastic nature of the gambling entertainment business and the fact that gaming outcomes vary a great deal around a fixed statistical outcome (i.e. the outcomes are stochastic), there is a heavy perception around the “luckiness” of a casino experience. For the purposes of analyzing whether a customer is having a particularly lucky or unlucky experience, Harrah’s evaluates and compares a customer’s actual win (or loss) against the theoretical loss that would have been expected during the time under consideration. Thus, if a player is involved in a game that has an expected house “take” of 10% and risks \$1000 over one hour, the expected loss is \$100.

Given this expectation, a loss greater than \$100 would be considered unlucky, with much greater losses being labeled as particularly unlucky. While the opposite is generally thought to be true (i.e. that a loss of less than \$100 would be considered lucky), players do not generally associate losses with luckiness. Thus, luckiness can be considered high if a player actually wins, and one can assume “unluckiness” if a player’s loss exceeds the theoretical loss that should have occurred. Extensive data exist on customer behavior following a first-time visit to a Harrah’s casino – and serve as the primary source of “customer insight” in the service concept development process. The table below demonstrates the logic for why an intervention during a particularly unlucky visit may increase the chances of a return visit, particularly if the intervention was not expected and might be interpreted as itself a “lucky” event.

⁸³ Interview with Sandeep Khara, *op cit.*

Graph 16: “Luckiness” of First Visit Drives a Customer’s Likelihood of Returning



Source: Tim Stanley Presentation to Hotel Technology Symposium, April 2006

Harrah’s executives did not know how this metric may have varied over time and decided to do some experimentation in actual service settings to determine the impact of prior experiences upon the above chart. In particular, notes Norton, “we did not have a good understanding of how luckiness affected likelihood for an individual who was giving us a second or third shot.”⁸⁴ Thus, the team designed several rules to gauge the effectiveness of a service intervention on a customer who was having a very unlucky second, third, or fourth visit. The results, listed below, were “not what we originally anticipated, but appear to be quite robust.”⁸⁵

⁸⁴ Follow-up interview with David Norton, *op cit.*

⁸⁵ Follow-up interview with John Bruns via telephone on November 7, 2006.

LUCKY VISIT

Given that the “unlucky” service intervention appeared to be working successfully, David Norton and others on his team believed that it would only be logical to also celebrate the success of customers that were particularly lucky. As Sandeep Khera notes:

...one of the thoughts we had was, “Well, what about the guests that are winning, that are beating us for money? Let’s go on and use it as an opportunity to celebrate and congratulate them.” So we made a bold assumption upfront that those people wanted to be celebrated and congratulated. And so we designed the rule and checked it with customers. The reporting showed that these are guests that on this particular trip to a frequency market are beating the house and they’re having a win at a certain level; it showed up as the numbers (inaudible). And we designed the rule and went out and had that interaction—thinking that it was the right one to have – based in part on customer feedback and in part on our marketing team’s logic.”⁸⁶

The concept for the lucky first visit intervention was, as noted by Sandeep Khera above, driven by both customer feedback and the marketing team’s logic. The raw customer data indicated that the lucky customers were already likely to return and did not necessitate an intervention.

According to Khera, the outcome was not as positive as anticipated:

Well, the guest reaction was, “Well, what do you mean? How do you know? Well, yes I’m having a lovely day today, but you know, yesterday was a horrible day. So no thanks; I’m not having a good time.”⁸⁷

⁸⁶ Follow-up interview with Sandeep Khera via telephone on November 6, 2006.

⁸⁷ Follow-up interview with Sandeep Khera, *op cit*.

Further, property managers – who live and die by their customer reactions – responded consistently with their customers. Nevertheless, frontline employees were engaged in a manner that helped improve the rule, making the intervention something that the employee engaging the customer determined whether it made any sense.

So we very quickly heard the feedback from the frontline basically, you know, somewhat critically saying, “Look. Okay, we trusted you on this. We gave it a shot. This is a horrible idea. You know, we need to kill this rule.” And that’s where again, you know, we had this conversation, “Alright, what’s not working? Because obviously something is potent here, let’s not just toss it. Look, there’s something that’s not working obviously here with the approach.” So we revised the approach. You know, we said, “This is an important plan in the customer’s journey. Let’s go out there, check on them, and based upon their reaction have a conversation or not. But let’s not make the assumption that they want to be congratulated.”⁸⁸

Although the lucky visit rule was not a particularly successful service interaction rule, the OpCRM engine has been proven as a capability that enables Harrah’s approach to service differentiation in real-time – as demonstrated by the prior rules.

OpCRM Fit with Strategy

Harrah’s strategy of competing via outstanding customer experiences is based upon the ability of the company to recognize valuable customers and treat them as such – regardless of the customer’s touch-point with the casino. Fundamentally, operational CRM is about doing just

⁸⁸ Follow-up interview with Sandeep Khera, *op cit.*

that while also wooing new customers by managing their perceptions of a casino's luckiness. OpCRM capabilities are fundamentally about differentiating a customer's experience in a casino based upon the type of experience that they have had – in real time. Thus, the capability allows Harrah's to help improve a customer's experience while that experience is still taking place.

Further, the capability enables Harrah's to automate service interactions that have historically been "hit or miss" and quite random. The system is highly scalable and can accommodate dozens of rules, which when combined with the hundreds of customer experience scenarios around which Harrah's has data (via its Total Rewards transaction database), creates an impressive automated differentiation capability – thereby allowing Harrah's to escape the scalability – differentiation constraint discussed above.

Performance of the OpCRM Capability

As described above, the Operational CRM system consists of various "rules" that drive what Tim Stanley has labeled "automagic." This subsection of the chapter will evaluate the Operation CRM system on two levels (a) the performance of these rules relative to a control group that exhibited virtually identical demographic data as well as behavior patterns vis-à-vis betting, frequency of visit, etc. and (b) the aggregate performance of the Operational CRM system.

As can be seen in the table below, the operational CRM rules were not universally successful. Rather, the table below demonstrates Harrah's ability to hone in on potentially promising rules and to roll them out to other properties – all the while continually monitoring the rule's performance. The table below summarizes April 2005 data for the performance of the operational CRM rules at the Harrah's Louisiana properties.

Table 28: Performance of Various Operational CRM “Rules” at Harrah’s Louisiana

	<i>% ADT Gain (Loss) per Customer (vs. Control Group)</i>		
<i>Rule</i>	<i>New Orleans (11,669 offers)</i>	<i>Louisiana Downs (7,335 offers)</i>	<i>Lake Charles (8,798 offers)</i>
<i>Unlucky First Visit</i>	<i>1%</i>	<i>1%</i>	<i>(1%)</i>
<i>Unlucky Second Visit</i>	<i>(7%)</i>	<i>1%</i>	<i>1%</i>
<i>Unlucky Third Visit</i>	<i>2%</i>	<i>(1%)</i>	<i>10%</i>
<i>Unlucky Fourth Visit</i>	<i>6%</i>	<i>(15%)</i>	<i>(12%)</i>
<i>Frequency Upside</i>	<i>(4%)</i>	<i>5%</i>	<i>11%</i>
<i>Birthday Greet</i>	<i>(9%)</i>	<i>(7%)</i>	<i>19%</i>
<i>Seven Stars Greet</i>	<i>0%</i>	<i>13%</i>	<i>0%</i>
<i>Reactivated Customer</i>	<i>1%</i>	<i>4%</i>	<i>5%</i>
<i>Decliner</i>	<i>0%</i>	<i>N/A</i>	<i>N/A</i>

Source: “Harrah’s Operational CRM Initiative Project Update, April 15, 2005”

Aggregate performance of the Operational CRM system, however, has been absolutely stellar when evaluated relative to a control group. The table below summarizes the results of the OpCRM system through the 3rd quarter of 2006.

Table 29: Aggregate Operational CRM Performance

Category	Metric	OpCRM Group	Control Group	Change (absolute)	Change (%)
Trip Play (day of interaction)	Length of Play (mins)	319	298	21	7%
	Day’s Theoretical Revenue	528	481	47	10%

	Day's Actual Revenue	398	371	27	7%
	P&L Impact	47	43	4	9%
Repeat Visit (over 3 months)	Trips	3.2	3.1	0.1	3%
	Total Theoretical Revenue	1525	1382	143	10%
	Total Actual Revenue	1339	1195	144	12%

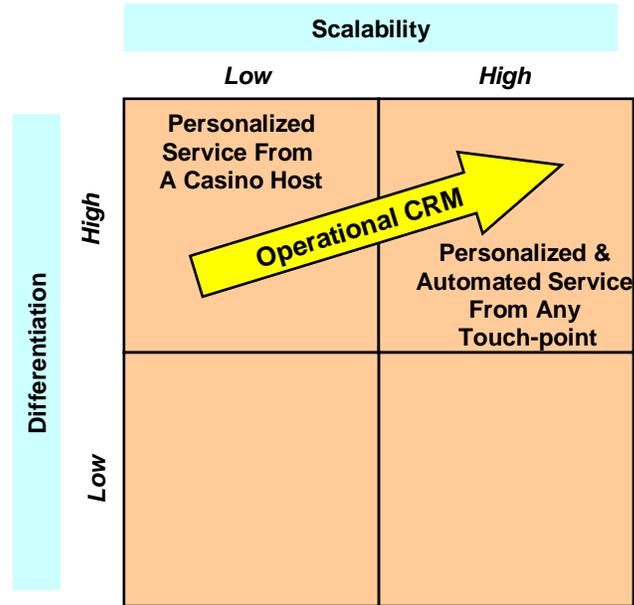
*NOTE: Includes cost of OpCRM service intervention but excludes gaming tax.
SOURCE: David Norton November Slide Show*

As one can imagine, the ability to lengthen the amount of time a player stays at a slot machine (i.e. length of play) has tremendous impact on the profitability of the firm. Increasing revenues by 12% (for a company that is already on a \$9 billion + revenue run rate), is a monumental accomplishment and, if the impact held when spread across all properties, would result in an additional \$1 billion of revenues. The bottom-line impact of 9% is equally impressive and would likely result in a substantial similar revaluation of the company's shares.

Contextualizing OpCRM

The OpCRM capability has accomplished a great deal that was not possible before it was developed. Nevertheless, the service innovations enabled by the OpCRM platform are most comparable to the automation of a personalized relationship with a casino host (which is highly differentiated but definitively not scalable).

Figure 19: The Operational CRM Innovation

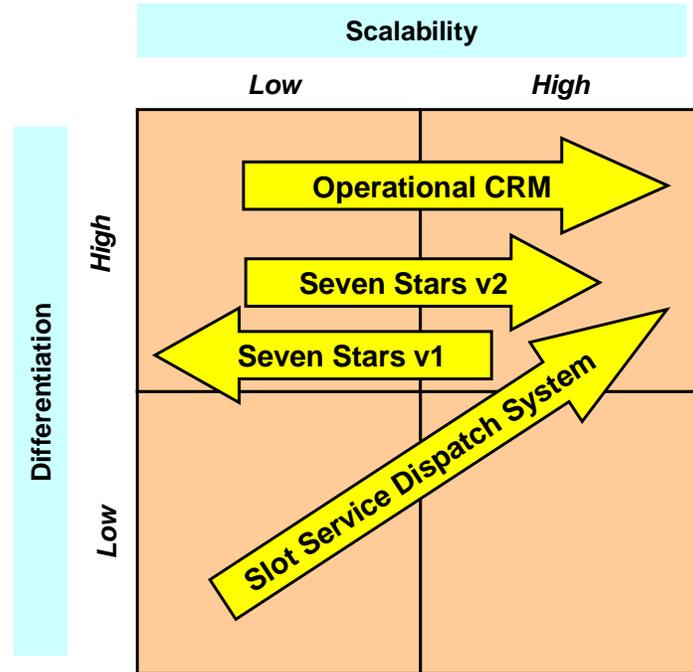


Summary: Service Innovation as Targeting Both Scale AND Differentiation

The three Harrah’s strategic service innovations highlight the tremendous power of being able to achieve both scale and differentiation. Perhaps due to the strong relationships between IT professionals and the “business unit” professionals within Harrah’s, each of the service innovations is based on scalable information technology. Differentiation, the vaccine against the commoditizing cancer of standardized offerings, is itself the target of the automation. Although it seems oxymoronic, Harrah’s has effectively standardized service differentiation through the automation capabilities inherent in information technology.

The figure below summarizes how these three Harrah’s service innovations fit into the scalability – differentiation framework. Note the heavy emphasis on movement towards the upper right quadrant of the 2x2 grid.

Figure 20: Contextualizing Harrah’s Service Innovations



An analysis of the three Harrah’s service innovations through a strategic analysis lens highlights the heavy impact these differentiation-oriented projects have had on customer switching costs. By utilizing customer history to effectively individualize or create a better service experience for the best customers, Harrah’s has effectively created an incentive for these customers not to go to competitors—doing so might result in a lower-quality service experience with a company that does not recognize or acknowledge that customer’s value.

