Trends in IT Outsourcing - A Vendor Perspective

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Fulfillment of the Requirements for the Degree of

Master of Science in Management of Technology
at the
Massachusetts Institute of Technology

June 2002

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ABSTRACT

Our thesis is part of a larger structured thesis conducted under the supervision of Professor Gabriel Bitran. The overall thesis looks at intermediaries in the IT service market, and specifically how Imaging and Computing Corporation (I&C) is positioned in the market. It has been broken up into four parts, with each part an independent thesis completed by two persons.

The four sections are:

- The evolving role of Intermediaries in the market for IT products and services.
- The international market for IT services (The cases of Brazil and China).
- The customer Perspective on Services Outsourcing.
- Trends in IT Outsourcing – A Vendor Perspective.

Our thesis will examine Trends in IT Outsourcing. We will identify the major trends in IT outsourcing and recommend frameworks that will help I&C align its strategy with current customer needs.

Thesis Supervisor: Gabriel R. Bitran
Title: Nippon Professor of Management
ACKNOWLEDGEMENT

We like to thank Professor Gabriel Bitran for giving an opportunity to participate in a project that is academically challenging but also very relevant for the current state of the IT industry. Our interaction with Prof. Bitran, during the last one-year, in class and outside has been very enriching. His insight and ability to identify the key conclusions from complex situations helped us refine our research and motivate us to extract the most form all the tools available to us. Prof. Bitran is not only an amazing Professor but also a great human being. We also thank our project manager, Gladys Scott who coordinated the progress and deliverables throughout the last six months. Her insightful feedback made sure that we keep the bigger picture in mind.

We would also like to thank Dan Boggs and Joanna Wampler, of I&C Corporation, for their valuable contribution in helping us put together this thesis. Their feedback on our research was very insightful and helped us identify the key issues in the IT services Business.

We were fortunate to have an immense resource about industry information in the extended group. We are thankful to our extended group-mates Ray, Paul, Mitsu, Tom, Kenny and Luis for their valuable comments and feedback. We will value and cherish their friendship.

This thesis would not have been possible with the out the help and support of Marguerite Baty.

In the end we would like to thank our wives Ruth and Saadia, without whose support none of this would have been possible.

Carl Beckett and Waqas Khan
PERSONAL NOTE

I would like to express my gratitude to my parents Rafiqqa and Hafeez Ullah Khan. Whose unconditional love and support has been with me throughout my life. My father gave me the courage to pursue my dreams and that personal growth does not end with titles, promotions or age, it ends when people stop trying to learn new things. My mother gave me taught me to value relationships and make the best out of what life has to offer.

I am also thankful to my siblings; Amena, my elder sister who was always a better student than me, for being a role model for me, Saman and Hasan for supporting me in all my endeavors.

In the end I would like to thank my wife, Saadia, for putting up with my challenging routine and helping me cope with the workload.

Mohammad Waqas Khan
1 INTRODUCTION

IT market has traditionally been divided into hardware, software and services. These three areas come together to build an information platform, but they each have a different focus (Refer to Figure 1.1). Hardware is function centric e.g. printers print. Software is process centric e.g. publishing software will coordinate the hardware to efficiently move the process from idea to printed document. Services are people centric; e.g. it enables IT systems for workforces that are unskilled or unable to set up, run or troubleshoot those systems.

The above segmentation is a feature of the PC era. At that time hardware, software and services were usually purchased from different vendors. The larger vendors e.g. IBM usually had divisions catering to each of the segments. Over last few years the increasing competition in the hardware business has reduced differentiation between products and brought prices and margins tumbling down. Hardware companies are under pressure to diversify their product offerings in an effort to lock in customers and block the channel for other competitors. More and more companies who were part of any one segment of the IT industry are now leveraging the other resources to compete more effectively. This is why we have seen the immersgence of large integrated IT corporations capable of designing, manufacturing, delivering, implementing, maintaining, operating and upgrading complex IT systems. This trend has been further facilitated by the cost effectiveness of the new delivery mechanisms such as the Internet.

Our research will focus on outsourcing as a business strategy and a relationship model. It has evolved over the past decade to become a dominant force in the IT industry. Megaforces – most notably the impact of Internet on both business and IT strategies – are changing the nature of the outsourcing opportunity: its value proposition, how services are/will be delivered, and what customers will require. Furthermore, new competitors are moving quickly to capture the new outsourcing opportunities. Outsourcers are at a crossroad, and they must determine how they will compete in the future.
2 **GLOSSARY**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ASP</td>
<td>Application Service Provider</td>
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<tr>
<td>BPO</td>
<td>Business Process Outsourcing</td>
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<tr>
<td>IT Outsource</td>
<td>Contracting to acquire any IT services.</td>
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<td>IT Insource</td>
<td>IT services executed by a company’s internal organization.</td>
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<tr>
<td>RFP</td>
<td>Request for Proposal. The document that defines the services required by the customer and lays the scope of work for the vendor to bid.</td>
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<td>RFI</td>
<td>Request for Information. This is the document that precedes the RFP and is a general description of the objectives of the customer. The customer and a number of pre-selected vendors participate in this process. The purpose is to design an RFP that not only meets the needs of the customer but is also realistic for the vendors.</td>
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<tr>
<td>SLA</td>
<td>Service Level Agreement</td>
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<tr>
<td>CFO</td>
<td>Chief Financial Office</td>
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<td>COO</td>
<td>Chief Operating Office</td>
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<tr>
<td>CEO</td>
<td>Chief Executive Office</td>
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<tr>
<td>e-Business¹</td>
<td>Marketing, buying, selling, delivering, servicing, and paying for products, services and information across (nonproprietary) networks linking an enterprise and its prospects, customers, agents, suppliers, competitors, allies and complementors.</td>
</tr>
<tr>
<td>ITO</td>
<td>Information Technology Outsourcing</td>
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<tr>
<td>XSP</td>
<td>Service Provider</td>
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<tr>
<td>CRM</td>
<td>Customer Relationship Management</td>
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<tr>
<td>ROI</td>
<td>Return on Investment</td>
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<tr>
<td>Big 5</td>
<td>The 5 leading Consulting companies. These include Andersen Consulting (Now Accenture), KPMG Consulting, Ernst and Young (Now Cap Gemini Ernst and Young), Deloitte Consulting and Price Waterhouse Coopers.</td>
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3 DETERMINANTS OF IT SERVICES MARKET

A study by IDC\textsuperscript{2} suggests that the worldwide IT services business will grow to $700 billion. The study projects that US will continue to dominate the industry and account for about $400 billion of the total revenue.

According to a study\textsuperscript{3} by Aberdeen group, most IT executives reevaluated beginning of year plans for 2001. This made 2001 a tumultuous year for sale of new IT hardware and software. The study shows that applications with proven track records and definitive ROI will win in the short term. Those technology suppliers that fail to demonstrate a short pay back period are likely to find their proposals put on hold until economic conditions improve.

Gartner Dataquest's\textsuperscript{4} forecasts show that the U.S. recession will continue to impact the growth rates in worldwide markets for IT professional services over the next two years. The recession's greatest impact is in consulting, development and integration services, which are particularly sensitive to economic downturns.

3.1 CORE COMPETENCE AND OUTSOURCING

There might be a number of ways to define "Core Competence" but we will try to focus on the definition based on a knowledge strategy. The objective of this strategy is to focus the efforts of company on a few critical functions.

The essence of creating focus in a knowledge strategy is to develop a small number of intellectually based knowledge activities - important to customers - to best-in-world levels. Starting with an analysis of the company's value chain\textsuperscript{5} and staff support activities, executives develop a few critical activity groupings where they are, can be, or must be best-in-world to compete effectively. These - and these alone are their core competencies. They define the very essence of how the company delivers its value proposition and why customers and employees prefer its outputs or operating concepts to those of competitors. The most effective core competency strategies focus on a few (two to four) cross-functional, intellectually-based service activities or knowledge and skill sets critical to customers, where the company can build and

maintain best-in-world capabilities and provide a flexible platform for future innovations. At least one of these competencies must connect directly to understanding the customer.

Once a company develops a true best-in-world core competency, it never outsources it and may even build defensive rings of essential competencies that customers insist it have or that protect its core - as Honda does by not outsourcing design, parts, or key equipment for its core competency, i.e., design and manufacture of clean, efficient, small engines. Other than its core and essential competencies, most companies can reap great gains by prioritized outsourcing of many activities where they are less than best-in-world. If it is not best-in-world at an activity (including transaction cost) and continues to produce that activity in-house, the company gives away a competitive edge that it could have had.

Upon serious investigation, most companies will find that 60 percent to 90 percent of their inside activities are services that are neither being performed at best-in-world levels nor contributing significantly to competitive edge - and are not very risky to carefully outsource. These should be the first targets for analysis.

3.2 Outsourcing in the IT Industry

Outsourcing is defined as a contracting model to acquire any IT services. This model has sprung from widespread reliance on third parties to support business goals. Growing recognition of the imperatives to align IT and business strategy has been a significant driver for the adoption of a "business-focused" approach to IT, and thus outsourcing strategies. From once being perceived strictly as a technical tool used by organizations to manage/optimize IT assets and infrastructure, outsourcing has gained a broader foothold in some organizations to encompass responsibility for the underlying IT-enabled business processes and even business outcome. Not surprisingly, the impact of e-business is a significant factor in all aspects related to IT, products and services, calling into question what the future outsourcing demands will be and how IT services providers will need to respond to a radically different world.

In a study by PriceWaterhouseCoopers it was found that outsourcing has moved markedly from performing a single function more efficiently to reconfiguring or re-bundling whole processes in new ways to generate greater shareholder value across the enterprise. As a consequence, the decision on whether and how to outsource is steadily moving up the organization to the CFO, COO, and CEO levels. As outsourcers' capabilities improve, the strategic issues are,
increasingly: Why not outsource? Where can we focus our own resources to create unique value? How can we best leverage our outsourcers' capabilities? How can we manage potential outsourcing relationships for greatest shareholder value?

3.2.1 Reasons for Outsourcing

In 1996, outsourcing was viewed as a viable means to achieve cost control or economies of scale, and some companies were beginning to incorporate outsourcing as a strategy in business planning. Today outsourcing is a given, with growing popularity as an essential management lever for business innovation, global expansion and competitive advantage. According to a report by The Outsourcing Institute, an association of buyers and providers of outsourcing, and Dun and Bradstreet, the top ten reasons for outsourcing are:

- Reduce and control operating costs.
- Improve company focus.
- Access to world-class capabilities.
- Free resources for other purposes.
- Resources not available internally.
- Accelerate reengineering benefits.
- Function difficult to manage or out of control.
- Share risks.
- Make capital funds available.
- Cash Infusion

IT outsourcing and its anchor segment of management services, however, can thrive in good times or bad. Nevertheless, while consultants and integrators face serious market constraints in the near term and midterm, outsourcers must contend with shifting end-user priorities and an industry shakeup driven by the recession, the dot-com collapse and new methods of service delivery. Opportunities for growth remain, however, for all professional services markets, and growth is expected to accelerate after 2003, when the recession is expected to be behind us and the small and midsize business (SMB) market becomes more accessible because of advances in technology, service delivery and service offerings.

3.2.2 Overview of the IT Outsourcing Industry
According to Gartner research, worldwide revenue for professional services was $386.6 billion in 2000 and is projected to grow at a 12 percent compound annual growth rate (CAGR) to $681.2 billion by 2005 (see Figure 4.1). The North America professional services market was

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$189.7 billion in 2000 and is projected to grow at an 11.4 percent CAGR to $325.8 billion in 2005 (see Figure 4.2).