Further, for customers with whom Harrah’s has had limited experience, the differentiation strategy (via OpCRM) is based heavily on understanding the customer’s potential worth. Via likelihood analysis on millions of customers in the Total Rewards database (comparable to actuarial analysis), Harrah’s has developed proprietary models that can dynamically bestow a high-value customer service experience upon a customer with whom Harrah’s does not have a detailed history. This dynamic, yet automated, differentiation for

unknown customers breaks the earlier dependence upon customer history and overcomes the switching costs that a customer loyal to a competitor might bear in moving his or her business to Harrah's. The interactive effect of these three innovations creates a self-reinforcing differentiation mechanism that seems to feed upon itself to generate higher and higher switching costs for Harrah's best customers.

Chapter 7 – Supporting the Strategy: Creating A Service-Oriented Culture Focused on Measurement

An important step in developing the scalable service differentiation strategy was the creation of a service-oriented culture. At the time Loveman arrived, the company's employees were not focused on service at all; because the demand for casino entertainment far exceeded the supply of available gaming opportunities, employees did not focus on customer satisfaction in any way. John Bruns, who heads the company's Customer Satisfaction Assurance team, notes that

In 1998, what you had at Harrah's was 50,000 employees that had no clue what service meant. The reason was they didn't have to be nice to customers. All they did was come to work every day and if they pissed off one customer, it didn't matter because there was another one right behind him. They had, if you will, a seller's market.⁸⁹

Despite the seeming strength of the business, it turns out that Harrah's was losing its best customers. Ruthless competition was being waged via huge capital expenditures and the development of "must-see" properties – in both frequency and destination markets, and the company's precarious financial condition led the most valuable customers to seek gambling entertainment services elsewhere. As noted by Loveman, Harrah's main competitors were building massive casino resorts requiring enormous sums of money in a classic, "build it and they will come" strategy to generate traffic in the casinos. At the time, it was a game Harrah's could not afford to play. Las Vegas was the center of the building action, and as noted by John Bruns, service was the last consideration on the minds of senior gaming executives:

⁸⁹ Follow-up interview with John Bruns, *op cit*.

*Before 1998, I will submit to you, **there was not one company focused on service** in the gaming industry. It was simply, if you build it, they will come. It was always, spend more money, build a bigger, more magnificent property. It will – it, in and of itself, will create a demand generator, and because the demand is so large, it wouldn't dilute the existing demand. And it proved itself over and over and over again in Las Vegas.⁹⁰*

Further, as Loveman notes, the casino industry has historically had reasons that required a hands-off, distanced approach to service on the gaming floor. Security concerns and the need for strict, visible distance had historically resulted in formal and stiff employees, frustrated by their inability to generate stronger relationships with their customers:

Casino service generally is disappointing all around. Service is hard to deliver in a casino. Employees are under strict rules to ensure there is no corruption. For example, dealers might want to give you a hug, but they can't, because you might slip something into their pockets. It's not like a hotel. So the business had always grown up around control. Service came way down the list, after control. Customers are losing. They're tired. It's a complex service delivery process. So there are a lot of things that can get in the way of good service (Becker, 2003).

It was this lack of focus on service and the customer experience that opened up an opportunity for Harrah's to differentiate itself vis-à-vis competitors with greater financial capabilities and resources. Combined with the enormous power of the Total Rewards customer

⁹⁰ Interview with John Bruns, *op cit.*

transaction and playing behavior database, this opportunity formed the Harrah's strategy of competing on the basis of customer experience.

Delivering a Vibe: Training & Enabling Employees to be in a Service Mode

Understanding that frontline employees have the greatest interaction with customers leads to a seemingly unfortunate and precarious (from a management perspective) situation in which the lowest-paid employees are the ones that have the greatest influence on customer impressions. This heterogeneity of service offerings (due to the social nature of any service interaction) drives a need to standardize – insofar as possible – service quality. The primary objective of these efforts is to help employees mentally and psychologically “leave their personal baggage”⁹¹ at the door and focus on their task of serving customers. By removing (or at least reducing) employee “state of mind variability,” consistent service is more likely.

Several of Harrah's service innovations are focused upon the creation of a service delivery environment in which employees are—to use a phrase used by Don Marrandino, General Manager of the Flamingo Las Vegas and the Harrah's Las Vegas—“delivering a vibe” consistent with extraordinary service delivery. Marrandino (who had been president of the Hard Rock Hotel and Casino as well as Wynn Las Vegas) notes that truly great experiences are dominated by an energetic “vibe” typical of what a great band might deliver. It's a team effort that is based on the energy of the various players in a band, and the collection of efforts transcends the whole to deliver a memorable experience for the guest:

In the band, people only see seven, eight, nine people on stage. But behind that band, there's t-shirt salesmen, the pilot that flies their plane, the stewardess, the catering people, the wardrobe people,

⁹¹ Interview with John Bruns, *op cit.*

*the agents, the accounting firm, the security detail. I would draw comparison to the most successful bands that ever played. Why are they more successful? The guitar players play the same C, D, G, they're all playing the same stuff. The lead singer, Bruce Springsteen— arguably the best marketed band of all time— doesn't sing better. There are people singing in lounges that sing better than he does. Why? I think there's an interesting comparison between bands and our business. I've gotten to see a lot of the best bands. How they practice, what they do, what they concentrate on...And the best concentrate on one thing – delivering a vibe. Not many businesses try to deliver that.*⁹²

So, how does Harrah's actually help employees get in the "mode" to deliver a vibe? An initial step, notes Ken Weil, was a shift in attention focus to "putting the customer first, rather than the task first."⁹³ This involved recognizing that

*[Front-line] employees come to work with problems. They come to work with child care problems, health care problems, transportation problems, financial problems. Employees come to work, and because they are front-level employees, they have a lot of these problems. Most management has moved past that, so some of these things have been – are not as significant to them in their day-to-day life, but to the employees, these are significant problems. So if you look at this group, this idea of transitioning from home to work is critically important. As Jack Welsh said in his book, "every brain in the game."*⁹⁴

⁹² Interview with Don Marrandino, Regional President and General Manager of the Harrah's Las Vegas and the Flamingo Las Vegas; Las Vegas, NV; August 21, 2006.

⁹³ Interview with Ken Weil, *op cit.*

⁹⁴ Interview with John Bruns, *op cit.*

In order to help transition employees from home to work, Harrah's has all customer-facing departments in the company conduct what are known as "Buzz Sessions." These Buzz Sessions occur before every shift every day, last for seven to ten minutes, and are often attended by senior management of a department and occasionally corporate executives.

According to John Bruns, the sessions have five key steps: (1) Listen to employees about their experiences, (2) Communicate key events that may affect the shift, (3) Reinforce behaviors that have proven effective vis-à-vis interacting with customers, (4) Spotlight and highlight employees, and (5) Have fun, completing the transition of front-line employees to a context in which they're ready to deliver service to customers with an attitude and demeanor that will translate into high customer satisfaction.

In addition to the Buzz Sessions, Harrah's management understood that employees needed to be trained in effective service delivery. Understanding that many frontline employees are hourly workers and that time in training can be a financial burden on them, the service training was designed to motivate them to take it seriously. Loveman notes that the management also required tests:

We developed a service curriculum, which came out of research with our best customers on the issues that really motivated their loyalty. For the first time in the company's history, every single employee attended this training. We paid them their tipped wages while they were in training; dealers make most of their money on tips. If you put them in training and only give them their hourly time, they get the message: this isn't really important. If you pay them their tipped wages — for the first time in most of these people's lives they were in training at tipped wages — that is a huge deal.

And we ran all these programs 24 hours a day because we had people working all shifts. At the Rio, in Las Vegas, for example, we ran 200 sessions with 20 people in each to get through 4,000 employees in just five months. At the end of the program, you had to pass a test — otherwise you could not keep your job. You can imagine the anxiety that percolated through the system (Becker, 2003).

Aces in the Right Places: Organizing for Quality Service Delivery

In addition to using Buzz Sessions to get employees into the work mode, Harrah's conscientiously discriminated in its assignment of employees to various locations within the casino. In particular, those employees who received the most positive reviews were placed in areas likely to contain a disproportionate representation of Seven Stars, Diamonds, and Platinum customers. While speaking with various property-level managers, several mentioned the ideas of having "aces in the right places."

The logic of focusing on the customer did not stop with the strategic allocation of individual human resources; rather, it continued on to include teams and the organization of hierarchies within the casino. In this regard, Harrah's instituted several organizational and staffing re-designs that were centered on creating a better overall experience for the customer. A great example of one such organizational redesign recently took place on the slot floor.

Historically, the slot floor was a domain in which numerous departments of the property ranging from food and beverage to janitorial and gaming operations would interact with guests. Each department was separately run. Gaming operations employees (slot service attendants, etc.) reported to the gaming supervisor on duty during each shift. Food and beverage employees reported to the food and beverage supervisor on duty during each shift. Janitorial services and

others reported in a similar manner. Thus, each function was separately run with no single point of coordination or orchestration. As Joe Flippen notes, “there was no one managing the customer experience holistically. There were no independent men that transcended departmental lines...Everyone wore different uniforms...and they didn’t talk to each other [across departmental lines].”⁹⁵

The Harrah’s team changed this by creating a de facto head of customer experience. Melissa Price describes the new role as one of complete customer management driven today by cross-functional leadership:

*It’s really getting to the place of how do you get these cross-functional teams and maybe at this point it’s just cross-functional leadership. So now I’m a supervisor and I own this zone of 200 machines, and the beverage people and the slot people that are in here all report to me. And my mission in life is to make sure every customer that comes in and out of this zone that I touch them in some way, shape or form. I say “Hi” to them; I say “Good luck”; I make sure they have a good experience; I anticipate their drink need. You know, I see if they need change; I just take care of them.*⁹⁶

This seemingly minor change, however, did not arise without organizational complications and the need to overcome vested interests. For example, slot attendants and janitorial staff have not historically earned tips from customers, which beverage attendants do. How will such a vestige of the previous approach manifest itself in the new organizational system? Joe Flippen succinctly summarized the difficulty of managing this process: “It’s going

⁹⁵ Interview with Joseph Flippen, *op cit.*

⁹⁶ Interview with Melissa Price, *op cit.*

to be tricky.”⁹⁷ To date, the change seems to have worked well and vested organizational interests have been overcome via pooled tips, the customer service bonus which is received by every employee for property service scores, and the recent emergence of a general service-oriented culture.

Nevertheless, this is not preventing a continuous improvement effort by the management of gaming operations. Price goes on to describe how cross-functional leadership of customer experience management is the first step in the redesign process. A logical extension, she notes, is to extend the cross-functionality from leadership to each employee – in effect making each employee responsible for complete customer management:

Step two goes far beyond that where, you know, this vision of every one of these supervisors and maybe even all the employees on the floor have a handheld and I can literally check you out of your hotel, make you dinner reservations. I'm more like a concierge that's out there to help you with – in your journey of your experience...⁹⁸

This goal of having multi-functioned individuals capable of attending to every need of every customer has not yet been achieved; nevertheless, the objective has been set and teams are already working on developing appropriate human resources.

While not directly related to the concept of having highly capable personnel on staff, a reduction in employee turnover is highly consistent with having “aces in the right places.” Employee turnover is expensive, not only in terms of training and HR processing, but also in terms of customer perceptions. If players are constantly interacting with employees who are

⁹⁷ Interview with Joseph Flippen, *op cit.*

⁹⁸ Interview with Melissa Price, *op cit.*

“new to the job,” then they are de facto dealing with folks who are less informed and experienced with Harrah’s and the service culture, etc. Management has made it a priority to reduce turnover:

We also worked on reducing employee turnover. We're very careful about who we hire and are doing a better job of nurturing people through their first 90 days with us because that's where we've been losing everybody. And a lot of it comes from making sure employees know what they're being hired into. We take people through what we call realistic job previews and get them acquainted with the work before they start. And we check in with employees the first week they're on the job, the second week, the fourth week, the eighth week. We work very hard on supervision reviews and so on. We've managed to reduce turnover quite a lot, which in turn helps our customer service scores (Becker, 2003).

Employee Jackpot: Incentivizing Employees towards Customer Satisfaction

As a final step in developing a service focused culture, the company designed a bonus scheme to incentivize employees to deliver great service. The scheme put in place allowed for every single property-level employee at the company to earn up to \$200 extra per quarter if service metrics were improved. Further, a substantial portion of the corporate management team’s evaluation criteria was designed around service scores; head of the customer satisfaction assurance team at Harrah’s John Bruns notes:

We're the only company that returns to the employee a bonus [based on service quality]. So management bonus is 25% of their bonus is attributable to customer satisfaction, and for an employee is a potential of \$200 a quarter, or \$800 for a year, per employee.

And since 2001 we've paid out \$104 million to our employees for changing the customer experience, not profit. It's strictly customer experience, changing the customer satisfaction. So we have truly demonstrated not only the commitment to the service profit chain, but the cause and effect and being able to anchor those with a meaningful incentive, that therefore what gets rewarded gets repeated. So therefore we have – we are improving the employee engagement and delivering a better experience for the customer.”⁹⁹

Thus, “the customer satisfaction scale for a property improves, every single employee at that property – whether you’re the janitor or the General Manager – gets \$200 that quarter.”¹⁰⁰ Head of gaming operations Ken Weil goes on to describe the simple outlook that frontline, property employees have developed towards the service scores: “People sit there and say, ‘I want to improve my service scores, because if I improve my service scores, I will get better compensated and better recognized for it.’ So that’s what happens...”¹⁰¹ Issues such as tip allocation and the disenfranchisement of certain employees (or groups) within the organization have been made secondary to the simple goal of improving customer service scores. This individual \$200 quarterly bonus has resulted in a very focused team-oriented approach to customer experience management.