In terms of the international geographical distribution, the highest growth rates for overall professional services for 2000 through 2005 are expected in emerging markets: Latin America (18.2% CAGR), Asia/Pacific (17.8% CAGR), Central and Eastern Europe (16.9% CAGR), and Middle East/Africa (13.5% CAGR). North America and Western Europe, the more mature markets, show CAGRs of 11.4 and 12 percent, respectively. Although Japan is considered an emerging market, it reveals the slowest CAGR at 8.6%.

Gartner expects worldwide IT outsourcing (ITO) market to grow to $317.1 billion in 2005 with a 12.7% CAGR from a base of $174.3 billion in 2000. In North America, ITO was $93.8 billion in 2000, growing to $159.6 billion in 2005 with an 11.2% CAGR.

The business process outsourcing (BPO) market worldwide was $119.4 billion in 2000, growing to $234 billion in 2005 at a 14.4 percent CAGR. In North America, BPO was $74 billion in 2000, growing to $142.7 billion in 2005 at a 14.6% CAGR.
<table>
<thead>
<tr>
<th>Segment</th>
<th>Worldwide</th>
<th>Market Share</th>
<th>North America</th>
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<td>IBM</td>
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<td>Fujitsu</td>
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Source: Gartner Group

According to Gartner (Refer to Table 4.1), Accenture, CSC, EDS, Fujitsu (including Amdahl, DMR and ICL) and IBM are the top five worldwide professional services firms by 2000 revenue. The companies are also among the top five vendors for two of the three major services segments (consulting, development and integration and management services), and IBM is among the top five for all three segments. Others appearing in the top five worldwide include Cap Gemini Ernst & Young, Debis Systemhaus and NTT Data. In North America, the top five is more mixed, including ADP, AT&T, Fiserv, Lockheed Martin and TRW (see Table 4.1).

3.3 **Drivers of Growth for IT Services**

By the end of 2001, the Internet hype had diminished and with it the focus on pure play services firms. Now the traditional technology vendors and consulting firms that are able to provide basic infrastructure related services, deliver large outsourcing engagements and serve the growing and complex solutions market will do well. Following is an explanation of the drivers of the growth of the IT services business.
3.3.1 Pervasive Computing

The market of desktop computers appears to be maturing, but the adoption of small portable computing devices, from smart cell phones to handheld organizers, is taking off. At the same time, the advancement of wireless technology is creating new ways of accessing data anywhere, anytime. This will create new demands on an enterprise’s IT infrastructure as that enterprise looks to capitalize on this trend. Opportunities for IT firms will first center on helping businesses wirelessly enable solutions for their mobile workforce.

3.3.2 Internal Focus of IT Projects

It is generally believed that the project for next year will focus on increasing efficiencies reducing costs in the enterprise. It is also hoped that this will drive spending on outsourcing of all flavors and will partially offset downward pressure on the systems integration market in the face of an economic slowdown.

3.3.3 XSP-build-down

Despite the emergence of new delivery models for services, the fundamental delivery is still IT. As the competitors in the XSP market fight for dominance over the next several years, there is a tremendous opportunity for services firms to assist them in building their own infrastructures. In the long term, these new infrastructures will those same services firms, but in the meantime, there is new revenue source (and experience)to be gained.

3.3.4 IT Service needs of Businesses

The need to utilize IT as a tool to solve a specific business function is a primary driver propelling the IT services industry. The quest for such things as effective and efficient communication and knowledge transfer within the company, as well as successful customer relationship management (CRM), continues to drive IT services spending today.

3.3.5 Economic Slowdown

It might sound a bit counterintuitive, but as economies around the globe see their growth rates slowdown, companies will be inclined to spend more on IT services to cut costs from their bottom lines. Companies are inclined to cut back on non-essential IT services. It is, however, a challenge to define what is and what is not essential. So the principal being followed by most
companies is to outsource services, which have the least direct impact on the customer experience. Outsourcing of all flavors will benefit in the short term. This argument is also borne out by some of the findings of our industry survey. Depending on the service being outsourced, cutting cost is one of the major reasons for outsourcing. In a recession cost cutting is one of the major focuses of many corporations.

3.3.6 Online Delivery of Services

Increases in remote management technology and the need to lower costs are driving the migration to a host of services being delivered online. This includes training initiatives and small to mid market consulting offerings as well.

3.3.7 Globalization and consolidation continue apace

Finally, the globalization effect and merger and acquisition (M&A) activities have not slowed. These were two important trends in 2000, and IDC believes that they will be as important in the future, especially as our world becomes more interconnected, thanks to the Internet.

3.4 INHIBITORS OF GROWTH

Although there are several factors driving growth of IT services, there are also a number of factors inhibiting growth.

3.4.1 Shortage of Qualified People

Much has been made of the recent dot-com layoffs, but the shortage of qualified IT staff still remains the greatest inhibitor to growth. Even if all the thousands of former dot-com employees were qualified to work for an IT services firm, they would barely meet the hiring needs of just the top five global IT services firms.

3.4.2 Project Management Changes

As some firms look to cut spending, they are breaking apart IT engagements to compete at each delivery phase for the best price. However, to do so, requires that they manage these projects in-house. Without expertise in project management, some of these internal projects would stumble. However, enterprises will quickly realize the critical role of project management and the assistance that IT services firm can provide.
3.4.3 Changes in Implementations

New models still necessitate rapid time-to-solution project delivery, but the bursting of the dot-com bubble has changed the dynamics of the market. In the aftermath of April's U.S. stock market correction, investors started to scrutinize the spending of not only dot-coms but the traditional firms as well. The bottom line for IT services providers is that many planned projects were delayed, or worse, the contract went to the lowest bidder. Now IT services firms are being pressured to demonstrate how quickly a project will reduce total cost of ownership.

3.4.4 U.S. Recession

The overall effect of an economic slowdown on the IT services industry remains a wildcard. Some sectors of the IT services industry should benefit from a slowdown in the U.S. economy, but the overall market will likely see lower growth rates in the industry as a whole. The math is simple: lower earnings mean that companies must spend less to maintain their bottom lines. Firms already under pressure will have to trim IT spending on projects that will not result in an immediate return on investment (ROI).
4 CURRENT CUSTOMER NEEDS

The top 20 global IT service vendor had total revenue of $175.4 billion in 2000, which accounts for 26.34% of the total market. The industry is highly fragmented and IBM GS, which has the largest share of market, accounts for only 5% of the total market revenue.

4.1 FROM PUBLIC SOURCES

In this section we will analyze current customer needs on the basis of information from public sources. We will look at three market segments:

- Technology Infrastructure
- Hardware
- Management and Support Services

These segments have been chosen because these represent the major areas where outsourcing occurs.

4.1.1 Technology Infrastructure

Various recent industry studies have shown that user organizations are less concerned with building a bold new computing world. Rather, they want to make the best use of what they already have. According to Aberdeen, in 2002 the top categories of infrastructure technologies on the basis of Intent to Purchase and Priority of Purchase are:

- Security Gateways and Services
- Network and Systems Management Applications
- Backup & Recovery Software
- Security for Internet Commerce

All of the above technologies assist user organizations in preserving and maintaining existing IT assets. Also, it is interesting to note that Business-to-Business Integration Software and Data Integration Software scored relatively low. These infrastructure solutions often deal with new initiatives and are used when deploying cross-departmental/cross-enterprise systems.

According to Aberdeen group, security is at the top of the priority stack and is highly unlikely to be taken off IT budgets. Solutions with High Intent/High priority include:

- Application Development Tools

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• Backup & Recovery Software
• Database Software
• Security for Internet Commerce
• Security Gateways and Services
• Storage Management

In addition Aberdeen indicates that most technology infrastructure solutions fall into either High Intent/High Priority or Low Intent/Low Priority. The primary conclusion from this is that IT executives have formed strong opinions - positive or negative - with respect to implementing technology infrastructure solutions. It is also important to recognize that the majority technology infrastructure solutions are cross-industry and cross-business model in nature. As apposed to applications that address only a specific vertical industry, technology infrastructure solutions are less susceptible to business cycles. This is primarily due to their appeal to a wider set of industries.

User organizations are most concerned with protecting and preserving their existing IT investments and are less concerned with building additional integration points. The events of September 11 are a likely catalyst for this trend. Additionally, integration projects are often complex and time-consuming undertakings and they are less palatable in today's environment of proven and rapid ROI. The same issues driving Priority of Purchase for applications drive the technology, infrastructure buying process. Again, users want fast pay back from solutions that address the operational challenges of their current businesses.

4.1.2 Hardware

Although hardware is not a direct focus of our study, it is inextricably linked with the whole IT industry. Hardware is also a primary source of revenue for some of the large established firms in the industry. The strategies for these companies will naturally want to exploit their hardware capabilities. Major trends in the hardware market that could be important will be discussed. Figure 5.1 shows hardware spending expectations for 2002.
With the exception of mainframes, users are expected to significantly increase spending in all hardware categories during 2002, with growth rates ranging from 8.1% to 10.2%. It should also be noted that survey respondents encompassed all sizes of organizations, which would tend to depress the mainframe numbers because only large organizations can afford these systems. This trend is surprising considering that they concurrently reported an average interim decline in their 2001 IT budgets of 1.4%.

4.1.3 Services
Below (Figure 5.2) is the average percent change in spending for 2002 reported by Aberdeen Group:
Systems Integration leads the list at 7.1% expected growth and technology strategy consulting came in last at 4.8%. IT outsourcing comes in at 6.2% and BPO has a 5.1% expected growth for 2002.

The above results match intuitive thinking and broad market trends. User organizations are seeking to cut costs during lean economic times. Technology strategy consulting, which is focused on large-scale enterprise initiatives, is often an expensive undertaking with distant future benefits. As a result, this sector typically suffers when IT spending is reduced, hence, the relatively low average growth rate of 4.8%.

It appears that IT executives will be able to reverse spending patterns quickly. The decrease in IT budgets reflected in the second half of 2001 is highly likely to have a dampening effect on 2002 services spending, particularly true for systems integration activities, which are chiefly concerned with implementing new application purchases. Again, using the CRM market as an example, the dramatic decline in license sales in the second half of 2001 would indicate that the systems integration contracts associated with those licenses would show a similar decline. Since systems integration revenues often lag license sales by three to twelve-plus months, one would expect 2002 systems integration spending to suffer. This would not only be true for CRM, but for a wide range of enterprise business applications and associated services.

The spending increase in IT Outsourcing is justified in light of the current economic conditions. In tough times, organizations are always eager to rid themselves of non-core activities and reduce operational expenses. Clearly, some applications are essential to ongoing business operations. The question is how to provide these applications to end-users at the lowest cost. IT Outsourcing can be a mechanism to achieve this objective. This is also true for BPO. Organizations are interested in shedding non-core activities. In this case business functions such as human resources (HR), billing and help desk are viewed as potential candidates for outsourcing. The growth in this sector is also supported by new delivery models, which in turn are enabled by the Internet. For example, online open enrollment for benefits eliminates much of the need and expense for internal HR resources.
4.2 FROM INTERVIEWS AND SURVEYS

4.2.1 Outsourcing Decision Making

This section will discuss findings from interviews and surveys of IT executives from various industries, which include retail, healthcare, and hi tech about what factors are considered when making a decision to outsource a particular IT need.