In addition to serving as an effective motivator for individual employees, the quarterly service has motivated team-oriented service behavior and helped the company overcome the inertial tendencies of vested interests. As the company began to implement some of the strategic service innovations such as Operational CRM, casino hosts began to lose power vis-à-vis customer influence and with respect to the company. As is the case in most organizational

⁹⁹ Interview with John Bruns, *op cit.*

¹⁰⁰ Interview with Ken Weil, *op cit.*

¹⁰¹ Interview with Ken Weil, *op cit.*

change dynamics, those with vested interests seek to slow change. The pooled CSA bonus sought to overcome this dynamic by motivating individuals to act as a group.

Don Marrandino notes how some hourly workers have begun to think:

If there's an employee that works with you that is grumpy and doesn't do a great job interacting with customers...and you're a good, upbeat employee, you put your arm around them and say, "Hey, you're screwing it up for me. You know, because I want to make the \$800 a year bonus scores and I don't want you to stop me..."¹⁰²

To further reinforce the team based approach to focusing on service delivery, the company makes a habit of publicizing the property's service scores, in real time at each property: Loveman states "in the employee areas there are graphs to let them know their service numbers, which are based on customer satisfaction surveys. The data come in each week, and employees check to see how they're doing" (Becker, 2003). Although a disenfranchised casino host may be making fewer tips than previously, the additional bonus offset some of the loss.

Perhaps the biggest indicator of this employee attitude towards service scores is found in peer-to-peer training that takes place. In reviewing several Caesar's Palace training materials for frontline employees (designed by peers), the emphasis on service scores as related to bonuses was very blunt: "Since Seven Stars and Diamond cardholders account for 80% of revenue and account for **80% of our CSA Performance Payout Scores**, it is very important...to provide excellent player service."¹⁰³ Clearly, the service score based bonus was successful in motivating employees to put the customer experience ahead of their personal agendas.

¹⁰² Interview with Don Marrandino, *op cit.*

¹⁰³ Slot Service Dispatch System training materials, *op cit.*

Get the Facts: Measure, Measure, Measure, & Measure

Having a business academic background, Loveman no doubt had studied the multitude of organizational communication problems that arise in large hierarchical bureaucracies. He was particularly concerned with one of the major, well-documented issues: the flow of accurate information. Loveman did not want to suffer from being an insulated chief executive who did not receive facts; he even used Caesar's acquisition as an appropriate time to share examples of how this "insulation from reality" can mislead the executive suite:

Now, I don't know any business like the hospitality business that's so prone to making this artificial reality for its leaders. I live in this bubble. I stopped at one of these – the gasoline – the Thrifty stations the other day, some time ago, and I bought myself some Diet Pepsi. Harrah's is a Coca-Cola operation, at least for the time being. And I wanted a Diet Pepsi. So I bought myself a six-pack of Diet Pepsi and I threw it in the brown bag and I went in my office and every once in awhile I had one.

A month later I'm in East Chicago, Indiana, which is a long way from Las Vegas. And we're having a meeting of the property management team, and I sit down and everyone's being poured their Coke and their Sprite. And here comes a waiter with a Diet Pepsi. Now, we don't have any Diet Pepsis in East Chicago. We're a Coca-Cola operation. Now that poor kid – somebody has sent this kid out to buy a Diet Pepsi, because somebody working in the corporate office got on the phone and said that this idiot who runs – is in charge of the company likes a Diet – who cares? It's a Diet Pepsi.

If your life starts to work like that, and all of a sudden you start to think that what people are showing you has some basis in reality and it's not. Now, you don't have quite that severe a

problem, but you have a version of that. As the people who work with you are generally trying to make you happy rather than making sure that what you're doing is right (Loveman, 2005a).

So while Loveman sought to get closer to the company's customers, he did not seek his employees' opinions of customers. He wanted actual data. Thus, with the help of other senior managers, he redesigned management context at Harrahs to one in which ideas and fact based decision-making over-ruled the opinions and hunches that employees had traditionally brought to the table. As Loveman noted during a Summer 2005 speech to his employees:

It's the idea that wins, not the person who has the idea. It's typical in an organization that people will defer to the idea of the boss no matter how stupid the idea is. I see it all the time. People want to say that my idea is good just because it's mine. That's ridiculous. My idea is no better or worse than yours...it's just an idea. It has to be held up and scrutinized for its merits. Either it's supported by the evidence and its analysis and thoughts, or it isn't. The fact that it's mine or yours doesn't matter. We have to separate ideas from people and pursue the great ideas – and not get stuck with thinking about who had the idea (Loveman, 2005a).

As will be seen in later discussion, this insistence from top management that ideas be scrutinized in a rigorous, analytic manner has resulted in a heavy measurement focus within most departments. For instance, Mary Dossett, Director of Gaming Technologies, notes that “Harrah’s measures everything. It’s one of our strengths. We do nothing that we cannot validate has a measurable positive impact. And if we discover there’s a negative impact, it’s out of

here...”¹⁰⁴ Likewise, Jay Snowden, General Manager of the Showboat in Atlantic City, states that “pardon the expression, but we measure the s&*t out of everything we deem important...it’s all about measuring for success and creating a meritocracy of ideas.”¹⁰⁵ In fact, the concept of fact based decision-making and measurement arose, unsolicited, in 15 of the 24 interviews that I conducted at Harrahs.

The sentiment is best captured via a direct quote from Gary Loveman, who in 2003 stated the following:

We measure everything...testing and measuring is very important to us. When our employees use the words “I think,” the hair stands up on the back of my neck. We have the capacity to know rather than guess at something because we collect so much information about our customers (Becker, 2003).

¹⁰⁴ Interview with Mary Dosset, *op cit.*

¹⁰⁵ Interview with Jay Snowden, *op cit.*

Chapter 8 – Conclusion

This final chapter concludes the dissertation by articulating the methods of developing a scalable service differentiation strategy. Scalable service differentiation is a horizontal movement on the upper half of the 2x2 framework that has been used throughout this dissertation, and represents a migration towards the holy-grail of strategic service competition – a differentiated and scalable offering. By differentiating the offering, a firm is insulating itself somewhat from the profit-dissipating competitive pressures that commoditize standard, replicable offerings. By creating scalability, the firm is allowing the offering to expand beyond a simple niche market and enjoy the profit-enhancing, margin improving benefits enjoyed through economies of scale. In short, scalable service differentiation allows companies to benefit from standardization without the corresponding negative commoditizing effect and also benefit from differentiation without the corresponding negative efficiency-destroying effect.

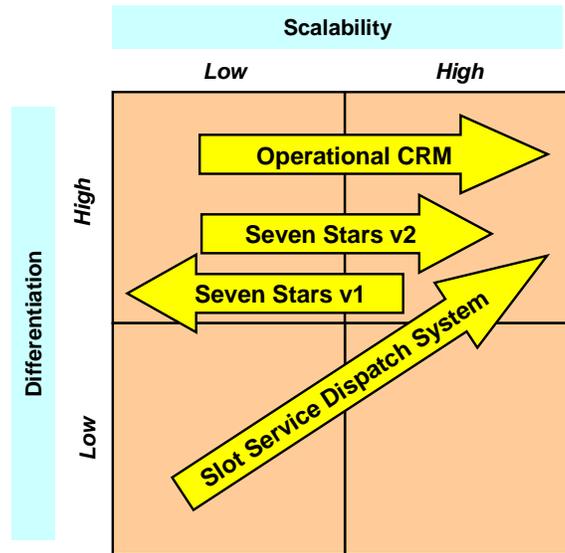
Service Innovations at UPS, The Apollo Group, and Harrah's Entertainment

A review of the 7 strategic service innovations discussed in this dissertation¹⁰⁶ suggests that Harrah's has indeed achieved something remarkable. Specifically, the three Harrah's service innovations did not have any degradation of differentiation (i.e. downward pointing arrows) during the quest for scalability. This is particularly striking in light of the fact that almost all of the UPS and Apollo Group service innovation involved loss of differentiation during the process of standardization. For this reason alone, managers and business academics

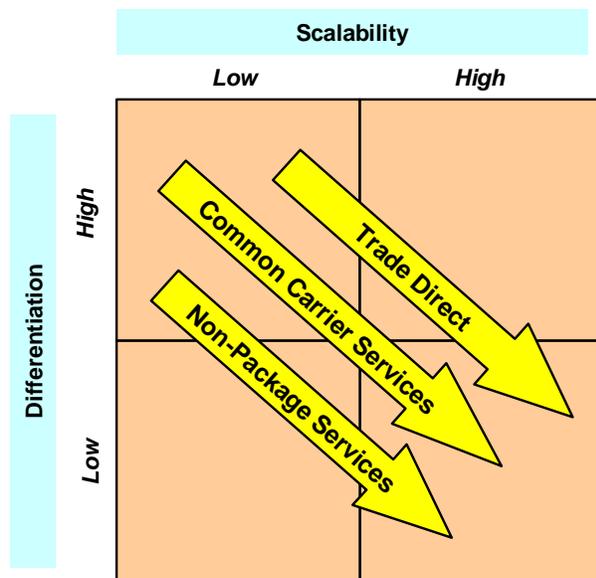
¹⁰⁶ UPS Common Carrier Services, UPS Non-Package Services, UPS Trade Direct, Apollo Centralized Curriculum Development & Management, Apollo FlexNet, Harrah's Slot Service Dispatch System, Harrah's Seven Stars Club, and Harrah's Operational Customer Relationship Management program.

alike should seek a deeper understanding of Harrah's Entertainment. The 2x2 diagrams that summarized each of these strategic service innovations are replicated below.

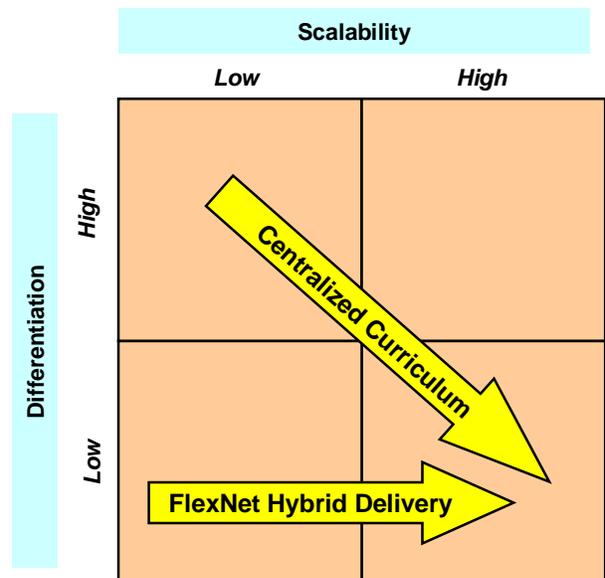
The Harrah's Innovations



The UPS Innovations



The Apollo Group Innovations



The pages that follow summarize the scalable service differentiation strategy and lay a roadmap for the development and implementation of it. The theoretical model is presented, along with details of the key “ingredients” necessary to effectively implement a scale and differentiation strategy.

Scale and Differentiation in Services: Automating Personalized Experiences

An Overview

As discussed in the introduction, Harrah’s Entertainment appears to have generated both scale and differentiation in its services strategy. The strategy has resulted in industry-leading returns on invested capital, and the company appears more insulated from the vicissitudes of the gaming market than its primary competitors. This advantage is based on Harrah’s pioneering use of information technology to capture customer behavior data.

Through Total Rewards, the company’s loyalty program, customers are incentivized to let Harrah’s monitor their gaming behavior in the casino. By capturing actual revealed preferences via this transaction data, Harrah’s is able to extract deeper insights from its customer base regarding customer demands than is available to companies relying exclusively on stated customer preferences obtained via focus groups, surveys, or even customer interviews. This customer data store also serves a valuable predictive function in that the breadth of the Total Rewards membership¹⁰⁷ yields statistical insights other companies can only dream of acquiring. Because of these insights, Harrah’s is able to treat potential high-value customers as high-value customers, thereby reducing the switching costs of gamblers that are likely to be particularly

¹⁰⁷ According to David Norton, Senior VP of Relationship Marketing at Harrah’s Entertainment, the Total Rewards database currently contains information on over 40 million US gamblers, or approximately 80% of the American Gaming Association’s estimate of the 50 million population of US gamblers.