The customers make outsourcing decisions on the basis of how critical the function is to the continued growth of the organization. The capabilities that are considered to be critical and unavailable, inside the organization, are usually farmed out to technical manpower supply companies. These organizations supply temporary manpower to the customer. The temps work with the permanent employees of the customer allowing the customer’s internal IT organization to develop capabilities on the new technology. These relationships are typically short and once the project is finished the relationship is terminated.

The major advantage of outsourcing mentioned by the respondents was the ability to add capability quickly. So, if the client needs to add capability quickly then he might choose to outsource. If the application is critical (e.g. ERP) he will try to bring it back inside. The managers are inclined to stay on the low risk side while making the outsourcing decision. Thus it is believed that most outsourcing arrangements will be for non-mission-critical applications such as email, help desk etc.

Clients assess the need for outsourcing by benchmarking their performance with others in the industry. If they find their organization lacking in any aspect of business then they try to improve performance by outsourcing.

The clients believe that although the service providers are prepared to give good rates for outsourced service, the same Service Providers (SPs) are in a much more powerful position when it comes time to renew (renegotiate) the contract. This happens because the outsourcing partner becomes a critical component of the client’s organization and there are significant switching costs involved in changing outsourcing partners. The biggest cost is the cost of disruption of operations. So, on a long-term basis it is the SP who holds the position of power and it does not necessarily cost the vendor less to outsource.

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9 Findings based on interviews with IT executives in Retail, Electronics and Higher Education sectors.
10 Interview with a senior manager of a large National Retailer.
Another very interesting reason cited for outsourcing is the discrediting for internal outsourcing departments. IT is difficult to deliver and users have very short memory. The fact they remember most is the last time their email crashed. In many organizations the IT people lose credibility over time and some times this reaches such a level that nobody is prepared to allocate any funds to them (the internal IT group) so there is little option but to outsource.

Given the above facts it becomes extremely important that the client spend significant time on developing and refining the RFP. The safety mechanisms that the clients build into the contracts are Service Level Agreements (SLAs). These have to be developed before the RFPs are sent out and should accompany the RFP documents that go to the vendors. A good RFP will not only protect the clients from legal issues such as ownership of data but will also lay the foundation of a fair and mutually beneficial relationship.

4.2.2 Selection of Vendors

Some of the larger customers maintain relationships with one major and a number of minor outsourcing partners. Once the decision to outsource is made the decision to choose the right vendor is made. The factors influencing the choice of a vendor are the following:

- Trust
- Industry experience
- Long-term commitment Perception

It seems that “trust” is the biggest factor in the choice of the outsourcing partner. Now the question arises how is trust defined and how is it gained? The customers define trust as the comfort that they have with the ability of the vendor to understand their business and deliver quality IT services. Trust is based on a number of underlying assumptions. Trust on technological competence, trust on project management skills and trust on the impartiality of the service provider. The clients mentioned that they do not trust SPs who start the relationship when there is a contract out. Clients prefer that the SP take time to understand their organization and their business. They feel that the relationship should initiate during a time when there is no contract to contest and the SP comes in to suggest ways to improve the operations of the client. In doing so, the SP positions itself differently from everybody else and is not subject to any predefined set of criteria that is open to competing SPs. One interesting fact was that customers do not see a great difference between the offerings of the major IT Service Providers. This fact highlights the importance of “Trust” as a basis for the relationship. Since most clients prefer to
consider only a few “preferred outsourcing partners”, existing relationships tend to be long term. Trust also automatically creates a barrier to entry for competing SPs.

The clients greatly value the service provider’s (SP’s) understanding of their business. They base it on SP’s experience with other clients in the same industry.

The clients want to maintain long-term relationships with only a few SPs. This is why they look for long-term commitment from the SP when deciding. Determining who does and who does not have a long-term commitment might be a challenge.

The customers feel that the utility of an RFP (Request for Proposal) is diminished by the fact that vendors seem a little too willing to sign on the set of requirements set out in the RFP. As opposed to the RFP, the RFI\(^\text{11}\) (Request for Information) process is much more open-ended and requires the vendor to develop a deeper understanding of the customer’s requirements. The vendors feel that the RFI process is the preferable method for developing a better understanding between the customer and the vendor. The vendor is clear about the expectations of the customer and the customer on the other hand develops a better understanding of the capabilities, both business and technical, of the vendor. The RFI process results in an RFP that delivers on the customers needs and also is specific enough for the vendors to understand what they are committing to deliver. The RFI process helps establish the initial trust between the client and the vendor which can then be built upon on reasonable expectation.

4.3 Industry Survey Findings

In order to gain a better understanding of the current trends in the IT industry, our efforts included sending out an industry survey to key personnel involved in the decision to outsource in their industry. These individuals represented senior management positions from large and midsize corporations which spanned multiple industries including Health Care, Telecom, Manufacturing, Education, Finance, IT Services, Government, Aerospace, Utilities, Advertising/Broadcasting, and the Insurance industries.

A series of questions were asked about the specific plans and experiences of the respondents with respect to IT outsourcing. To gain a more detailed understanding, IT functions were broken into 10 categories, which are:

1. Application Hosting
2. Application/System Monitoring

\(^{11}\) RFI is defined in the glossary of terms given in Chapter 3 of this thesis.
3. Data Center Operations/Facilities
4. Data/Voice Network Management
5. Develop IT Strategy
6. Implement IT Strategy
7. Software Development & Maintenance
8. Security
9. Storage Management
10. Support services (end user and other)

The complete questionnaire is attached in Appendix A.

4.4 Survey Summary

Overall, respondents to the survey indicated the intent to serve IT functions internally. Over 80% of all IT functions were served internally. This result was inconsistent with other industry surveys suggesting significant IT outsourcing. Since these same respondents gave specific feedback later in the survey about experiences with outsourcing, we suspect they do use outsourcing. We hypothesize the cause of this inconsistent could be due to a number of factors. The bulk of the respondents surveyed were IT Managers within the given organization. There could exist a conflict of interest in the IT Manager role and the trend to outsource IT services. Furthermore, the respondents may have interpreted to question to mean 100% outsourcing and respond with a negative for anything less than complete outsourcing of a particular service.

When asked about the intent to outsource going forward, Application Hosting, Application/System Monitoring, Security, and Storage Management were the primary areas targeted for an increase in outsourcing. Although most respondents have outsourced some IT function in the past, over two thirds have experience problems in either an increase in cost, lack of vendor flexibility, or loss of control. This suggests that the process of outsourcing is not being executed well, and the industry could benefit as a whole by improving the processes and execution of outsourcing these services.

Of the respondents surveyed, 100% develop IT strategy internally. A small number (6%) are considering outsourcing IT Strategy and Implementation, but these are yet undecided. For a vendor to be successful in winning a contract for IT strategy development and implementation, they will need to overcome concerns of the loss of control by the organization, and the concerns
over expertise of the vendor. This will happen only through establishing a long term track record with the organization, and demonstrating competence in less critical business areas.

Cost is a determining factor in most areas, and in Application Hosting it is the dominant influencer for the decision to outsource. Interestingly, over the last year as many companies have pulled Application Hosting back internally as have outsourced it. This suggests that the cost benefits did not meet with expectations, or that the cost savings were not fully understood to begin with.

4.5 Survey Discussion

Companies are fulfilling outsourcing needs primarily through internal resources. Although there was some indication of outsourcing of Data/Voice Network Management, Support Services, and Software Development and Maintenance, significant outsourcing was used only for Software Development and Maintenance with just under 30% of the respondents outsourcing these services. Data/Voice Network Management and Support Services were outsourced in just under 20% of the organizations interviewed. The results for all services are shown in Table 4.1. It is important to note that none of the respondents outsourced IT Strategy.

<table>
<thead>
<tr>
<th>How does your organization fulfill the following IT needs?</th>
<th>Internal</th>
<th>External</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Hosting</td>
<td>88%</td>
<td>12%</td>
</tr>
<tr>
<td>Application/System Monitoring</td>
<td>88%</td>
<td>12%</td>
</tr>
<tr>
<td>Data Center Operations/Facilities</td>
<td>88%</td>
<td>12%</td>
</tr>
<tr>
<td>Data/Voice Network Management</td>
<td>82%</td>
<td>18%</td>
</tr>
<tr>
<td>Develop IT Strategy</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Implement IT Strategy</td>
<td>94%</td>
<td>6%</td>
</tr>
<tr>
<td>Software Development &amp; Maintenance</td>
<td>71%</td>
<td>29%</td>
</tr>
<tr>
<td>Security</td>
<td>94%</td>
<td>6%</td>
</tr>
<tr>
<td>Storage Management</td>
<td>88%</td>
<td>12%</td>
</tr>
<tr>
<td>Support services (end user and other)</td>
<td>82%</td>
<td>18%</td>
</tr>
<tr>
<td>Total</td>
<td>88%</td>
<td>12%</td>
</tr>
</tbody>
</table>

The deciding authority on whether to address an IT function internally or externally resides with senior management. 60% of our respondents indicated the CIO/CTO, VP of IS/IT, or VP of Comm/Networking as the final decision maker. The remaining respondents indicated other senior managers such as the CEO/President/Owner/Partner and IS department heads as the deciding authority. Only a very small percentage of respondents indicated a consensus driven decision process, and these respondents were from Government entities.
When it comes to the decision criteria that organizations used to determine whether to outsource a particular service or not, respondents indicated control and cost for nearly every category, with expertise being extremely important for Strategic and Software related tasks. Criteria for decision making are summarized in Figure 4.3. Figure 4.3 shows that different criteria are use for different services. As expected, the lower value added areas such as Application Hosting, Data Center Operation, Security, and Support Services have cost as the primary criteria when deciding to outsource. For areas closer to the business such as IT Strategy and Implementation and
Software Development, the primary criteria to outsource was based on control. Figure 4.4 explores the services where cost is the most important criterion. As shown in the earlier graph, Cost is the most important criterion for commodity-like services such as Application Hosting. If we consider a particular criteria to determine how it plays into any one service area, we see that control and resources play uniformly across most categories, while cost is weighted higher in areas such as Application hosting, Data Center Operations/Facilities, Application/System Monitoring, and Support Services. This finding is surprising since we would expect a higher focus on cost as we get further from control sensitive areas such as Strategy and Software. Additionally, we would not expect cost to
be a determining factor in determining the higher level objectives such as IT Strategy and implementation. For these areas, Expertise was also listed as an important criterion. When asked about changes made in the last year, and anticipated changes for the next year, most respondents reported that little change has occurred, and there are few plans for changes in the coming year. The one area of exception to this has been in Application hosting. with change occurring for approximately half of the respondents. Interestingly, as many companies are pulling this work back internally as are pushing it externally. These findings are summarized in Figure 4.5 and 4.6.

Criteria for selecting IT service vendors are given in Figure 4.7. When selecting an IT service provider, respondents indicated a Proven Track Record, Price, and Performance/Service Level Guarantees as the three most important criteria. Process Specialization was also important but ranked lower than the primary three. Reciprocity and Third party recommendations had little influence on selection.

The contrast between perceived benefits and challenges of outsourcing is given in Figure 4.8. The benefits for companies to outsource IT functions are several. Over half of the respondents reported Benefits in and Improved Focus on their Core Business, Increased Access to Expertise, Maximization of Resources, and Reduced Costs. Ironically, when asked about problems encountered while outsourcing, an increase in cost was reported by over 60% of the respondents. Other problems reported included Loss of Control, Lack of Vendor Flexibility, and a Lack of
Contract Governance by the Company. This highlights the need for the industry to improve the processes for outsourcing, including not only execution but better expectation management in the early stages.

4.6 I&C FINDINGS

When asked whether I&C was considered for outsourcing needs, the majority of respondents replied that I&C was not considered. (Refer to Figure 4.9 for details). This illustrates a huge problem for I&C. Although I&C has market share in hardware products, and is publicly promoting service offerings, customers are not considering I&C as a viable provider of services. A large percentage of respondents did NOT consider I&C for outsourcing needs. This is especially troubling since a large percentage of the contacts were provided through I&C target customer contact lists. Application/Systems monitoring is the area where I&C is most often considered as an option. We believe this is due
to the popularity of a key product. This product gives I&C access to the market and we believe this can be exploited as a foothold to expand from for other services.

When asked why I&C was not considered, a variety of reasons were given, but often the customer was unaware of I&C’s capabilities in this area. This suggests I&C could benefit from improving their messaging and promotion of I&C services to gain awareness of capabilities in services. Figure 4.10 explains why I&C was not considered as an outsourcing partner.
5 COMPETITIVE PERSPECTIVE

In this chapter we will analyze competition in the services business. The objective of this analysis is to determine the Key Success Factors of some of the successful IT service providers.

The prevailing method in the services industry has moved away from the traditional approach of devising a strategy, developing a solution, testing it and deploying it. Now, the preferred approach is to develop a strategy, leverage a reconfigured solution, launch version one of the solution, evaluate the benefits and continue improvements while moving the entire project forward.

The market for IT services is highly fragmented. IBM, which is the biggest player in the market, has no more than 5% share of an estimated revenue of $700 billion for the year 2001. The total market share of the top 20 IT service vendors accounts for only 26.4% of the total worldwide IT service revenues.

5.1 IBM

IBM global services (IGS) is the world’s largest IT services provider, with 2000 revenues of $33.2 billion (including $ 5.2 billion from maintenance). The company grew 3% in 2000 and 9% in the first half of 2001. IGS now represents about 40% of IBM’s total revenue.

IGS, through its army of 150,000

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Figure 7.1

IGS Revenue Share by Competitive Services Category, 2000

- Consulting: 2%
- IS Outsourcing: 20%
- Sys Integ: 18%
- H/W Supp and Inst: 16%
- IT ed and tran: 2%
- App Outsourcing: 3%
- Custom App Dev: 4%
- Processing Serv: 6%
- N/W Infra Mgmt: 7%
- N/W Consult & Integ: 10%
- S/W Supp & Inst: 12%

Source: IDC

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13 Mayo S and May N. Global Profile Series: IBM Global Services in the Driving Seat by. 2001 IDC Inc.
employees leverages IBM’s vast resources - research, technology, business partners and technology vendors - to develop business and IT strategies, transform companies into ebusiness and information systems (IS). A breakdown of the share of revenue of IBM’s Competitive Services Categories (CSCs) is given is Figure 7.1 (previous page). IS outsourcing accounts for the largest part of the revenue. The gross margin for IGS averages above 25%.

5.1.1 Structure and Services

IBM divides its spectrum of capabilities into Business Innovation Services, Integrated Technology Services, Learning Services and Strategic Outsourcing Services. Following (Figure 7.2) is an internal view of IBM’s service offerings and how they complete the puzzle fulfilling customer demands.

**Figure 7.2**

**IBM Global Services Spectrum of Capabilities**

<table>
<thead>
<tr>
<th>Advise me what to do</th>
<th>Help me do it</th>
<th>Manage it for me</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IT</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Curriculum Development
- Distance learning

*Source: IBM, 2001*
5.1.2 Analysis

IBM is positioning itself to be the leading provider of "computing-utility". IDC, in a 2001 report, believes that IBM is in a prime position to dominate this market. It has many of the pieces of the puzzle and is building mindshare by aggressively promoting services, such as e-sourcing for Small and Medium Businesses (SMB). Despite a long list of valuable assets IBM have many challenges ahead:

- To avoid sub-optimal performance, IGS must adopt a truly vendor-neutral strategy.
- As IBM does not own a network anymore, it will have to clearly highlight the secure aspect of its virtual network to its customers.

5.2 Electronic Data Systems

EDS was founded 38 years ago by H. Ross Perot and over the years has become a global leader in the IT industry. With its headquarters in Plano Texas, EDS today employs over 121,000 people and generated $19.2 billion in annual revenue across 50 countries by the end of 2000. EDS’s broad portfolios range from business consulting and executive search to claims processing, outsourcing, and Internet services.

EDS has more than 9,000 clients worldwide and derives 58% of its revenue from the United States. The company serves clients in such industries as manufacturing, aerospace, healthcare, finance, insurance, food, retail, travel and transportation, energy, communications, and governments.

5.2.1 Structure and Services

Traditionally, EDS’ core competencies lie in outsourcing and Business Process Management (BPM). However, the company’s services portfolio is now organized along four lines of business:

- **Information Solutions.** This is the centralized outsourcing business, which manages customers’ mainframe data, was EDS’s largest line of business in 2000, representing approximately three quarters of its revenue.

- **Business Process Management.** BMP is the company’s second-largest line of business. This unit includes EDS’s customer services and claims processing business and is an area of rapid growth.
• **A.T.Kearney.** This is its business consulting and executive research unit acquired in 1995, delivers the following types of services: strategy consulting, e-business consulting, strategic information technology consulting, and organizations and operations consulting.

• **E-Solutions.** The Internet and enterprise solutions business unit is the largest and is at the heart of EDS's reorganization. The new unit was formed to act as a bridge between the management consulting practice of A.T. Kearney and EDS’s core outsourcing business.

### 5.2.2 Analysis

EDS’s major accounts have traditionally consisted of large corporations and governments. EDS’s core business is outsourcing. Now EDS is assisting its existing customer base in transforming themselves into Web-enabled organizations. Furthermore, EDS is expanding the reach of its services to the extended enterprise (clients’ customers and suppliers) and therefore to smaller corporations, EDS is adding Fortune 2000 and dot-com start-ups to its client base to create a new revenue stream for its e-business services.

EDS is also pursuing a strategy of best-of-breed partnering. The firm partners with other companies that have key skills in the market and that ultimately complement the ones existing within EDS. EDS’s key partners are Microsoft, Cisco Systems, HP, Oracle, NCR, BellSouth and Sun Microsystems.

One of the key success factors for EDS is to establish a solid entity that can provide services at the same level of quality and consistency, regardless of where in the world the customers are being serviced. In this way, virtual customer intimacy can be established. However, EDS is facing other challenges. One is to continue delivering a single global message of how the company can bring value to its customers. Another is to extend beyond its legacy of business process and outsourcing services, thereby capturing more opportunities in the Internet services market.

### 5.3 COMPUTER SCIENCES CORPORATION

CSC, one of the world’s largest providers of IT services, specializes in management and technology consulting, systems integration and development, Web and application hosting, IT and BPO. With revenue of $10.2 billion for fiscal year 2000 and 61,000 employees in more than 800 offices worldwide, CSC provides services to clients in the commercial and public sectors.
5.3.1 Structure and Services

Since 1997, CSC has organized its business units within three broad categories: industry verticals, geographic operations, and lines of services. CSC’s services include the following:

- **Management Consulting.** This is offered in business strategy, operations, change management, and the strategic use of IT.

- **IS Consulting.** This includes design, development, integration, and implementation in areas such as ebusiness, enterprise systems, CRM, and data warehousing.

- **IT Outsourcing Services.** This includes IT strategy, application management and ERP, desktop and distributed systems management, Web and application hosting, and network and data center operations.

- **Business Process Outsourcing.** CSC does BPO in the areas of insurance and healthcare administration, credit services, logistics, and SCM.

- **Integrated Solutions.** These are provided for the financial services, healthcare, chemicals, energy, telecommunications, and government sectors.

5.3.2 Financial Trends

For FY00, which ended in March 2000, CSC’s worldwide service revenue grew 23%, from $8.1 billion in FY99 to $9.4 billion. This growth was fueled by increasing in outsourcing, the major new contracts being with AT&T, United Technologies Corp., Enron Energy Services, Raytheon, General Electric, Equiva, San Diego County, and Old Mutual. Growth within CSC’s European operations slowed to 12% from a previous 27% the year before. However, this slowing was offset by 81% growth, fueled mostly by acquisitions, within Asia and Australia.

At the end of Sept, CSC posted revenue of $5 billion for the first six months of its fiscal year, up 12% compared with the first half of the previous year. However, when reported in constant currency, revenue grew 15%. For certain, currency fluctuations are a reality that can dampen earnings, but IDC believes this revised figure indicates CSC’s continued strength despite the expected slowdown in Y2K-related projects in the first half of the year. Revenue comes mainly from outsourcing deals but also increasingly from e business engagements. For the first half of the fiscal year, CSC announced a total of $7.7 billion in signed contracts, more than a 45% increase for the same period the previous year.
5.3.3 Growth Strategies

CSC bases its growth equally across the following three strategies: acquisitions, internal growth, and large outsourcing contracts. Acquisitions within CSC are focused in the IT services area. The company looks for large-scale firms that have strong customer bases and are profitable. During the past year, CSC has used this strategy to record impressive growth throughout Asia/Pacific. CSC traditionally expands geographically by following a major client into the region, and IDC would not be surprised to see the company becomes interested in Latin America during the coming year. Internal growth within CSC is restricted by the current IT skills shortage, but the company has managed to increase the revenue per head as a result of increases in infrastructure management contracts that are priced on value rather than on people and time involved. CSC continues to be successful in landing large outsourcing contracts that are on average between $150 million and $200 million. The company targets deals of $75 million and greater because it finds these deals are as easy to sell as smaller contracts and because CSC prefers to engage with firms that have qualified project management teams in place.

During the last year, CSC has focused much of its attention on capturing mindshare within the e business sector. For FY00, CSC’s revenue in this sector was up over 350% to $700 million. CSC is focusing efforts on the B2B market and believes it is in a strong position to continue this growth as the e business market takes root among its traditional client base of the global 1000. The company believes its size and experience position it well to deliver the end-to-end solutions that this type of engagement requires.

5.3.4 Analysis

CSC makes little attempt to convey a single face to outside world. In fact, in the words of its CEO Van Honeycut, “If there is any ‘CSC way’, then it is to be flexible to meet the client’s needs”.

Maintaining such flexibility can be disastrous for a global concern, but CSC escapes this pitfall in two ways. For one thing, the company puts top priority into maintaining strong client relationships-dedicating top management to oversee every major engagement. In

Additions, the matrix organizational structure within CSC bounds this flexibility within its three organizational lines.
CSC takes a conservative approach to emerging industry trends. The company prefers to be a quick follower into a new market rather than take the lead. With several IT services firms announcing their intention to create future markets, CSC could find itself struggling to capture recognition. However, IDC believes that this cautious approach will continue to serve the company well in the long term if it is able to respond quickly and aggressively once new trends have taken hold. The company’s recent success in securing ebusiness contracts proves that such a wait-and-see strategy can be successful. By leveraging its core outsourcing capabilities, CSC has secured a position for itself in this new market that relies on the strength of its past and its vision of the future.

5.4 Compaq Global Services

Compaq has evolved beyond its original legacy as premier vendor of personal computers to also become one of the world’s largest providers of IT services. Compaq Global Services, its services arm, places eighth in IDC’s ranking of the top 10 worldwide IT services vendors in 2000. Compaq has been gradually integrating Digital Equipment Corp.’s services unit into its organization to leverage its strengths as an enterprise wide IT services provider. This process has not always been smooth. CGS can call to action 40,000 services professionals in 200 different countries. Services contributed $6.6 billion, or 17% of Compaq’s total revenue of $38.5 billion in 1999.