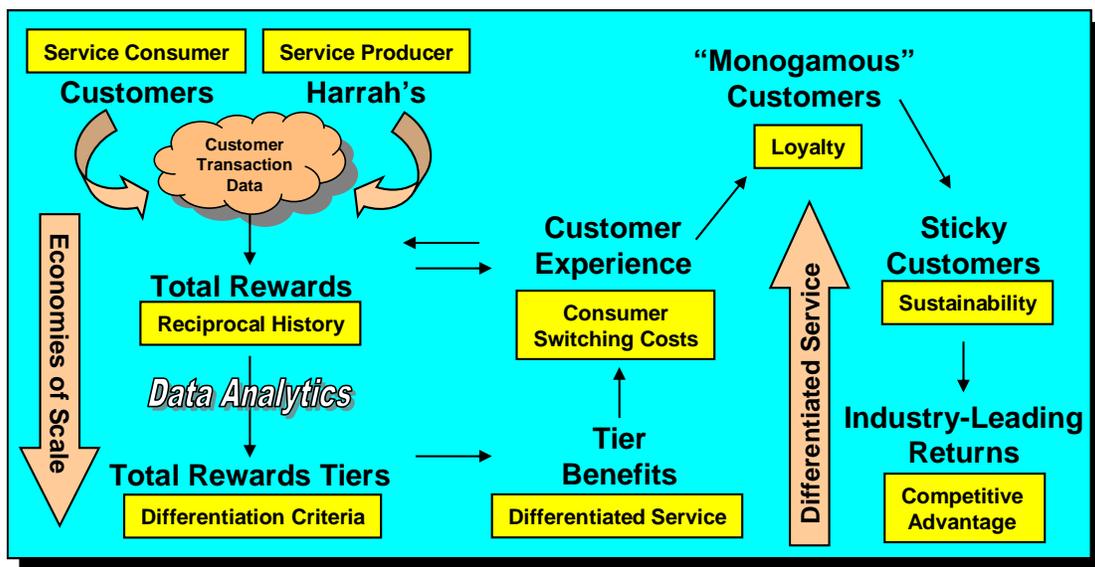
loyal to other casino companies. Just as Harrah's is able to remove the switching costs these potential customers face, it is also able to impose switching costs upon its own customer base.

The store of reciprocal history in Total Rewards enables the calculation of customer worth. Once Harrah's understands who its most valuable customers are in terms of profitability to the firm, Harrah's is then able to set criteria for differentiated treatment for these customers. Through the various tiers of the Total Rewards program and their corresponding tier benefits, Harrah's is able to delivered differentiated service. Such differentiated service yields a better customer experience for the best customers, which leads to additional business from these customers – both in absolute terms as well as a percentage of their gaming budget. The result of this differentiated service is customer lock-in via switching costs.

High value customers at Harrah's receive differentiated treatment that they are unlikely to experience at other casinos. Thus, visiting another casino is a risky endeavor for these customers as they risk, for example, having to wait 15 minutes for slot service, or a long line at the casino's restaurant, etc. As a result, these customers face significant switching costs. These switching costs manifest themselves via increased customer loyalty and increasing degrees of "monogamous" behavior. This process then becomes self-reinforcing, because as the best customers get the best service, their switching costs lead them to play more at Harrah's. The additional gaming transactions are captured in the database, allowing Harrah's to develop deeper insights into both that customer and the likelihood customers with similar profiles would generate similar value to the firm. This additional insight allows for greater service differentiation, which again increases customer switching costs and loyalty to Harrah's Entertainment. Because the system is based on scalable information technology, Harrah's is able to do this simultaneously for hundreds of thousands of customers each day at each property.

The Harrah's model of scale and differentiation in services is summarized in the figure below. As visible from the figure, the use of information technology allows the company to develop the dynamics of scale economies vis-à-vis customer value calculations and the determination of differentiation criteria, which in turn enables differentiated service delivery among masses of like-appearing customers.

Figure 21: Scale and Differentiation at Harrah's Entertainment



Further, the recently announced buyout of Harrah's Entertainment by private equity firms Texas Pacific Group and Apollo Management is unlikely to change this strategy. On December 20, 2006, the day upon which the company formally accepted the offer, Gary Loveman announced that

The privatization of Harrah's will really not result in any changes in our strategy. Indeed, I think our purchasers were taken with our strategy, pleased with the strategic alternatives made possible by the brands, the real estate position we have, and the Total Rewards

*system and other aspects of our strategy. So we'll be continuing to pursue our strategy much as we have in the past. This transaction that announced today is a change in ownership that is really not a change in direction at all, and I don't think our customers or the vast majority of our employees will see any difference in what we've been working on to ensure great service for our guest and great careers and great experiences for our employees.*¹⁰⁸

This sentiment was further confirmed by Charles Atwood, Vice Chairman of the Harrah's Board of Directors, that same day when he indicated the strategy of focusing on customer experiences was unlikely to be affected.:

*For customers, I think this transaction is not going to mean a thing. They're going to keep getting that great experience they get everyday at Harrah's; and for our employees, they're going to continue to provide that very special customer service experience that keeps those customers coming back over and over again.*¹⁰⁹

The Three Key Ingredients of Scalable Service Differentiation

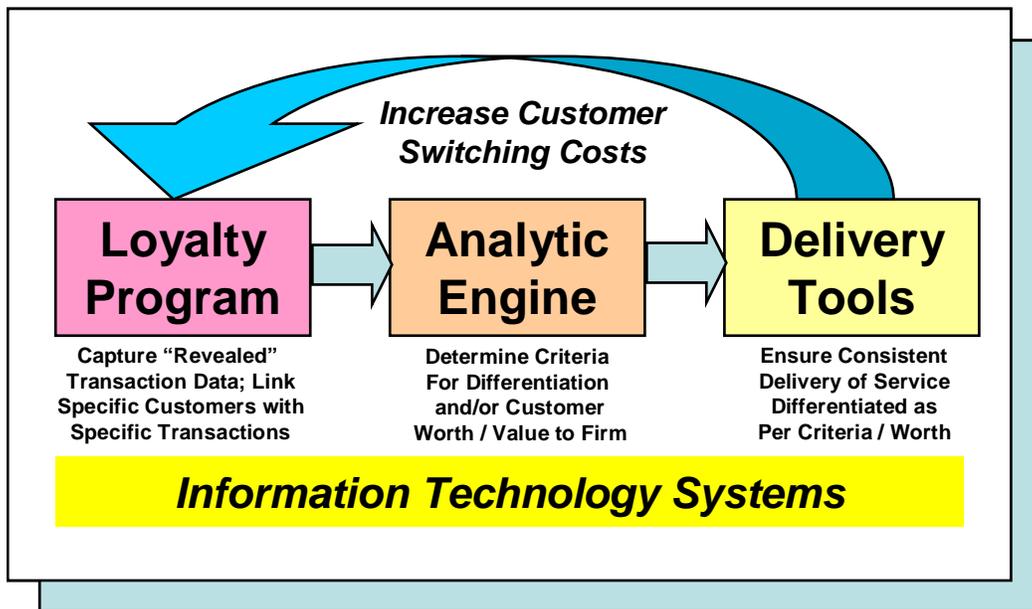
The figure above demonstrates in detail how the Harrah's service strategy took hold to generate a system of increasing returns to the customer relationship. The strategy was based upon three primary ingredients, which seem pertinent to virtually every consumer services firm. The first ingredient was a mechanism through which specific customer transaction data could be tied to and associated with specific customers. The second key element was an analytic engine

¹⁰⁸ Gary Loveman, Chairman of the Harrah's Entertainment Board of Directors, in the company's video press release dated December 20, 2006.

¹⁰⁹ Charles Atwood, Vice Chairman of the Harrah's Entertainment Board of Directors, in the company's video press release dated December 20, 2006.

that enabled the utilization of customer-specific transaction data to generate customer-specific value / worth metrics. Finally, the third component was a set of delivery tools that enabled consistent and differentiated service delivery to customers based on the criteria / value determined by the analytic engine. Underlying these three key ingredients was an information technology capability that powered the whole scalable service differentiation strategy. The figure below summarizes the general scalable service differentiation approach.

Figure 22: The Scalable Service Differentiation Strategy Model



Loyalty Program

The first element of the general model for scalable service differentiation is a mechanism through which to link specific customer transaction data with specific customers. In Harrah's case, the company used its Total Rewards loyalty program as the means through which to link that data. Although the most traditional manner in which to connect customer and transaction data is via a loyalty or frequent-buyer program, the linkage need not be based on some form of

“accrued rewards” to the customer. For instance, companies such as Amazon.com use simple customer accounts to accomplish this same objective.

The fundamental objective of this first ingredient should be the linkage of all customer transactions, selections, and revealed preferences with specific customers. Note that the linkage of transaction data with customers is a relatively recent phenomenon within services. Consider two of the leading loyalty programs in the world: the American Airlines AAdvantage program and Harrah’s Total Rewards. AAdvantage, the first frequent flyer program in the world, began in the early 1980s. Total Rewards, the first casino loyalty program, began in the mid 1990s. Despite the progress of these two pioneering loyalty programs, even they have fully achieved their potential. Much remains to be done by way of linking the transaction and customer data. For example, American Airlines does not currently know which customers order which drinks on which flights. Nor do they monitor which customers fly with what types of bags. Nor do they understand the preferences of outbound customers and how they may vary from inbound customers. In much the same way that Harrah’s is expanding its data capture network to include non-gaming transaction data and more granular data on table games (see above), additional data capture and linkage opportunities abound at American Airlines.

Analytic Engine

Once customer transaction data is captured and linked to specific customers, an analytic engine is needed to extract insight from the data. *The analytic engine has one primary objective: using a set of predetermined criteria to rank, segment, and organize customers by their “worth” and/or “value to the firm.”* Harrah’s and other leading service companies have historically utilized the “tier” or “status” concept to differentiate between different value customers: at Harrah’s, the very best customers were tiered at the Seven Stars level, while the

next best customers were granted “Diamond” status, while the following tier was “Platinum,” and then gold. Likewise, American Airlines has Executive Platinum, Platinum, and Gold status for its very best, next best, and good customers, respectively.

Given the objective is to develop a prioritization of customers from highest-value to lowest-value, tiering is not a necessary procedure. While it seems a bit extreme, and perhaps even inefficient to do so, there is no reason why customers cannot be given a particular rank through which customer rank #1 is always given better service than customer rank #2, who always receives better service than customer rank #3, etc. Though it might seem difficult to manage such finely tuned differentiation among millions of customers simultaneously, but imagine how easy such a task might be with the Slot Service Dispatch System described above. Rather than treating all members of a particular tier as equivalent, the system could abandon the tier system and just utilize individual customer ranks.¹¹⁰

Likewise, is it possible for American Airlines also to rank customers based on their worth to the company? Sure. There is no reason that upgrades should be disbursed on a first-come-first-served basis within a particular tier. The highest value customer should get the upgrade, period. Such a prioritization system likely already exists.

Delivery Tools

Once a company is able to capture customer transaction data, link it to specific customers, and then run the data through an analytic engine to compute a differentiation criteria (more likely than not to be customer worth or value to the firm), delivery tools are needed to ensure consistent service differentiation that scales to meet simultaneous performance across thousands of customer touch-points and with millions of consumers. The Slot Service Dispatch

¹¹⁰ This is not to suggest that the tier system should itself be abolished as the step-function nature of the tiers results in an effective aspirational element to the loyalty program which has quite significant benefits to the company.

System and the Operational CRM tools currently deployed at Harrah's Entertainment and described above are perfect examples of delivery tools that help manage consistent differentiated service delivery via automated prioritization. Through extensive information technology, the delivery tools partially remove the employee mindset in creating unique customer experiences.

The underlying objective of the delivery tools is to ensure that service is consistently differentiated for all of a company's customers based upon the customer ranking which emerges from the analytic engine. If the delivery tools were not part of the system, it is unlikely that the strategy would be anything more than service differentiation – meaning that it would lack the scalability which has proven to be so rarely in the company of differentiation.

Application of the Strategy in Other Industries

This section of the conclusion discusses how a strategy of scalable service differentiation can be applied to other service industries. In particular, it highlights how one can generalize from Harrah's successful application of the strategy to other contexts, with descriptions of how other service companies might generate consumer switching costs via effective use of reciprocal history (i.e. customer transaction data). The applications of the scalable service differentiation approach to three other service industries are explored below: (1) transportation services, (2) retail services, and (3) communication services. For each of these industries, I suggest possible applications of the scalable service differentiation strategy and evaluate the status of the three key ingredients to the strategy.

Scale and Differentiation in Transportation Services: Airlines

Is it possible to apply the lessons of the scalable service differentiation strategy to the air transportation industry? Perhaps. This section of the chapter will investigate how airlines might

utilize information technology and their existing stores of customer data (reciprocal history) to intensify consumer switching costs and enhance customer loyalty.

Airlines are already well on their way towards the scalable service differentiation strategy. Most have loyalty programs that capture data on which customers are flying which routes, how much they are paying for their seats, and knowledge of how those prices paid compare with the average fares for those routes. Airlines have already begun tiering their customers into various “status” categories as well. Finally airlines have also taken an analytic approach to marketing, often offering customized promotions to members of each tier.

What airlines have failed to do, however, is to dramatically alter the *experience* of air transportation to generate increased consumer switching costs. Consider American Airlines, currently the world’s largest airline company. The airline was a true pioneer in the loyalty management field as it was the first firm to offer frequent flyer miles via its “AAdvantage” program which began in 1981.¹¹¹ American also went on to pioneer tiering of its customers and began to differentiate offers (and in some cases, services¹¹²) based on those tiers.

The AAdvantage program currently has four tiers – general members, Gold, Platinum, and Executive Platinum.¹¹³ Qualification is based upon actual travel on American Airlines or upon a selection of American’s partner airlines. Members can achieve tier membership in one of two ways: (a) through the accumulation of actual miles earned, or (b) through Aadvantage “points,” a method American uses to facilitate status for high-fare paying customers.

Discounted fares generally earn 0.5 points per mile of air travel, normal fares earn 1.0 point per

¹¹¹ <http://www.aa.com/content/amrcorp/corporateInformation/facts/history.jhtml> (accessed on December 17, 2006).