5.4.1 Structure and Services

Compaq has undergone several reorganizations, among them the integration of its services and solutions organization with its worldwide sales and marketing organization to create Worldwide Sales and Services in an apparent effort to boost services visibility and to reinforce its customer alignment. During the second quarter of 2000, Compaq further realigned its organization and that realignment resulted in the formation of CGS. CGS delivers worldwide infrastructure design, implementation and management services through its professional and customer services groups as follows:

- Customer Services: This provides customer support, including business-critical performance assessments, Internet solutions and IT management services. Within the desktop
management, CGS offers a complete life-cycle services portfolio from product procurement, desktop maintenance, and support services to ongoing desktop management support services.

- **Professional Services**: The Professional services unit targets enterprise customers that CGS segments into the following groups: applications services providers, hosting services providers, and network services providers. The gamut of offered solutions and services focuses on the following segments:

  - **Next generation infrastructure**. This segment includes next generation networks, mobility and wireless solutions, computing and storage environments, security and enterprise management.
  
  - **Enterprise-ready Microsoft**. Compaq will enhance its focus on the Microsoft e business platform and enterprise environment by providing highly scalable and available Microsoft deployments
  
  - **Future sourcing**. This segment will leverage Compaq’s outsourcing experience in network and desktop management, including enterprise application management
  
  - **e-Business-critical infrastructure technologies**. This segment will enable e business deployment
  
  - **Integrated Internet solutions of Internet-enabled solutions**. This segment will deal with solutions such e-CRM, e-security, KM, e-procurement, and e-SCM.

Compaq has a long history of using partnerships and alliances to expand its market reach and to cover areas where Compaq lacks the core competency, such as software or business solution. The company currently works with 12 strategic partners, including Microsoft, Oracle and Computer Associates

### 5.4.2 Analysis

Compaq turned around its overall operations and returned to profitability, thanks to its enterprise computing unit and strong sales of server computers; however, the services unit is still lagging behind the expectations that were set at the time of the acquisition of Digital’s services unit two years ago. The company so far has failed to capitalize on its infrastructure expertise (i.e. services around servers or storage) regarding its individual business units and to present them as an end-to-end solution. A client expects a solution that needs to be delivered horizontally.
Compaq’s latest announcement that it will continue expanding its services offerings and enterprise solutions around network infrastructures that traditionally were its forte represents a good strategy. The company is particularly well positioned to take advantage of the growing demand for storage services. Its storage product business has strong multivendor services expertise and a reputation that will be valuable, particularly in the storage area network (SAN) services arena.

On the other hand, Compaq needs to back up its reliance on pure infrastructure services with higher-value services and solutions engagements in order to be rightfully called an “Internet, enterprise and technology provider.” In the light of recent developments in the services industry, Compaq must also develop a business-solution portfolio to compete on equal footing with IBM-GS, EDS, and HP.

Compaq has all the attributes to compete successfully in the global services marketplace because of its global reach, positive break/fix services regulation, large services employee headcount, sound and effective HR practices, and vast resources and expertise that came with the acquisitions of Digital and Tandem. The greatest potential hindrance to Compaq’s services would be failure of the company as a whole to recognize services as a priority. Professional services remain Compaq’s Achilles’ heel, and the notion of unfulfilled promises of Digital’s services is still haunting Compaq.

5.4.3 Financial Trends

Services revenue accounted for $6.6 billion in 1999 and grew an estimated 3% over 1998. For the first nine months of 2000, CGS revenue declined $78 million, or 1% compared with the same period last year, (3% without the currency effect). The decline in revenue was primarily the result of decreasing revenue from the Professional Services unit. IDC and Compaq both view this result as a sign of continuing difficulties in effectively integrating the services unit into the overall organization.

5.4.4 Growth Strategies

In a continuing effort to revitalize its services segment, Compaq recently presented a new strategy that will expand beyond its larger strategic positioning-as the “infrastructure provider to the Internet”- and focus on next-generation network infrastructures, especially in the wireless,
security and storage areas. Compaq also plans to reduce the number of services offerings in its Professional Services unit while going into more depth in the remaining areas.

A new marketing campaign will accentuate Compaq's traditional strength and build on it. For example, storage business has so far been one of the few areas in which the company has aggressively and successfully pursued the vision put forth at the time of Compaq's acquisition of Digital; Compaq has a comprehensive portfolio of services that are built around its storage area network (SAN) initiative as well as its Enterprise Network Storage Architecture.

Compaq also intends to gain larger mindshare in the telecommunications and financial services vertical industries to dispel the reputation for shallow vertical industry knowledge. Most important, the company wants to appear as a unified Compaq and put an unequivocal end to being called "the PC company" that bought Digital and Tandem.

CGS' Customer Services announced an online support service to further enforce its positioning as "The Non Stop Internet Company. Some of the announced services target users, while others target partners, and most of them are free of charge. The main focus is on problem avoidance types of services. This type of offering prevents problems by providing proactive delivery of the latest drivers and pre-failure notification of a system status that is likely to cause a problem. IDC believes that the e-support offering is a critical, must have element for any systems vendor. Compaq's particular e-support offering touches all of the important pieces of e-support solutions and offers room to grow and expand in the future.

5.5 Unisys

Since 1997, Unisys has been working on making a dramatic shift from being a provider of proprietary mainframes and mainframe maintenance services to a provider of solutions within higher growth services and technology markets. The company employees a total of 36,000 people worldwide, and solutions and services now account for over 70% of Unisys's revenue. However, transforming a global organization in such a dramatic fashion is challenging at best, and the difficulties surfaced for the company during the year 2000. After posting impressive results for 1999, revenue fell on a year-over-year basis for all three-quarters to date in year 2000.

CEO Larry Weinbach, who has been leading Unisys's transformation since 1997 responded to this year's slowdown in revenue by launching a five year plan mid-year this year. The steps were to implement tight spending controls, freeze hiring of personnel, increase emphasis on
partnerships and alliances, train staff heavily, and conduct a strategic review. These steps will take time to reach fruition, but they certainly move Unisys in the right direction.

5.5.1 Structure and Services

Unisys reorganized itself last year into six business units focused on key markets. This structure replaced the previous three-pronged organization that was built on consulting, integration and outsourcing services, support services, and computer products. The new structure, chartered with ensuring the uniform creation and deployment of e-action Solution, which addresses customer’s e-business transformation needs, categorizes Unisys’s capabilities as follows:

- **Global Industries.** This develops solutions for the financial services, transportation, communication, publishing, commercial and cross industry sectors as well as the public sector.

- **Global Outsourcing.** This includes data center and business process outsourcing as well as application management services.

- **Global Network Services.** This includes network, desktop management, and maintenance services for both Unisys and multivendor equipment.

Unisys aims to use its “domain knowledge” or intimate industry know-how, to create value-added solutions in selected markets.

5.5.2 Financial Trends

In the early 1990s, when it was undergoing financial problems, Unisys had essentially no revenue growth. That situation changed several years following an aggressive turnaround strategy, but at the end of 1990s, revenue again slowed and most recently declined during the first nine months of 2000. After flat growth in 1996, Unisys, revenue grew 4% in 1997, and growth accelerated to 9% in 1998. However, revenue growth slowed 4.2% in 1999 and down over 11% on a year-over-year basis for first nine months of 2000. Nevertheless, since 1997 the company has cut its debt by $1.7 billion and its annual interest and dividend expense by more than $275 million. In short, the company’s balance sheet is much healthier today despite the short-term declines in revenue.
5.5.3 Growth Strategies

Having launched an aggressive move a year ago to become an e solutions provider, Unisys settled on 60 industry-specific hardware and software installations, which it calls "repeatable solutions". Since then, the company has trimmed the number of offerings back to 30 and now, following a strategic review, back to only the 15 most profitable. The solutions that Unisys took to market at the beginning of this year were focused on back-end functions at the time when customers were demanding front-end engagements. Unisys recognized this mismatch and is now aggressively training existing staff to meet the market's needs. The company has retrained over 18,000 of its employees in e-business this year and founded Unisys's university to assist in the task.

The company is also positioning itself to capture opportunities in the growing area of m-commerce by leveraging its communications experience. At present, efforts in this regard are focused primarily on assisting mobile carriers to deploy solutions to their customers, but these efforts will be extended to existing clients across targeted industries as well.

Recently, the company announced that it plans to close most of its low-margin hardware business and to lay off about 5% of its work force as part of a drive to keep focusing on its more profitable line of e business services, targeting the financial services, transportation, and communications industries. Unisys also said it had hired an investment bank to explore strategic alternatives for its Federal Systems division, which sells computer products and services to U.S. government agencies around the world.

5.5.4 Analysis

In general, Unisys appears to be on the way to a solid recovery. The portfolio of solutions it offers has been slimmed down and refocused on front-end, customer-facing needs. However, the turnaround for the company is now at a critical point. Quick fixes in the company's financials have been exhausted, and longer-term strategic initiatives are beginning to take hold. If they are successful, Unisys may well emerge as a strong contender to become a top IT services provider.

One important element that has sustained Unisys through these difficult times is the company's identification of its ability to attract and retain employees by accommodating individual and group preferences and needs. The company's employee initiatives had a profound impact on people's morale, and turnover has been extremely low.
Unisys has realized its needs to form partnerships and alliances to successfully deliver solutions in today’s market but shifting the culture of the company to embrace such arrangements is a longer-term process. This may prove to be difficult for the company given its product background, but such a strategy is critical to the success of IT services firm today.

Finally, although services now account for more than two-thirds of its business, there still is a perception in the market that Unisys is a product-focused company. Unisys has devoted a great amount of energy and resources to changing this perception in the services marketplace. With its intention to get rid of its lower-margin hardware business, Unisys will be left with mostly services offerings, probably resolving this problem of perception.
6 HISTORY OF HP

HP’s strategy for the future can be annunciated in the words of the CEO, Carly Fiorina\(^\text{14}\):

“To sell services, software, systems and devices needed to provision IT as a “service” via 24-by-7 technology infrastructure”

6.1 INTERNAL PERSPECTIVE

Table 7.1\(^\text{15}\)

<table>
<thead>
<tr>
<th>Year</th>
<th>Current Products</th>
<th>New Products/Technologies</th>
<th>Current Cust. Segment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1930s</td>
<td>Electrical Instruments.</td>
<td>Oscillators &amp; Electrical Instruments.</td>
<td>Engineers &amp; Scientists</td>
</tr>
<tr>
<td>1940-45</td>
<td>Electrical Instruments.</td>
<td>Microwave and Radar devices.</td>
<td>Engineers &amp; Scientists</td>
</tr>
<tr>
<td>1946-50</td>
<td>Electrical Instruments.</td>
<td>None</td>
<td>Engineers &amp; Scientists</td>
</tr>
<tr>
<td>1950-55</td>
<td>Electronic Test &amp; Meas. Instrs.</td>
<td>High Speed Frequency Counter.</td>
<td>Engineers &amp; Scientists</td>
</tr>
<tr>
<td>1960-65</td>
<td>Elect Test &amp; Meas. Instr., Plotters &amp; Medical Products.</td>
<td>Frequency Synthesizer, Medical Devices, Atomic Clock</td>
<td>Engineers &amp; Scientists</td>
</tr>
<tr>
<td>1966-70</td>
<td>Elect Test &amp; Meas Instr, Plotters &amp; Medical and Computer Products.</td>
<td>First Computer, Fetal Heart Monitor, scientific desktop Calculators, Time shared Operating system and time sharing service.</td>
<td>Technical users, Engineers, Scientists and Non Tech users.</td>
</tr>
<tr>
<td>1986-90</td>
<td>Elect Test &amp; Meas Instr, Plotters &amp; Medical, Computer Products, Calculators.</td>
<td>RISC computing</td>
<td>Businesses users, Engineers and Scientists.</td>
</tr>
<tr>
<td>1991-95</td>
<td>Elect Test &amp; Meas Instr, Plotters &amp; Medical, Computer Products, Calculators.</td>
<td>Palmtop, Laptop computer, Main frame computer, world's brightest LEDs</td>
<td>Businesses users, Engineers and Scientists.</td>
</tr>
</tbody>
</table>


\(^{15}\) www.I&C.com
After studying HP's history (Table 7.1) it becomes evident that the primary skill that the company has had is hardware product development and distribution. In doing so, the emphasis has been on developing best-in-class products. This is in line with the demands of the company's primary customers, scientists and engineers. For most of HP's long history, there seems to have been a reasonably good match between the skills of the organization and those required by the customer. The new products for one 5-year period are the main products for the next period.

The current CEO, Carly Fiorina, has espoused E-services as the new product. HP still seems to be in the process of acquiring the skills to effectively compete in the services market. Currently, HP continues to rely on sale of products as the primary source of revenue. Most of HP's traditional competitors seem to be moving to a Systems Integrator model. Some, like IBM and EDS, have gone beyond the basic IT consulting services to strategy and management consulting. HP's capabilities in these fields seem woefully inadequate.
7  HP's CURRENT MARKET POSITION

HP has traditionally been recognized as one of the world's largest providers of personal computers, office equipment, and electronic monitoring instruments and services. Support has always been integral parts of HP's total package of offerings. HP is a multinational company with presence in 120 locations employing a total of 86,500 people worldwide. Services contributed $6.3 billion, or 15% to the total revenue of $42.4 billion in FY 99. The company placed seventh in IDC's ranking of the top 15 worldwide IT services vendors in 2000.

No one company can do it all, and HP has understood that fact very well from the beginning. HP's idea of building alliances and a network of Internet-oriented companies is consistent with its main goal of establishing a powerful presence in the Internet-based economy. HP has a reputation as one of the best partners in the industry; as a result, HP can quickly assemble the key alliances needed to take advantage of e-services opportunities. HP's service offerings comprise e-services, hardware and software support, and business services.

E-Services are Internet-based services that derive new revenue streams and create new efficiencies. The concept of e-services includes both e-commerce and e-business and exploits several of HP's core competencies and natural advantages, such as its strong brand recognition, its mission-critical infrastructure, and its integrated hardware, software and services offerings.

Support Services offer rapid implementation and globally available support of solutions based on HP products (Systems, storage and networks), ongoing support and maintenance services as well as associated parts and supplies for enterprise network services and mission-critical outsourcing services, and imaging and printing products.

Business Services include consulting, systems integration, outsourcing, training and education, and customer financing services. HP hired 600 new consultants during the third quarter of 2000 in an apparent effort to seize the momentum of the fast growing consulting demand. HP's consulting practice delivers its full life cycle of solutions services around the following IT and business functions: data warehousing, security, high availability, application management, ERM, e-commerce, e-intelligence, and collaborative product development.

7.1  ANALYSIS

The choice of Carly Fiorina as president and CEO indicated that HP would further sharpen its services-oriented strategy. With orders for "boxes" (PCs, printers, and so on) slowing across the industry, the initiative of a service-oriented strategy could not come at a better time. A well-
executed service strategy would help HP differentiate its products and ultimately separate winners from losers.

HP has quickly responded to many major issues in today’s IT services competitive market. Although IDC suggests in its research report that HP was one of the pioneers of the new paradigm of delivering services in a utility, it has not emerged as a leader in the IT utility marketplace.

With its suite of services around the always-on infrastructure using a pay-per-use pricing model. HP’s Internet Utility computing initiative integrates the individual pieces necessary to provide reliable infrastructure while addressing clients’ basic but crucial needs, such as speed reliability, scalability, security, and compatibility. HP was also one of the first vendors to reposition its overall support business to respond to demand for high availability and recovery services and is uniquely positioned to leverage its infrastructure to offer business recovery services worldwide.

Despite the fact that HP aborted its attempt to acquire PwC’s consulting practice, IDC expects that HP will further strengthen its consulting portfolio organically or by acquiring a smaller consultancy. Profitability remains an issue in its IT services group, HP strives to expand its high-margin consulting business to be able to provide both IT and business consulting services to clients worldwide, and an acquisition is a logical way to accomplish that goal quickly.

7.2 Financial Trends  

HP services reported consistently solid results in 1999, capitalizing mostly on a strong demand for network and mission-critical support services. Services revenue for $6.3 billion in FY99, a 12% growth over 1998. The company maintained a stunning 14% growth in FY00, and services revenue reached $7.1 billion at the end of October 2000. The Business Services unit gained strategic importance and is now responsible for approximately 42% of the company’s services, while the Support Services area accounts for the remaining 58%. Consulting was the fastest-growing services sector, with 46% revenue growth as of October 31, 2000, on a year-to-year basis. Services contributed a 10% growth in earnings compared with a 5% growth for HP’s total earnings. In the light of eroding margins in the company’s other business lines, such as computing systems, this contribution makes IT services indispensable for HP to succeed in the long run.

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7.3 Growth Strategies

HP unveiled two major initiatives in regard to e-services in 2000: Internet Utility Computing Services, which target B2B activities and the “HP Garage Program” for Internet start-ups.

HP’s Internet Utility Computing Services offer HP’s existing “always on infrastructure” via the Internet to aspiring B2B start-ups for a services fee. The always-on infrastructure presents a combination of HP’s technology and services across storage, software, consulting, and servers to be utilized by the customer throughout the business life cycle.

The name HP Garage Program illustrates HP’s newly found vigor to reinvent itself by associating the name with the landmark garage in Palo Alto, California, where Mr. Hewlett and Mr. Packard founded the company more than half a century ago. The initiative was conceived to leverage HP’s inherent core competencies while further propagating the HP brand among buoyant Internet start-up firms. It utilizes the power of the “utility computing” concept to help fast-moving start-ups, dot-coms, ASPs, e-services provider.

7.4 Corporate Communications – Analysis of Press Releases

The vendors have a whole set of tools to convey their message to the market. These tools are:

- Advertising and Promotion
- Trade Shows
- Channel Conferences
- Press Releases
- Industry Partnerships

All vendors use all these tools to communicate how they want to be perceived by the customer. IBM’s advertising campaign featuring real employees is now famous for its impact on developing a friendlier perception of the Big Blue. In our analysis we used just one of these tools to assess the corporate message of the vendor. The tool we chose is “Press Releases”. The primary reason for choosing this tool is its great impact on Business-to-Business Customers. This medium is also important for communications to the financial community and channel partners. The time frame we chose as a sample was the six months between September 2001 and February 2002.

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A summary of our findings is included in Table 8.1. The first company we looked at was IBM. Out of a total of 219 press releases, more than 40% are either about services contracts or have a significant services component along with that of software or hardware. The software and hardware businesses each make up about 25% of the press releases. It is clear that the services press releases far outweigh any other message that IBM is sending to the analyst and journalist communities. We believe that this singleness of message is the primary reason that IBM is increasingly perceived as a solutions company instead of a hardware supplier.

EDS, which started as a service-only company (Focused on outsourcing and facilities management) is now venturing into software products as well. The largest number 54% of press releases was about the services business, but 16% of these were about software. This fact does not immediately become evident when one thinks about EDS and therefore constitutes a very interesting finding. The software products that EDS seems to be selling have a large portion of service component built into them. This fact points to the increasing importance of Software products in establishing a company in the increasingly competitive services space.

In case of Unisys, the dominance of services is even more defined. Services constitute 55% of the 56 press releases that the company sent out in the six months between September 2001 and February 2002. The only other category with any significant number of press releases is hardware, which accounts for 27% of the press release in the same time period. The press releases are testament to the effort by Unisys’s top management to convert the company into a service organization.

Table 8.1

<table>
<thead>
<tr>
<th>Corporate Press Releases by Type</th>
<th>IBM</th>
<th>EDS</th>
<th>Unisys</th>
<th>HP</th>
<th>Compaq</th>
<th>MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services</td>
<td>41%</td>
<td>54%</td>
<td>55%</td>
<td>17%</td>
<td>23%</td>
<td>6%</td>
</tr>
<tr>
<td>Software</td>
<td>24%</td>
<td>16%</td>
<td>2%</td>
<td>8%</td>
<td>1%</td>
<td>42%</td>
</tr>
<tr>
<td>Hardware</td>
<td>25%</td>
<td>0%</td>
<td>27%</td>
<td>37%</td>
<td>46%</td>
<td>6%</td>
</tr>
<tr>
<td>Others</td>
<td>10%</td>
<td>30%</td>
<td>16%</td>
<td>37%</td>
<td>29%</td>
<td>46%</td>
</tr>
<tr>
<td>Total</td>
<td>219</td>
<td>143</td>
<td>56</td>
<td>110</td>
<td>188</td>
<td>388</td>
</tr>
</tbody>
</table>

Source: Corporate Websites of IBM, EDS, Unisys, HP, Compaq and MS

HP’s services business accounts for 17% of press releases in the last six months. This is better than what we had expected but is still hugely overshadowed by the hardware business, which accounts for 37% of the press releases. The area where HP lacks significantly is software. Only

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18 Numbers generated from press releases posted on the corporate websites of IBM, I&C, EDS, CSC, Unisys, Compaq and Microsoft. We recognize that the total number of press releases from each company is more than the ones posted on the website. We, however, believe, the ones posted on the website to be a representative sample because of their quantity and the fact that they were selected by the management as the ones that are important.
8% of the press releases were in connection with software. We believe that HP will need to do a better job of communicating its capabilities in non-traditional businesses. A communications strategy that portrays HP as a company with a more well-rounded set of capabilities will help build HP’s brand as a solution provider. The press releases by HP were also swamped by the news about that proxy battle between its CEO and Walter Hewlett. This might also have skewed the data (37% about issues other than S/W, H/W and Services).

The press releases of Compaq seem to have a distribution very similar to that of HP. HP, however, seems to have a greater brand recognition among customers as a technology innovator. The companies seem to have little complementarities in terms of brand recognition.

Microsoft’s press releases are dominated by software and others. In the others category we see lots of press releases regarding the ongoing monopoly trial. Another interesting observation is the hardware related press releases of Microsoft (MS). Out of a total of 388 press releases, 6% were regarding MS hardware. All these 6% were related with MS Xbox gaming console. If we compare this to HP’s software press releases we see that they are just 8% of the total. Compared to HP MS uses press releases much more effectively to promote even it secondary businesses.

7.5 I&C’S CORPORATE MESSAGE

In this section we will contrast the coherence of I&C’s message with that of three other firms. These firms are competitors of I&C is the PC and server businesses. The value of this comparison is not the similarity of the business of the companies but the difference in the clarity of the corporate messages. The coherence of the message is important for any and all businesses whether it sells products, services or commodities.