¹¹² The manner in which American began to differentiate the actual service has to do with its use of unused First Class inventory, which was given to American’s best customers, thereby giving a better service experience to its better customers.

¹¹³ All of the information about American Airlines and the company’s AAdvantage program were sourced from the AAdvantage section of www.aa.com located at <http://www.aa.com/content/AAdvantage/programDetails/main.jhtml>.

mile, and premium fares earn 1.5 points. Thus, a 2,000 mile trip will earn an AAdvantage member 2,000 miles and somewhere between 1,000 and 3,000 points. Members retain separate accounts for their points and miles, and tier membership is based upon crossing certain thresholds. A customer obtaining 25,000 points or miles in any calendar year would result in Gold status. 50,000 points or miles earns that customer Platinum status, and 100,000 points or miles equates to Executive Platinum status.

Benefits afforded to members include complimentary upgrades on certain fare tickets, selected lounge access, and priority customer support telephone numbers. These benefits are differentiated by tier, with Executive Platinum services exceeding Platinum benefits, which are better than Gold benefits, etc. For instance, upgrades—regardless of whether they are complimentary or purchased—are awarded (dependent upon seat availability) to Executive Platinum members 100 hours prior to departure, to Platinum members 72 hours prior to departure, and to Gold members 24 hours prior to departure. General members do not qualify for upgrades.

Thus, although there is a degree of scalable service differentiation already present through upgrade benefit tiering, the possibilities for further service differentiation at American Airlines are enormous. In the interest of space, I only suggest one possibility here, an application for the airline that can be best understood as an analogy with the slot service dispatch system. Such a “Ground Operations Prioritization System” would rely heavily on the company’s data analytic capabilities as well as the ability to dynamically re-orient ground operations at an airport based on the aggregated customer value on a particular plane.

Just as Harrah’s employees found themselves running from “candle to candle” in a haphazard, unstructured, and random somewhat “first come, first served” manner, so too do most

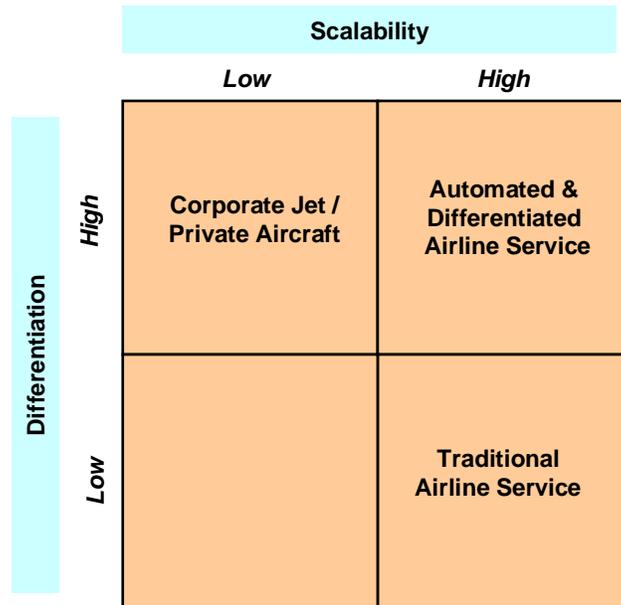
airlines currently allocate runway and gate slots in a “first come, first served” manner that does not distinguish between customer values. Given one of the most common complaints about airline service has to do with unintended, non-weather delays (runway traffic, gate availability, etc.) that affect the punctuality of the travel experience, differentiating gate and runway slots based on the aggregate value of the customers on a plane would be an interesting way of reducing the likelihood of delays for the airline’s best customers. The analogy to Harrah’s is clear: systems should work diligently on making sure your best customers are insulated as much as possible from “luck-busting” events.

American Airlines already has data on its most valuable customers and has the ability to value customer worth. Thus, it is possible to calculate the aggregate customer value of a plane. A plane with 10 Executive Platinum members, 25 Platinum members and 22 Gold members should clearly be given priority (on the margin) over a plane with 3 Executive Platinum and 10 Gold members. While the example provided is clear, exact differentiation strategies – based on the relative values of tiers – will determine how murkier situations can be handled.¹¹⁴

Over time and in aggregate, however, such gate and runway prioritization would result in American Airlines’ best customers receiving the best service. They would therefore find that their switching costs would be higher as competitor planes would leave them subject to the vagaries of airport delays and random plane and gate prioritization. The net result would be a scalable service differentiation strategy that generates more loyal customers, higher than average industry profitability, and an increased likelihood of sustaining that advantage over some period of time into the future. The figure below summarizes the various strategic approaches via the now familiar scalability-differentiation framework.

¹¹⁴ Further optimization will also need to take place given the complexities of airport traffic patterns, distances to runways, location and availability of ground operations personnel, the number (and importance) of connecting customers on board each of the planes, etc. All of this implies the problem is complex, but still solvable.

Figure 23: Scale and Differentiation in Airlines



To implement this strategy of automated and differentiated dispatch, American Airlines would need (a) a system that links specific transaction history to particular individuals, (b) an IT engine that allows American to determine the basis of differentiation (i.e. determine customer worth), and (c) an information technology tool that allows the company to consistently differentiate service delivery.

American already has successfully linked individual customers to specific transactions via its pioneering AAdvantage program. Further, the airline has already begun to calculate customer worth by distinguishing between the value of miles using the parallel “points” system to tier customers according to their value to the firm. The key IT capability that American would need to develop in order to implement the scalable service differentiation strategy suggested above is an IT tool to automate the ground operations in a consistently differentiated manner.

Scale and Differentiation in Retail Services: Online Commerce

The retail industry is an extraordinarily interesting service – although consumers do in fact depart from a retail experience with a tangible product, the actual service being rendered is the selection, presentation, and facilitation of a purchase of a manufacturer’s product. Thus, the “product” is simply a pass-through and the retailer is providing a service of interfacing with customers. What can the current research tell us about retailers and their ability to both differentiate their service as well as do it in a scalable manner?

In the land of online commerce, Amazon provides an example of a company not dissimilar to Harrah’s in its focus on the customer experience and its heavy emphasis on a differentiated (yet scalable) service.¹¹⁵ Its use of information technology is obvious, but the engines behind the service exemplify the use of automated service differentiation. In fact, CEO Jeff Bezos noted in his 2003 letter to shareholders that “the customer experience we create is by far the most important driver of our business.” To truly understand the impact of the Amazon innovation on retailing, consider the predecessors to Amazon’s initial retail focus – books.

In the traditional, bricks-and-mortar environment, books were sold by two extremes of retailers – the small, boutique bookstore or the large national chain. The competitive battle between these two extremes was highlighted in the movie *You’ve Got Mail*, in which Tom Hanks represents a large, low-cost bookstore chain that was competing with Meg Ryan’s boutique bookstore, which focused on personalized service. The trade-off is clear: either the book retailer is focused on scale and uses such benefits to compete on price, or the books are “full-priced” but accompanied with personalized recommendations and staff that remember your name.

¹¹⁵ Amazon’s focus on the customer experience is present in numerous trade articles and secondary-source reports, but perhaps the best articulation of the strategy is found in a 2003 letter from Jeff Bezos, Founder, Chairman, and Chief Executive Officer of the company, to shareholders. The letter is available at http://media.corporate-ir.net/media_files/irol/97/97664/reports/2003_%20Shareholder_%20Letter041304.pdf

Amazon.com, however, has managed to create a retail experience that is both personalized and scalable (Saunders, 2001; Spector, 2002). Through effective use of information technology and customer accounts, Amazon has managed to develop reciprocal history with its customers – meaning that the company knows what types of books you have purchased, to whom and where they were shipped, the type of shipping service you historically choose, or whether you have purchased non-book items from the store, etc.

This reciprocal history is then utilized to generate personalized service which increases customer switching costs. This differentiated and personalized service is delivered in numerous ways. Because the company is operating in the virtual world, it can present a different storefront to returning customers than to new customers. As the IT system gets to know a customer's tastes, it can provide recommendations of books that may also be of interest to you or are correlated with the purchases of folks who also purchased books similar to those you've purchased (i.e. we see you purchased five books on British history during WWII, you might want to consider this other book which is also about WWII, which other customers who purchased the book you purchased found interesting). Amazon can also remind you to purchase a birthday gift for your sister (on the one year anniversary of your prior purchase of a gift for her which you had gift wrapped and sent to her address). Further, Amazon will tell you what others who viewed a particular book looked at next or what they ended up purchasing. Recommendations and reminders such as these are typical of the Meg Ryan small-town book shop with personalized service. One would not find such service at a physical Barnes & Noble store.

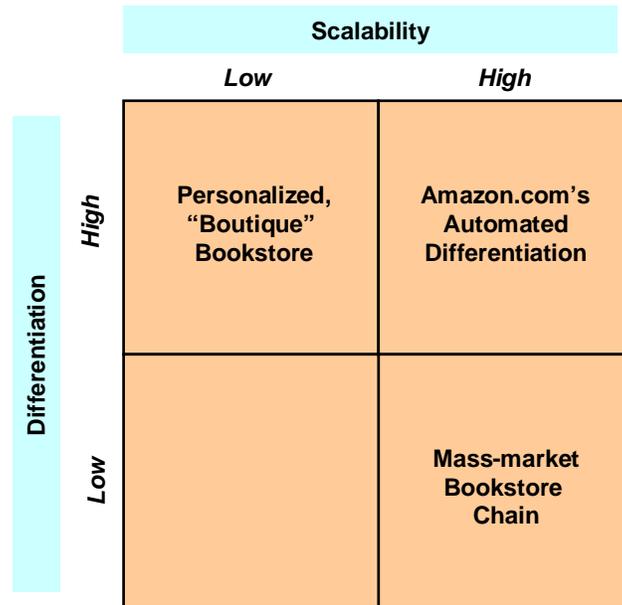
Combined with the fact that the whole system is an interactive, virtual store powered by information technologies that can handle millions of concurrent users, the Amazon.com store becomes an excellent example of how scale and differentiation can co-exist in a service business

model. Thus, the net impact of this reciprocal history-driven consumer switching cost is that it is costly for a loyal Amazon customer to shop for books elsewhere. Going to other online booksellers will not generate appropriate (if any) recommendations, will not result in friendly reminders of important gift-giving dates, and will effectively result in a “restart” of the producer’s knowledge and understanding of the consumer – resulting in a lesser quality service experience than previously enjoyed. Hence, the consumer does himself personal harm by switching to another service provider.

Fundamentally, however, Amazon.com has not utilized its customer knowledge and information technology as effectively as Harrah’s. To do so would involve service differentiation by customer worth. Is it possible for Amazon to understand customer-level profitability? I think so. Is it possible for Amazon to bucket these consumers into various tiers of profitability to the firm? Absolutely. Is it possible for Amazon to then treat each customer differently, based on the customer’s value to Amazon? Certainly.

One possible scenario is a world in which the discount received on books depends on your “status” with Amazon. Thus, in a manner not dissimilar to Total Rewards or AAdvantage, Amazon could begin a running tally of a metric linked to customer profitability. As customers passed certain thresholds, they would rise through various tiers. Amazon could then use those tier rankings to differentiate upon the order in which the latest Harry Potter book was shipped to customers, or upon the price (or pace) of shipping, or upon the price paid for the book. By providing its best customers with the best selection of books, delivered in the most efficient manner possible, and at the best possible price, Amazon would effectively be creating larger switching costs upon its best customers. Such a strategy would likely result in more loyalty from the company’s best customers and therefore higher than industry average profitability.

Figure 24: Scale & Differentiation in Online Commerce



To implement this strategy of automated differentiation based on customer worth, Amazon would need (a) a system that linked specific transaction history to particular individuals, (b) an IT engine that allows it to determine the basis of differentiation (i.e. determine customer worth), and (c) an information technology tool that allowed the company to consistently differentiate service delivery.

The linkage of specific transaction to specific customers is inherent in the Amazon “account” system whereby customers must sign in before making a purchase. Further, Amazon already has the tools to distinguish the service based on a particular customer.¹¹⁶ What Amazon would need, however, is an analytic engine that automates customer worth calculation and sets the criteria for differentiation. Developing this IT capability is unlikely to be a difficult task as the company already has transaction level detail for each customer account.

¹¹⁶ For instance, when I log into Amazon.com, I am presented with a virtual storefront which highlights business and military history books. When my wife logs into Amazon.com, she is presented with a different storefront which highlights novels and social policy / political books.

Scale and Differentiation in Communication Services: Cable Companies

Most network businesses are inherently scalable business models: as high, fixed costs (i.e. the cost of building out the network) are spread across an increasing number of customers (i.e. scale), the cost on a per-customer basis falls, resulting in rising profitability and economies of scale. In traditional economic terms, the marginal cost per incremental customer (i.e. the variable cost) is very low relative to the total cost (i.e. the fixed plus the variable costs). Thus, the inherent scalability of a network business is dependent upon low variable costs; given that customization costs are largely variable (i.e. borne for each customer), differentiated offerings are by nature not scalable. In short, it seems incompatible to have both a scalable business that is also customized to consumers.

The cable television business is a typical network business: it is inherently scalable and possesses increasing returns to scale. Although minor variations such as channel packages exist, the actual service is effectively standardized. Recent innovations in network technologies, however, are enabling the application of data analytics on customer behavior, thereby allowing for a strategy of scalable service differentiation. Let us first consider the new cable television services enabled by technological advancements.

The digitization phenomenon that has struck virtually every previously analog business created the opportunity for cable television companies such as Time Warner to reinvent themselves as broadly diversified communications services companies.¹¹⁷ In addition to the traditional one-way signal transmission capabilities (i.e. the ability to send a television signal over the cable to a home), these same companies are now able to offer numerous two-way

¹¹⁷ For more detailed information about Time Warner and their broad suite of services, visit http://www.timewarner.com/corp/2006_Profile/# for a complete corporate profile which highlights the company's business units and extensive menu of offerings.

communications services such as broadband internet access, on-demand movies, and VOIP¹¹⁸ telephony services. The development of such two-way communications services over the cable network has created enormous opportunities for cable companies (Lewis, 2001). In addition to the simple ability to offer new services, these new capabilities allow for service differentiation in an already, and inherently, scalable network business.

Consider the “movies on demand” service that is now offered by cable companies. This development allowed the formerly one-way cable companies to interact with customers within a standardized framework. Customers no longer needed to visit a movie-rental store such as Blockbuster or Movie Gallery in order to enjoy a movie of their choice in the comfort of their own home. Rather, they could now browse a selection of movies (including previews), purchase and view a movie with the same functionality¹¹⁹ of a DVD or VHS tape, and “return” the movie without ever leaving their couch (Haddad, 2000). To date, companies such as Time Warner and Comcast have enjoyed tremendous success in offering such on-demand capabilities.

Innovators from outside the industry, however, have viewed this success with envy and have recently developed capabilities to compete with these on-demand services. New business models have emerged and begun to threaten the profitability of this business. Unique movie-rental distribution models such as the subscription service offered by NetFlix are gaining share by offering the flexibility of traditional movie media.¹²⁰ Online downloadable movie companies such as Vongo are also offering competing “on-demand” movie services that do not require access to the cable network.¹²¹ How can traditional cable television companies such as Time

¹¹⁸ VOIP = Voice over Internet Protocol. VOIP is a digitized version of traditional phone service that enables voice to be segmented into digital “packets” which are transmitted via the internet and re-assembled into voice at the destination. For more information, see <http://en.wikipedia.org/wiki/VoIP>.

¹¹⁹ Functionality includes capabilities such as pausing, stopping, fast forwarding, and rewinding the movie.

¹²⁰ For more information on Netflix, see <http://www.netflix.com>.

¹²¹ For more information on Vongo, see <http://www.vongo.com>.

Warner and Comcast compete in this increasingly competitive environment? Can they utilize the scalable service differentiation strategy to develop a more durable edge over their competitors?

The Harrah's strategy of scalable service differentiation demonstrated how it was possible to utilize customer transaction data to determine criteria upon which to differentiate the offered service. Through the use of data analytics and information technology, the service could then be delivered in a way that generated the best service for the best customers. Just as Harrah's did this on their casino floor, so too could Time Warner do this for its on-demand customers. Time Warner already knows which customers are using its on-demand services, when those customers are using the service, the actual movies that they are watching, and how frequently they are using it.¹²² Thus, Time Warner has the data to determine customer worth for its on-demand consumers and can redesign its strategy around the delivery of differentiated service.

Just as Amazon provides a service that replicates the small, boutique bookstore that knows its customers and provides personalized suggestions, so too could Time Warner blend the best of the local movie-rental store (with suggestions, differentiated options, personalized service, etc.) and the scale and consistency of a large cable network. Currently, all movies are rented for a period of 24 hours, after which they must be repurchased for continued use. Could Time Warner offer its best customers a 28 hour window? Given the high-prevalence of evening movie-watching, this would effectively equate to 2 nights of the movie, something that customers might value.

The company could also offer a differentiated suite of movie-options. Movie studios already provide movie releases to hotels and airlines earlier than to the DVD, VHS, and at-home based on-demand service markets. Time Warner could negotiate with movie studios for the

¹²² If for no other use, Time Warner necessarily tracks this information for billing purposes.

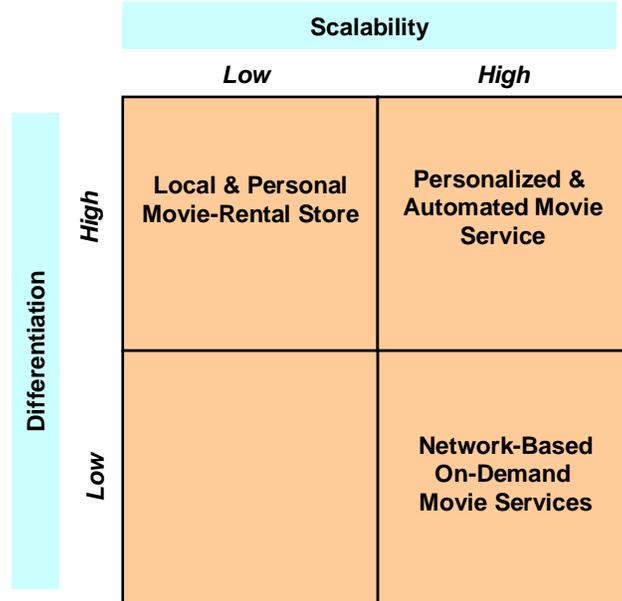
early release of new movies (Lowry, Grover, & Forest, 2003) to on-demand services and offer that service only to targeted customers. For example, the company knows which customers have watched every Harry Potter movie within 24 hours of the movies' releases via the on-demand service. Could the company then offer an "early release viewing" (at a premium price) of the next Harry Potter movie to these customers?

Time Warner might also have knowledge of purchasing patterns and utilize that to offer personalized suggestions. If 85% of customers who rented Harry Potter also rented Lord of the Rings, the remaining 15% might appreciate the "personalized" suggestion to also watch the movie. Such recommendations based on customer purchasing patterns can be particularly useful with respect to new releases. Likewise, if a customer has never rented a horror movie, they are unlikely to do so in the future.¹²³ Time Warner could take this insight and not display previews of horror movies on its on-demand preview channel but rather require the customer to seek out the horror movie in order to rent it. Such differentiated presentation would be comparable to the dynamic virtual storefront offered by Amazon.

By providing such differentiated service, Time Warner might be able to generate reciprocal history (i.e. learn preferences and tastes) with its customers. This reciprocal history can then be translated into higher consumer switching costs – as the consumer would have to teach Netflix or Vongo about his or her preferences in order to receive similarly "personalized" service. The end result of this differentiated service would be a stickier customer, the development of a more durable (and constantly strengthening) competitive advantage, and a high probability of greater profitability for Time Warner.

¹²³ This would more likely be true if the customer is an avid on-demand movie watcher and has thousands of transactions, none of which were for horror movies.

Figure 25: Scale and Differentiation in Communication Services



Implementing a scalable service differentiation strategy at Time Warner would not be particularly difficult, given the company already possesses two of the three key ingredients of the strategy: (a) each address is already identified in the company’s system and keeps track of all on-demand viewing history for billing purposes, thereby linking specific transactions with specific customers¹²⁴, and (b) the targeted advertising capabilities that Time Warner is already implementing enable differentiated service delivery (Kiley, 2005). The company would only need to develop an analytic algorithm to generate a basis upon which to differentiate across customers. Such an engine would require the company to determine customer worth (or some other criteria for differential treatment) and could be based upon usage patterns¹²⁵ or frequency of video “renting.”

¹²⁴ One complication that will need to be addressed is the use of multiple different customers at a common address.

¹²⁵ For instance, a customer who rents consistently between the hours of 2pm and 5pm on weekdays may prove to be more valuable than a customer who rents between 8pm and 10pm on weekends due to demand patterns, etc.

Summary: Scale and Differentiation in Service

The model presented here was developed through inductive strategy and innovation research at Harrah's Entertainment, but by no means is the scalable service differentiation strategy applicable only to other casino companies or other entertainment companies. The three key ingredients described above are available to virtually any service company, and as described in the previous chapter, the application of the strategy to other industries seems eminently doable. The strategy has the ability to lessen the intensity of the profit-dissipating forces affecting most standardized offerings.

Entrepreneurs should recognize the power of this strategy in competing against well-entrenched and capitalized incumbents, and managers of all levels should notice that the Harrah's case described above demonstrates that information technology can be powerfully applied to generate substantial competitive differentiators and superior returns on capital. Finally, the fact that a casino entertainment *services* company was able to deliver a scalable and differentiated offering—seemingly impossible¹²⁶ with *products*—necessitates that academics re-evaluate “accepted” conclusions through a “product vs. service” lens.

Although the strategy is heavily based on IT-powered data gathering and analytics, it is equally based on the differentiated service delivery that generates the switching costs. Further, the strategy is a holistic system, suggesting that a service-oriented culture focused on measurement may support and encourage the development of the switching costs. Pieces of the system are unlikely to prove particularly effective. At the very least, it seems that firms employing a strategy of scalable service differentiation are likely to have, in a very Harrah's-esque manner, the odds stacked in their favor.

¹²⁶ Mass customization of products is the closest approximation of scalable differentiation in products; as discussed above, however, such mass customization is really only “menu-driven” configuration.

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Appendix

Methodology Overview

The following pages provide a detailed discussion of the various methodological matters that arose during this research. While the section is not intended to serve as a primer on case study methodology, it does articulate why the case method was selected for this study, how the study was designed, and how the sources of data were gathered.

Research Strategy: The Case Study Method

For the reasons cited above—primarily relating to the current state of theory with respect to service innovation and new service development—the research approach taken in this dissertation is the case study method. Much of academia continues to think of case-based research as a lower-quality, less-rigorous approach to investigating empirical phenomena. This view, which persists in many academic circles, is best captured by Robert Yin in the preface to his definitive guide to case study research methodology, *Case Study Research Design and Methods*:

The case study has long been stereotyped as a weak sibling among social science methods. Investigators who do case studies are regarded as having deviated from their academic disciplines, their investigations as having insufficient precision (that is, quantification), objectivity, and rigor (Yin, 1984).

Despite this stereotype, Yin continues, case study research continues to persist in many domains of social science academia as a prevalent research strategy. He goes on to suggest two conventional explanations for why this paradox exists: (1) some researchers are not trained to use

alternative methods and as such, cases are their default research approach; (2) the dependence on US federal funding for research—and the corresponding “bureaucratically hazardous clearance procedures”—have made case research the preferred approach. Yin then proposes a third explanation: the “stereotype of the case study method may be wrong”(Yin, 1984).

The stereotype may be wrong, notes Yin, because the case study is a unique research strategy that is optimal in certain circumstances. Unlike experiments, surveys, histories, and quantitative analysis of archival statistics, “case studies are the preferred strategy when ‘how’ or ‘why’ questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context” (Yin, 1984). This is not the case with all research questions. There are times when other research strategies are more appropriate. Yin provides an overview of the various research strategies and the contingent nature of their appropriateness:

Table 30: Research Strategy Approaches

Strategy	Research Question	Requires Control over Behavioral Events?	Focuses on Contemporary Events?
Experiment	How, Why	Yes	Yes
Survey	Who, What, Where, How Many, How Much	No	Yes
Archival Analysis	Who, What, Where, How Many, How Much	No	Yes/No
History	How, Why	No	No
Case Study	How, Why	No	Yes

Source: Yin (1984)

Although the table above developed by Yin (1984) supports the logic for selecting the case study method to attack the research question posed above, the primary driving consideration which ultimately motivated me to pursue a case-based research strategy was the current state of our understanding. Thus, I would also add a fourth “criteria” column called “Degree of Theoretical Maturity.” All strategies other than the Case Study would require “mid” to “high” theoretical maturity. The Case Study strategy would be agnostic on the degree of theoretical maturity.

Given this set of criteria, it quickly becomes evident that the best way to attack the topic of interest is to utilize the case study method. The phenomenon being studied and the question being asked (i.e. What is the process of creating a service offering that is both scalable and differentiated?) fit the criteria listed in the table above (as well as my additional column) fairly well. The question is about “how” a process happens, the topic is contemporary and hasn’t yet been studied, it does not require control over the events, and finally, the theory is not particularly mature. The literature review demonstrated that we are currently in the early stages of building a service-specific innovation theory. We are in what Christensen and other innovation scholars have labeled the “descriptive stage” of theory building (Christensen, 2006; Christensen et al., 2003) – a stage requiring careful description of a phenomenon and how it happens. Other terms have arisen to describe the measure I am labeling “degree of theoretical maturity,” including what some would call “nascent theory” or “suggestive models” (Edmondson & McManus, 2004). Regardless of the terminology, scholars tend to agree that theoretical maturity is an important element of considering how most effectively to contribute to a field of study.