Table 8.2\textsuperscript{19} depicts a compilation of repeated words found in of four sample PC firm’s strategy, mission, vision, and web page statements. It also lists important words that are missing from the previous statements. The purpose of the exercise is to understand if the firm communicates what it claims to be and what it strives for, to understand how coherent and reinforcing are each company’s statements, and to bring to light words that are missing from the company-consumer two-way communication.

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\textsuperscript{19} Barbier M and Fonseca J. Pricing and Bundling in the PC Consumer Market. 2002 Sloan school of Management.
<table>
<thead>
<tr>
<th></th>
<th><strong>Compaq</strong></th>
<th><strong>Dell</strong></th>
<th><strong>I&amp;C</strong></th>
<th><strong>Sony</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IT solutions provider</strong></td>
<td><strong>Computer solutions company</strong></td>
<td><strong>Inventing</strong></td>
<td><strong>Broadband &amp; networks,</strong></td>
<td></td>
</tr>
</tbody>
</table>

According to Micho F. Spring, chairman of Weber Shandwick Worldwide, member of the Interpublic group of companies, everything communicates, brand, values, products, price, leadership, employees, etc. This communication must be coherent in order to link all the pieces of the firm.

It is very important to take into account how these four companies are trying to communicate with the outside world and how the external world (retailers and customers) perceives them, their strategies, and their products. By carefully analyzing their messages to the outside world we can observe how coherent or not their communication’s strategy is.

7.6 **IT Service Megadeals**

Another method for analyzing a firms position in the market for IT services is by looking at where the money has gone in IT services in recent years. We can do this by taking a close look at large IT services contracts signed by IT services firms in 2000.

The largest outsourcing contract signed during 2000 was in Japan. The U.S. $ 7.5 billion deal between IBM and NTT is remarkable not only for its size but because it marks a turning point for U.S. and European IT services vendors in Japan. The message is clear that foreign companies can play in the Japanese market.

Among the year's largest IT services contracts, IBM had a second win in Japan when it signed $1.4 billion outsourcing contract with Mitsui Mutual Life Insurance Co. EDS won the year's second largest contract when it secured the U.S. government's largest-ever outsourcing deal valued at $4.1 billion for five years. The significance of the U.S. government's acceptance of 'megadeal' outsourcing was not lost on the market. All vendors now want to see EDS succeed so that the government will embrace further outsourcing.
7.7 Lessons for I&C

The importance of a single message from the whole corporation is highlighted by the confusion among customers regarding I&C's capabilities. The low mind share among customers is also a symptom of the absence of a clear strategic message from I&C.
8 FRAMEWORK FOR STRATEGIC AND TACTICAL PLANNING

In this section we will recommend tools that a firm can use to analyze its service capabilities relative to the competition. We will recommend a tool to set the strategic direction of the company and then derive a more tactical tool for use by middle managers in doing their day-to-day work.

8.1 CAPABILITIES MATRIX

The objective of the capabilities matrix is to compare a firm’s capabilities with those of the competition. The leading IT service providers of today display a wide variety of operational capabilities. Each of these capabilities makes them more competitive in the market.

In order to recommend an effective service strategy for a firm, management must analyze the sources of competitiveness of all the major players in the IT services arena. The players must be analyzed on a similar set of parameters. The matrix should focus on the company’s internal capabilities not the ones that it intends to deliver through partners. We recognize that many services can be effectively delivered through partners but most of a firm’s competitors have in-house capabilities that cover almost all cells of the matrix. We feel that successful service companies are bringing more and more capabilities in-house and hence creating a perception of being a one-stop-shop for all service needs. This perception also helps in building a strong service brand. Moreover, the capabilities matrix can all clearly identify areas where a firm might want to form alliances and partnerships.

Figure 9.1 gives the structure of the Capabilities matrix. The framework has been adapted from Figure 9.1.
work by Kenny G. Liao\textsuperscript{20}. This framework can be used to segment the outsourcing market and compare capabilities of various vendors. There are four major categories of capabilities that contribute to a firm’s appeal as an outsourcing partner. These are:

- Capability to design/develop & supply Hardware.
- Capability to design/develop & supply Software.
- Capability to perform special/specific Business Processes/Functions.
- Capability to delivering consulting advice on strategic issues.

All these capabilities impinge on a company’s ability to deliver quality services to the customer. As we move from bottom to the top of the matrix the nature of firm capabilities changes from technological to cultural and organizational. In other words, the expertise moves from hard skills to soft ones. Engineers and technicians with narrowly defined skill sets mostly perform the bottom functions. On the other hand, the functions at the top are performed by consultants with a broad skill-set and experience. These people usually have management education/experience on top of technical qualifications. The broader skill-set of strategy consultants makes them a different kind of workforce compared to the technical consultants. Hence it is logical to conclude that the two groups would flourish in very different kinds of organizations. We therefore see that the higher skills have traditionally been dominated by consulting organizations, such as the big 5 and McKinsey, while the lower ones are offered by hardware manufacturers or specialized IT services organizations, such as EDS. The challenge for companies is to effectively manage the two kinds of organizations.

Another aspect of consulting is the perception of impartial analysis and recommendations. On this aspect, the consulting and independent IT service companies are at an inherent advantage. The hardware manufacturers have to make extra efforts to make sure that they are not perceived as being partial.

\textbf{8.1.1 How to Use the Capabilities Matrix}

The first step to creating the capabilities matrix will be to agree on a set of capabilities that are either offered in the market or are ones that a firm aspires to offer in the future. We believe that the list has to be exhaustive. In all likelihood the initial list of services will be very long and will have to be consolidated into packages of services. One example of an exhaustive list of services

\begin{footnotesize}
\end{footnotesize}
is attached as Appendix B. The value of this exercise is that it will force the management to assess the utility of each service and identify sets of services that customers generally prefer. A review of this should be done on a half yearly basis. Once the set of services has been identified on a strategic level, these can then be translated into tactical measures for use by line managers. Once the menu of services has been created, the next step is to fill out the cells for each of the companies. There can be two ways of doing this:

- Rate companies on a scale of 1 to 10 for each service. A sample matrix filled on the basis of rating is shown in Figure 9.2.
- Checking each cell in which the company is offering a service (A binary option of yes or no).

If we rate the absence of a service as zero, the rating option will automatically take care of the binary options. The rates 1 to 10 should represent the strength of the company’s particular service. Since this is a rating scheme not a ranking, two companies can have the same score for a particular service.

This matrix should be created for any and every competing organization whether it is basically a hardware company or not. We also realize that all services/capabilities are not equal in importance so we have suggested to weight each service according to their importance. These weights should be created with a customer’s perspective. All organizations in the company should use the same weights so that the results are comparable across the enterprise. Agreeing on what the weights would be another challenge. We suggest that these be based on a short customer survey. The other method would be to assign them on the basis of recommendation of
a firm’s service organization. This method, too, should not be wrong because the recommendations of the internal people will be based on their experience with customers. The only issue would be that in this method the inclusion of customer feedback would be indirect. In Figure 9.2 the bottom rows of the matrix give the total scores of each company (Both Raw and Weighted) and the raw average score. That the total weighted score of the each company gives a good measure of how attractive that company is for customers to do services business with. In figure 9.2, company Z is the most capable and hence most attractive for customers. The difference between the raw and weighted total score would give each company a good idea if it has developed capabilities in the right areas.

8.1.2 Capabilities Matrix as a Feedback Tool
The Capabilities matrix should be used as a biannual feedback tool where a firm can ask existing and prospective customers. This will serve two purposes: 1) it will allow a firm to assess which services customers deem important by asking them to weight the services and 2) it will enable a firm to see how its capabilities are perceived compared to those of the competitors.

8.1.3 Capabilities Matrix as a Tracking Tool
Another use of the Capabilities matrix is to track how various companies have developed service capabilities over time. In Figure 9.3 the services capabilities of one company are tabulated over time. The intervals chosen in this example are quarters but these could be of any length depending on the company’s business.

8.2 The Sales Matrix
The sales matrix is a tactical tool and can help individual account managers to assess the opportunity for new business within their existing customers and also identify new customers.
As a service lead organization a firm will have to be able to solve business problems of customers. The service provider (SP) should be able to put together all the services and technologies to solve the customer’s problem. Putting together the solution then becomes an internal function. As far as the client is concerned he is buying the SP’s capability to solve his business problem.

The matrix has been adapted from our discussions with a senior IT service executive. The matrix in Figure 9.4 divides the client organization on the basis of geographical locations and/or company functions. On the other axis the client organization is divided in terms of its IT needs. The ultimate objective of a service provider should be to occupy all the cells of this matrix.

The matrix helps a vendor visualize its place in the whole outsourcing opportunity space with one customer. The vendor has to view the whole organization as a set of possible engagements. The vendor also has to look at customers as accounts. The account managers should be held responsible for all services delivered to the customer and be evaluated on profitability of the account and the satisfaction of the customer. The account managers should be motivated to expand from one engagement no matter how modest. The matrix for each account will help motivate the sales people make a sale to an existing customer.
In the example given in Figure 9.4 the vendor is present only in PC/desktop outsourcing in location B. This engagement should be treated as a point of entry and the account manager should look for expansion in all directions. This means acquiring PC/desktop business in other locations an/or functions and enhancing services at Location B.

The challenges in creating this matrix are segmenting the customer organization and listing the services that the vendor can offer. The segmentation of the customer organization can be done by consulting with an experiences sales person who has dealt with that particular customer or a similar one in the past. The challenge of creating a menu of services, however, seems to be a bigger problem. When we look at any of the large service vendors we feel that they have a HUGE list of services. Listing all of them would only confuse the sales people and the customers. The company will have to undertake an exercise in refining the services offerings into a few packages. One example is to use the items of the capability matrix (Figure 9.5).
APPENDIX A
Thank you for participating in this information technology survey—your responses are very important to us. This survey will take less than 10 minutes of your time. Your input will be used by our research team at the MIT Sloan School of Management to develop assessments of today’s IT requirements in different industries. Your answers to the survey are confidential and results will be used only in aggregate with those of other survey respondents. Upon completion of the study, these results will be shared with you.

Name: ____________________________________________

Email: ____________________________________________

Company: _________________________________________

Address: _________________________________________

_____________________________________________________________________

Telephone: __________________________________________

Which of the following best describes the focus of your organization?

Accounting/Banking/Finance ______
Services ______ Advertising/Broadcasting/Publishing ______
Business/Professional Services ______
Education ______
Energy ______
Government: Federal ______
Government: State or Local ______
Other: ____________________________________________

Health Care/Pharma/Medical ______
Information Technology ______
Insurance ______
Manufacturing ______
Telecommunication ______
Transportation ______
Utilities ______
Wholesale or retail ______

Which of the following best describes your primary job function?

Corporate management ______
Comm/Networking Management ______
Eng/Mfg Management ______
Marketing/Sales ______
Other, please describe: ____________________________________________

Financial management ______
IS/IT Management ______
Ops/Admin/HR ______

Please, indicate your title within your organization:

_____________________________________________________________________

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How does your organization address its information technology (IT) needs?

Primarily Internally  Primarily Outsourcing

1. If your organization outsources, which of the following three describes its situation best:

   _____ Comprehensive Outsourcing = Outsourcer has complete operational responsibility across
                                 the infrastructure.