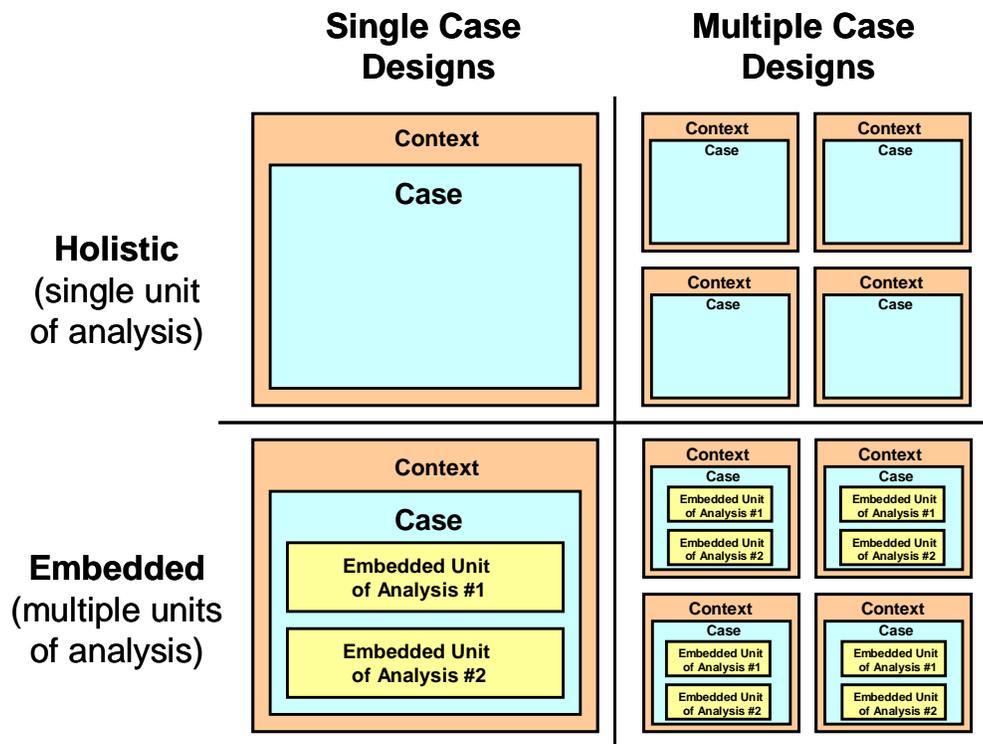
Further, given the objective of this research to generate (rather than test) a theory about service innovation and service firm strategy, an inductive approach in which detailed data

acquired via a case study serves as the basis upon which a preliminary theory can be formulated seems appropriate. The overall strategy was to approach the research without any prior suppositions or bias that might have influenced the data gathering, the data analysis, or the interpretation/findings.

The Research Design: Single Case, Multiple Units of Analysis

Yin suggests that there are four primary types of research designs within the case study approach. These four designs are based on a 2x2 matrix with the two dimensions of (a) number of cases and (b) number of units of analysis. The figure below summarizes Yin’s articulation of the various case study strategy research designs.

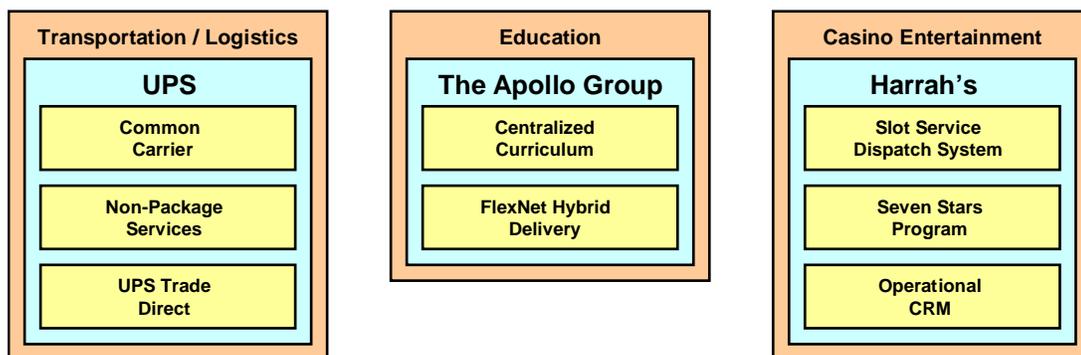
Figure 26: Case Study Research Designs



Source: Yin (1984); Diagram originally sourced to COSMOS Corporation; Diagram above found in 3rd Edition.

The research design I chose to utilize in this project was a Multiple Case Embedded Design (“Type 4” in the Yin (1984) nomenclature). In selecting this research design, two primary decisions were contemplated: (1) single vs. multiple cases, with a service company serving as a “case,” and (2) within the case(s), whether there would be one or multiple service innovations that would be studied. The figure below summarizes the research design employed in this dissertation.

Figure 27: Multiple Case, Embedded Research Design



Despite this research design, the dissertation placed a disproportionate emphasis upon one case – Harrah’s Entertainment. Thus, one might argue that the dissertation is effectively a single case, embedded research design. Yin highlights five primary rationales for a single case design. The first, labeled by Yin as a “critical” case, is effectively a theory testing rationale. To justify this rationale, “the theory has specific and clear set of propositions as well as the circumstances within which the propositions are believed to be true...The single case can then be used to determine whether a theory’s propositions are correct or whether some alternative set of explanations might be more relevant” (Yin, 1984). The second rationale is labeled as an “extreme” or “unique” case. The rationale here should be obvious from the label; nevertheless, it is based on the desire to understand a rare or uncommon case and to seek any insights such a

case may have on our understanding of non-unique cases. The third rationale for a single case study is to evaluate a “typical” or “representative” case in which the “objective is to capture the circumstances and conditions of an everyday or commonplace situation” (Yin, 1984). The goal of the representative case is to provide lessons that are broadly applicable and informative.

The fourth rationale described by Yin is to conduct a “revelatory” single case study. Yin notes that “this situation exists when an investigator has an opportunity to observe and analyze a phenomenon previously inaccessible to scientific investigation”(Yin, 1984). The fifth and final rationale, notes Yin, is the “longitudinal” case in which the investigator conducts two single case studies at different points in time. Given that little field and case-based research has been conducted regarding service innovation, Harrah’s Entertainment can be classified as a “revelatory” case, one in which I had the opportunity “to observe and analyze phenomenon previously inaccessible...”(Yin, 1984).

Case Selection: Harrah’s Entertainment

Case selection—particularly when emphasizing one case—is absolutely crucial to a researcher’s ability to generalize findings to other contexts. As such, extraordinary care and consideration went into the process of selecting the appropriate case. Heavily-weighted criteria utilized in selecting the case included (a) the depth/quality of access at the company, (b) the company’s success at developing new services that were both scalable and differentiated, and (c) the “uniqueness” of the company (i.e. has it been studied in great depth already?). Other considerations included the location of the company’s management, the company’s size and prominence, the company’s industry, etc.

The other cases that serve as comparisons – The Apollo Group and United Parcel Service – were selected because they were particularly innovative companies operating in large service

sectors of the economy and were willing to participate. Other cases which were considered but, for various reasons, were later eliminated included Southwest Airlines, American Airlines, British Airways, Ritz Carlton, Comcast, American Express, Fidelity, Dell, Merrill Lynch, Amazon.com, Federal Express, Onstar, British Telecom, and Verizon.

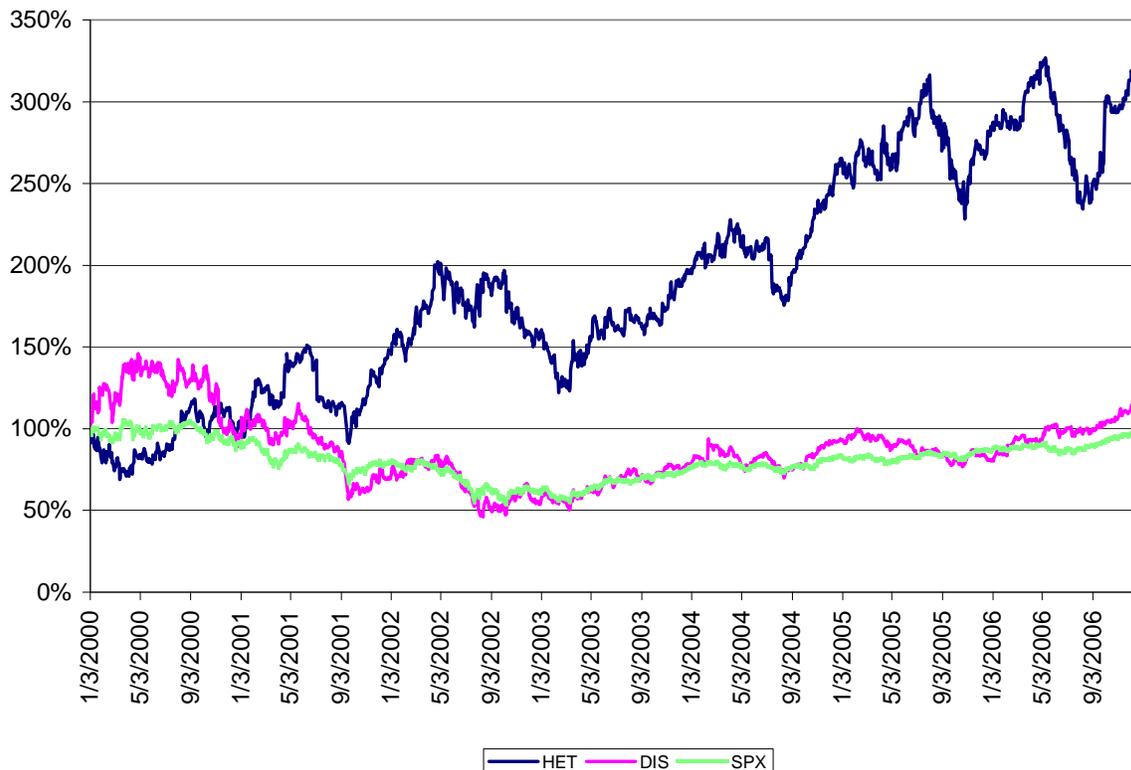
Given the desire for an in-depth study that required significant attention from senior managers and the company, securing deep access was critical in the selection process. While most companies were willing to grant basic access to managers for interviews, few were willing to share internal documents and performance data. UPS, a member of the MIT Center for Digital Business, had expressed an interest in participating in research projects at MIT and therefore granted me access to managers and some documents. Harrah's – perhaps because it is run by former Harvard Business School Professor Gary Loveman – also granted me access and provided mountains of internal and external presentations. From my previous life as a venture capitalist investing in the for-profit education sector, I had gotten to know the senior management of the Apollo Group and had learned about their strategies. Nevertheless, most of the Apollo case is based upon publicly-available data.

Fundamentally, however, one of the primary reasons I chose Harrah's Entertainment as a case to study was managerial access. The depth and breadth of access to senior managers was fabulous, the commitment of senior management to participation in the project was substantial, and the company has not been extensively studied by the business academic community. I had managed to gain the support of an internal champion—Chief Information Officer Tim Stanley—who facilitated internal introductions and shared data and presentation materials about the company's service development efforts. Several other senior managers were particularly helpful and authorized their direct reports to spend some time speaking with me about the various

service development projects in which I grew interested. Ultimately, the depth and quality of access to data and management time alone justified the selection of Harrah's Entertainment as the sole revelatory case for this study.

While financial markets are notoriously fickle and stock price performance is confounded by a multitude of factors, the stock price chart above tells a dramatic story of Harrah's performance. Not only has the company dramatically outperformed other leading entertainment companies (i.e. Disney), it has also outperformed the general market (US S&P 500) by a large and substantial margin. \$1.00 invested in Harrah's stock at the beginning of the year 2000 was worth over \$3.28 on December 21, 2006 (vs. \$1.16 for Disney and \$0.97 for the S&P 500).

Graph 17: Harrah's Entertainment Comparative Stock Price Performance



Data and Information Sources

This research is based upon information acquired from ten main sources: (1) formal interviews with managers involved in the service development process at Harrah's using a semi-structured interview guide, (2) informal discussions with Harrah's executives about new services, (3) presentations made by various senior executives to public forums, (4) interviews of senior Harrah's executives by third party sources, (5) follow-up conversations with interviewees after all interviews were completed, (6) Gary Loveman's speeches and articles, (7) internal presentations and speeches about service development projects at Harrah's, (8) financial and regulatory filings made to the Securities & Exchange Commission, (9) the www.harrah.com website and (10) industry association and other publicly-available data about Harrah's and service development.

Formal Semi-structured Interviews

Over the course of 7 months (April to November 2006), I conducted 24 interviews with senior executives at Harrah's. Most of these interviews took place in person either in Boston or in Las Vegas at the company's corporate offices. Several of the interviews were conducted telephonically. Interviewees included managers in operations, IT, food & beverage, property management, brand marketing, relationship marketing, finance, and divisional management (see table below). The interviews were semi-structured in that they were based on an interview guide that consisted of both specific and open-ended questions. The questions were designed to generate undirected discussion about various topics, with no preconceived notions of what would be discussed beyond the general topic. An abbreviated replication of the interview guide follows the interviewee list. It is worth noting here that questions specifically about customer involvement in the development process were intentionally excluded so as not to solicit what was

sought. All interviews were recorded and transcribed, resulting in approximately 1700 pages of interview text. In aggregate, these interviews represent more than 27 hours of discussion and are the primary source of data used in this dissertation.

Table 31: Interviews Conducted

Name	Title	Date(s)
Tim Stanley	Senior Vice President, Chief Information Officer	April 16, 2006
Chris Chang	Director, Information Technology	April 16, 2006
Mike Effner	Director, Information Technology	April 26, 2006
Mary Dossett	Director, Gaming Technologies	April 25, 2006
Sandeep Khera	Director, Operational CRM	April 25, 2006
Sunny Tara	Director, Enterprise Architecture & Integration	April 25, 2006
Jason Pashko	Director, Database Reinvestment & Analytics	April 25, 2006
Ken Weil	Senior Vice President, Gaming	April 25, 2006
David Norton	Senior Vice President, Relationship Marketing	April 25, 2006
Steve Pinchuk	Vice President, Revenue Management	April 25, 2006
Joseph Flippen	Director, Consolidated Operations Analysis	April 25, 2006
Patti Lee	Senior Architect, Information Technology	April 25, 2006
Greg Gamsky	Director, IT Solutions	April 25, 2006
Marc Oppenheimer	Vice President, Marketing (Joliet, IL property)	August 14, 2006
George Dittmann	Director, Customer Insight	August 15, 2006
Katrina Lane	Vice President, Channel Marketing	August 15, 2006
Sherri Pucci	Assistant General Manager, Grand Casino Tunica	August 16, 2006
John Bruns	Vice President, Customer Satisfaction Assurance	August 21, 2006
Melissa Price	Vice President, Slot Service & Operations	August 21, 2006
Gerry Tuthill	Vice President, Table Games	August 21, 2006
Don Marrandino	Regional President, Harrah's Las Vegas and Flamingo Las Vegas	August 21, 2006
Karin Matthews	Director, Gaming Operations	August 24, 2006
Walter Coffey	Director, Food & Beverage Design	August 25, 2006
Jay Snowden	General Manager, Showboat Atlantic City	September 1, 2006

The Interview Guide

1. Please provide a brief background of your professional history both within and before Harrah's.
2. Describe your role within your department and more generally at Harrah's. To whom do you report? What are the main functions and tasks that you seek to achieve?
3. With which other groups at Harrah's do you find yourself frequently working? How?

4. **How does your function “happen” or get accomplished? (i.e. process) Please use an example or two if possible...**
 5. **How do you fit into Harrah’s overall corporate strategy?**
 6. **Can you describe an example of a new service with which you were involved?**
 - a. **How was the concept developed?**
 - b. **Describe how different groups interacted during the development process.**
 - c. **What role did experimentation and/or controlled testing play?**
-

Informal Discussions

In addition to the formal semi-structured interviews, I also had several informal discussions with various Harrah’s executives. While these discussions were not recorded or transcribed, I did take notes during them and they served as useful background information gathering opportunities. These informal discussions were particularly helpful in identifying who within Harrah’s was worth interviewing, as well as projects worth investigating. In many ways, these informal discussions helped lay the groundwork for much of the formal data-gathering efforts and provided a map of the organization and the appropriate individuals within it to focus upon. Although I did not meticulously monitor data about these discussions, they probably represent approximately 6 hours of discussions and hundreds of pages of notes.

Public Presentations

Another source of information about Harrah’s that proved to be useful was public presentations by senior Harrah’s leaders. Most of these public presentations were either given by Chief Executive Officer Gary Loveman, Chief Financial Officer & Treasurer Jonathan Halkyard, or by Chief Information Officer Timothy Stanley. Included among these presentations were the annual shareholder’s meeting presentation, investor relations presentations, and

conference/convention presentations. These presentations were particularly helpful in framing the company's external image as well as Harrah's self-description of accomplishments, challenges, and the focus of management attention. Several of them provided hard data on the company's service development efforts as well. In aggregate, these public presentations provided hundreds of pages of material.

Other Interviews

Given the relatively-unusual background that Gary Loveman brought to the gaming industry, several insightful interviews about him and Harrah's have been published in trade journals or broadcast on television. Several of these were particularly useful and insightful in providing appropriate context for the impact of Loveman's strategy upon both Harrah's and the industry. Especially noteworthy is the interview by Dylan Rattigan on CNBC's ON ASSIGNMENT special episode entitled "Las Vegas, Inc." Another noteworthy interview is the March 2003 *McKinsey Quarterly* discussion with Gary Loveman.

Follow-up Conversations

After all the interviews were conducted, I had dozens of follow-up conversations with various executives at Harrah's. These follow-up conversations were motivated by the need for greater understanding regarding a specific topic or subject. Most of these conversations took place over the telephone and were focused discussions targeting my desire to dive deeper into a topic the interviewee had referenced in an earlier conducted formal interview. Often, these conversations were utilized to plug "holes" in a story that had emerged (albeit not completely) in the interview transcripts. Several—but for logistical reasons, not all—of these conversations

were recorded and transcribed. The table below summarizes the follow-up interviews that took place, including the dates and topics of discussion.

Table 32: Follow-up Interviews

Name	Topic	Date(s)
Tim Stanley	Project updates; Requests for additional data; Discussion of whom within Harrah's I should be approaching for various topics; semi-structured interview.	April 24, 2006 June 6, 2006 October 26, 2006 January 8, 2007
Chris Chang	Project updates; customer involvement; semi-structured interview.	October 26, 2006 January 8, 2007
David Norton	Seven Stars Program, Same Day Cash Back, Domestic Asian Hospitality Program	November 6, 2006
Sandeep Khera	Operational CRM	November 6, 2006
John Bruns	CSA Scores, BARS, Luckiness of Casinos	November 7, 2006
Greg Gamsky	IT implementations of various services	November 8, 2006
Melissa Price	Slot Service Dispatch System	November 9, 2006

Gary Loveman's Articles & Speeches

While a professor at the Harvard Business School, Loveman co-authored a piece that has proven particularly influential on Harrah's strategy. Several executives with whom I spoke made reference to the *Harvard Business Review* article entitled "Putting the Service Profit Chain to Work." As a glimpse of the strategic backdrop through which Loveman set Harrah's strategy, this article is very insightful. Although written in 1994, the article clearly lays out a strategy of increasing customer satisfaction to drive loyalty and increasing profitability. In addition to that article, Loveman also authored another *Harvard Business Review* article in 2003 entitled "Diamonds in the Data Mine." This second article was written shortly after Loveman was promoted to Chief Executive Officer of Harrah's and describes the data-analytic approach he and Harrah's have taken to the entertainment service industry.

Finally, I had the opportunity to review several of the speeches Gary has given at industry trade shows, investment conferences, the annual shareholder's meetings, key management

meetings, and corporate gatherings, etc. These proved useful as well as they provided the “perspective from the top.” Two particular speeches by Loveman stand out as noteworthy: (1) “The Journey” was a speech given by Gary Loveman to the senior management community of Harrah’s on the day following the closing of the acquisition of Caesar’s Entertainment during the Summer of 2005, (2) “On the Brink of Something Big” was a speech given by Gary Loveman at the Fall 2005 Key Management Meetings seminars held at Bally’s in Las Vegas for company-wide senior management of Harrah’s. Both of these speeches provided extraordinary insight into Loveman’s strategic vision for Harrah’s and the company’s focus on service delivery as well as his take on the competitive dynamics facing the industry. Both were recorded, transcribed and coded.

Internal Presentations

Harrah’s managers shared with me several dozen internal presentations made by and to internal working groups and senior management committees. Most (although not all) of the presentations I reviewed were specifically generated either by or with the help and cooperation of the IT department: the topics addressed in these presentations include project reviews, pilot study results, and analytics associated with marketing programs. Other presentations discussed topics such as food and beverage operations and reservation management procedures and systems. Several presentations described forthcoming service innovations and how the management team had planned the process of designing, introducing, and measuring the new service. In aggregate, these presentations represent several hundred pages of material and contain insightful graphical interpretations of new service projects.

Financial and Regulatory Filings

Given that Harrah's has been a publicly-traded company for quite a long time period, there are mountains of data available via filings made with the US Securities and Exchange Commission as well as press releases and earnings results announcements. The annual reports published between 1995 and 2005 proved particularly useful in shedding light upon how the company's service strategy was developed. Other data (quarterly reports, merger documents, etc.) were reviewed on an as-needed basis and provided useful details on various historical matters. In addition to the financial filings, press releases provided data on the company's activities in an "ongoing" sense. As one might imagine, ten years of SEC filings for a company as large as Harrah's represents an extraordinary amount of data. For the purposes of this dissertation, I effectively discarded all information that was focused only on financials and primarily focused upon the qualitative textual material found in annual filings such as the annual report or the SEC Form 10-K.

Harrahs.com Website

The company's website has a plethora of information, ranging from a detailed corporate history to information relating to practices, management biographies, and various consumer facing services. In addition to being an information source about the company, the website also provides spectacular details on the various offerings and services available at particular properties, details of the Total Rewards program, special entertainment promotions, etc. An additional area of the website that has proven to be extraordinarily insightful into the company's service strategy is the "careers" section. This section of the website provided data on the hiring process at Harrah's and the approach taken by management to filling different positions. The career section also presents a strategy and vision of the company that, because it is not explicitly

targeting consumers, was another data-point on the company's actual service strategy (vs. the marketing-oriented or investor-oriented perspective found in other data).

Direct and Participant Observation

During several of my visits to Las Vegas to interview senior Harrah's executives, I spent several hours watching customers interact with slot machines and Harrah's employees. Melissa Price, Vice President of Slot Service and Operations for Harrah's Entertainment, also organized a session during which I was able to directly observe the Slot Service Dispatch Service in action (see below for more details) and speak directly with slot service dispatchers as well as Service Ambassadors at the Caesar's Palace in Las Vegas. The other noteworthy direct observation opportunities I had during the course of this research were provided by Don Marrantino, General Manager of the Flamingo Las Vegas and the Harrah's Las Vegas. In addition to providing me a "back of house" tour, Don was also kind enough to arrange for me to observe a "buzz session" at the Flamingo Las Vegas main cashier cage. In addition to these (and other) direct observations, I also acquired data as a participant at the Harrah's Las Vegas, The Rio All-Suites, The Flamingo, Paris, and Caesar's Palace properties. Not only did I sign up and become a member of the Total Rewards loyalty program, but I was directly responsible for generating (as a customer) \$130 of gross gaming revenue for Harrah's over my three trips to Las Vegas.¹²⁷

Industry Association and Publicly-Available Data

The final source of information I was able to leverage for data utilized in this case study was publicly available data contained in articles, industry association reports, publicly-disseminated industry association data, etc. One very useful source of information was the

¹²⁷ Note: This "research expense" was not borne by MIT, the National Science Foundation, or the Center for Digital Business @ MIT. Rather, these "expenses" were absorbed directly by this author's personal accounts.

American Gaming Association's annual Survey of the Casino Industry, a series of documents published yearly which contain a broad variety of gaming industry data. Finally, the other publicly available data that proved to be informative was found on www.google.com, ABI/INFORM, ProQuest, Lexis/Nexis, Business Source Elite, and other online databases of corporate information and trade journal articles. In aggregate, these sources represent hundreds of pages of textual material.

Return on Invested Capital (“ROIC”) Calculation Methodology

(The following is an excerpt from the Bear Stearns August 2006 *Gaming & Lodging: Revisiting ROICs & The Value-Valuation Relationship* report.)

ROIC METHODOLOGY

There are numerous ways to calculate an ROIC. Our method slightly differs from the methods used by some of the companies in our coverage universe, but yields similar results.

For the purposes of our analysis, we defined the “Return” portion as recurring, tax-affected EBIT plus depreciation and amortization, less maintenance CAPEX. Our rationale is to approximate the recurring, un-leveraged cash income which the companies in our coverage universe generate. For this reason we begin with EBIT (i.e. recurring operating income, adjusted for non-cash and one-time items), as it excludes the effects of interest income and non-operating charges. We then add back depreciation and amortization, given the non-cash nature of these expenses. That said, we realize that asset-heavy companies in our coverage universe are subject to the true economic cost of the physical plant deterioration. We therefore subtract maintenance CAPEX from our return calculation, to account for the amount of capital required for physical upkeep of PP&E (i.e. not including expansion capital).

We define “Invested Capital” as total assets less current liabilities. We begin with the total asset base – i.e. whether funded by debt or equity—in order to appropriately gauge returns on un-leveraged cash flows—i.e. returns to which both stock and bond holders are entitled. We then reduce total assets by current liabilities to derive net invested capital. Our rationale for subtracting current liabilities is that these partially offset current assets needed for day-to-day operations. In short, we consider only the excess of current assets over current liabilities (i.e. the working capital required) part of the capital base.

We realize that our calculation of ROICs does not adjust the capital base for write-offs or take into account inter-company differences in the definition of maintenance CAPEX (i.e. certain companies define a much larger percentage of total CAPEX as maintenance related).

Nevertheless, we believe that results of our analysis are valid *directional* indicators of company returns, and feel that the simplicity and homogeneity of our calculation makes for transparency and easy comparability between the companies in our coverage universe.

About The Author

Vikram Mansharamani is an experienced investment professional with a decade of experience in management consulting, investment banking, private equity / venture capital, and asset management. His professional experience includes work with Oechsle International Advisors, Great Hill Partners, Merrill Lynch, and Booz Allen & Hamilton. Mr. Mansharamani holds a Masters of Science degree from the MIT Political Science Department (Security Studies Program), a Masters of Science degree from MIT for work conducted at the MIT Sloan School of Management, and a Bachelor of Arts Degree from Yale University, where he was the recipient of the Marshall-Allison Prize and was elected to *Phi Beta Kappa*. He currently lives in Southern Maine with his wife Kristen and 6 month old daughter Victoria.