   _____ Infrastructure Management Services = Outsourcer manages the organization's IT
                                 infrastructure (tailored options for storage, networking, applications, help desk)

   _____ Complementary Management Services = Outsourcer complements the organization's IT
                                 capability and focus

2. How does your organization fulfill the following IT needs?

   a) Application Hosting
       Primarily Internally  Primarily Outsourcing

   b) Application/System Monitoring
       Primarily Internally  Primarily Outsourcing

   c) Data Center Operations/Facilities
       Primarily Internally  Primarily Outsourcing

   d) Data/Voice Network Management
       Primarily Internally  Primarily Outsourcing

   e) Develop IT Strategy
       Primarily Internally  Primarily Outsourcing

   f) Implement IT Strategy
       Primarily Internally  Primarily Outsourcing

   g) Software Development & Maintenance
       Primarily Internally  Primarily Outsourcing

   h) Security
       Primarily Internally  Primarily Outsourcing

   i) Storage Management
       Primarily Internally  Primarily Outsourcing

   j) Support services (end user and other)
       Primarily Internally  Primarily Outsourcing

3. For each of the above categories, please indicate the most important criterion that influenced
   the choices made.

   a) Application Hosting  Expertise  Efficiency  Control  Resources  Cost

   b) Application/System Monitoring  Expertise  Efficiency  Control  Resources  Cost

   c) Data Center Operations/Facilities  Expertise  Efficiency  Control  Resources  Cost

   d) Data/Voice Network Management  Expertise  Efficiency  Control  Resources  Cost

   e) Develop IT Strategy  Expertise  Efficiency  Control  Resources  Cost

   f) Implement IT Strategy  Expertise  Efficiency  Control  Resources  Cost
g) Security

h) Software Development &
    Maintenance

i) Storage Management

j) Support services
   (end user and other)

4. Have there been any changes in any of these IT areas in any of the categories in the last year?
   a) Application Hosting  
      No change  
      More outsourcing  
      More insourcing
   b) Application/System Monitoring  
      No change  
      More outsourcing  
      More insourcing
   c) Data Center Operations/Facilities  
      No change  
      More outsourcing  
      More insourcing
   d) Data/Voice Network Management  
      No change  
      More outsourcing  
      More insourcing
   e) Developing IT Strategies  
      No change  
      More outsourcing  
      More insourcing
   f) Implementing IT Strategies  
      No change  
      More outsourcing  
      More insourcing
   g) Security  
      No change  
      More outsourcing  
      More insourcing
   h) Software Development & Maintenance  
      No change  
      More outsourcing  
      More insourcing
   i) Storage Management  
      No change  
      More outsourcing  
      More insourcing
   j) Support services (end user and other)  
      No change  
      More outsourcing  
      More insourcing

5. Do you anticipate a significant transition in any of these areas over the next year?
   a) Application Hosting  
      No change  
      More outsourcing  
      More insourcing  
      Undecided
   b) Application/System Monitoring  
      No change  
      More outsourcing  
      More insourcing  
      Undecided
   c) Data Center Operations/Facilities  
      No change  
      More outsourcing  
      More insourcing  
      Undecided
   d) Data/Voice Network Management  
      No change  
      More outsourcing  
      More insourcing  
      Undecided
   e) Developing IT Strategies  
      No change  
      More outsourcing  
      More insourcing  
      Undecided
   f) Implementing IT Strategies  
      No change  
      More outsourcing  
      More insourcing  
      Undecided
   g) Security  
      No change  
      More outsourcing  
      More insourcing  
      Undecided
   h) Software Development & Maintenance  
      No change  
      More outsourcing  
      More insourcing  
      Undecided
   i) Storage Management  
      No change  
      More outsourcing  
      More insourcing  
      Undecided
   j) Support services (end user and other)  
      No change  
      More outsourcing  
      More insourcing  
      Undecided

6. If any of the above categories has been outsourced, please identify the firm to which these tasks
   have been outsourced.
   a) Application Hosting
b) Application/System Monitoring

c) Data Center Operations/Facilities

d) Data/Voice Network Management

e) Develop IT Strategy

f) Implement IT Strategy

g) Security

h) Software Development & Maintenance

i) Storage Management

j) Support services (end user and other)

7. Please, identify if I&C was considered for any of these opportunities. If no, please answer as to why not.

a) Application Hosting  Yes.

No. (Please specify reason)
  Unaware of I&C’s abilities in this area
  I&C is not on the company’s list of pre-qualified preferred providers
  Priority given to existing hardware provider
  Other, please describe

b) Application/System Monitoring  Yes

No. (Please specify reason)
  Unaware of I&C’s abilities in this area
  I&C is not on the company’s list of pre-qualified preferred providers
  Priority given to existing hardware provider
  Other, please describe

c) Data Center Operations/Facilities  Yes

No. (Please specify reason)
  Unaware of I&C’s abilities in this area
  I&C is not on the company’s list of pre-qualified preferred providers
  Priority given to existing hardware provider
  Other, please describe

d) Data/Voice Network Management  Yes
e) Develop IT Strategy

No. (Please specify reason)
- Unaware of I&C's abilities in this area
- I&C is not on the company's list of pre-qualified preferred providers
- Priority given to existing hardware provider
- Other, please describe

Yes

f) Implement IT Strategy

No. (Please specify reason)
- Unaware of I&C's abilities in this area
- I&C is not on the company's list of pre-qualified preferred providers
- Priority given to existing hardware provider
- Other, please describe

Yes

g) Security

No. (Please specify reason)
- Unaware of I&C's abilities in this area
- I&C is not on the company's list of pre-qualified preferred providers
- Priority given to existing hardware provider
- Other, please describe

Yes

h) Software Development & Maintenance

No. (Please specify reason)
- Unaware of I&C's abilities in this area
- I&C is not on the company's list of pre-qualified preferred providers
- Priority given to existing hardware provider
- Other, please describe

Yes

i) Storage Management

No. (Please specify reason)
- Unaware of I&C's abilities in this area
I&C is not on the company’s list of pre-qualified preferred providers
Priority given to existing hardware provider
Other, please describe

j) Support services (end user and other) Yes

No. (Please specify reason)
Unaware of I&C’s abilities in this area
I&C is not on the company’s list of pre-qualified preferred providers
Priority given to existing hardware provider
Other, please describe

8. Who is the deciding authority as to whether IT functions should be addressed internally or externally?

CEO/ President/Owner/Partner
CFO/Treasurer/Controller
CIO/CTO, VP of IS/IT, VP of Comm/Networking
COO/Exec VP/Senior VP
Director/Manager/Chief/Head of IS/IT or Comm/Networking

Consensus

Other, please describe: _______________________

9. Please, rank the top three (1st, 2nd & 3rd) criteria your organization has used to select IT service provider.

Performance/Service Levels Guarantees ______ Price ______
Process Specialization ______ Proven Track Record ______
Reciprocity ______ Third-party Recommendation ______

Other, please describe: _______________________

10. Please, rank the top three (1st, 2nd & 3rd) benefits received while outsourcing.

Focus on core business ______ Improved internal service ______
Improved external service ______ Increased access to expertise ______
Maximized resources ______ Reduced costs ______
11. Please, rank the top three (1st, 2nd & 3rd) problems encountered while outsourcing.

Increased costs _____ Lack of contract governance by company _____
Lack of vendor flexibility _____ Loss of control _____
Staff turnover _____ Unclear contract _____

Other, please describe:

__________________________________________________________________________

12. How does your organization measure or evaluate the effectiveness of outsourcing?

Quantitatively (e.g. ROI, expenses reduced) _____ Don’t measure _____
Qualitatively (e.g. increased customer satisfaction) _____ Both _____

Other, please describe:

__________________________________________________________________________
APPENDIX B
List of infrastructure services. These are taken from Peter Weill and Michael Vitale’s book “Place to Space”. Plus work by Mani Subramani and Marianne Broadbent? Notes are examples of types of services and not inclusive.

APPLICATIONS INFRASTRUCTURE

Internet policies
   Employee access, URL logging

Enforce internet policies and provide capability

Email policies
   Inappropriate personal mail, harassment policies, filtering

Enforce email policies and provide capability

Centralized management of EC applications
   Development, common standards/applications, single point of access, multimedia

Centralized management of infrastructure capacity
   Server traffic

Integrated mobile computing applications
   Laptop dialup, ISP access

ERP services
   Shared and standard ERP

Middleware linking systems on different platforms
   Integrating web shop-fronts with ERPs.

Wireless applications
   Web applications

Application service providers
   Used by business units and centrally provided

Workflow applications

Payment transaction processing
   EFT

COMMUNICATIONS

Communications network services
   Full service TCP/IP networks linking all ports in a business

Broadband communications services
   video

Intranet capabilities
   Publishing, company policies, message boards

Extranet capabilities
   Providing info in TCP/IP to select customers/suppliers

Workstation networks
   Including LANs and POS networks

EDI linkages to customers and suppliers

Electronic support to groups
   Groupware like Lotus Notes
DATA MANAGEMENT
Manage key data independent of applications
  Centralized product data
Centralized data warehouse which summarizes key information from decentralized databases
Data management advice and consultancy
Electronic provision of management information
  EIS
Storage farms or storage area networks
  Separate from LANs and workstations
Knowledge management
Contact database, KM architecture, knowledge databases, communities of practice

IT MANAGEMENT
IS project management
Negotiate with suppliers and outsourcers
  Centralized and negotiated prices for software
Service level agreements
  Agreements between corporate IT, outsourcers and BUs
Pilot e-commerce initiatives
  Pilot web shopfronts in conjunction with BUs
IS planning
  Forward business plans and capacity plans

SECURITY
Security policies for use of information systems
  Data protection, access privileges, hacker protection
Enforce security policies for use of information systems
Disaster planning for business applications
Firewall on secure gateway services

ARCHITECTURE AND STANDARDS
Specify architectures (data)
Set high level guidelines and blueprint for the way data will be used and integrated
Specify architectures (technology)
Set high level guidelines and blueprint for the way technology will be used and integrated
Specify architectures (communication)
Set high level guidelines and blueprint for the way communications technology will be used and integrated
Specify architectures (applications)
Set high level guidelines and blueprint for the way IT applications will be used and integrated
Specify architectures (work)
  Set high level guidelines and blueprint for the way work will be conducted
Enforce architectures (data)
  Enforce compliance with high level architecture
Enforce architectures (technology)
  Enforce compliance with high level architecture

Enforce architectures (communication)
  Enforce compliance with high level architecture

Enforce architectures (applications)
  Enforce compliance with high level architecture

Enforce architectures (work)
  Enforce compliance with high level architecture

Set standards for IT architectures (data)
  Set standard operating environment (SOE) to implement architecture

Set standards for IT architectures (technology)
  Set standard operating environment (SOE) to implement architecture

Set standards for IT architectures (communication)
  Set standard operating environment (SOE) to implement architecture

Set standards for IT architectures (applications)
  Set standard operating environment (SOE) to implement architecture

Set standards for IT architectures (work)
  Set standard operating environment (SOE) to implement architecture

Enforce standards for data architecture
Enforce standards for technology architecture
Enforce standards for communication architecture
Enforce standards for applications architecture
Enforce standards for work architecture

CHANNEL MANAGEMENT
Eftpos/POS
Kiosks
Web sites
Call centers
IVRs
Mobile phones
Mobile computing
  Via dialup

IT R&D
Identify and test new technologies for business purposes
Evaluate proposals for new information systems initiatives

IT EDUCATION
Training and use of IT
Management education for generating value from IT use

IT INFRASTRUCTURE FACILITIES MANAGEMENT
Large scale data processing facilities
  mainframe
Server farms
   Mail server, web servers and printer servers
Installation and maintenance of workstations and LANs
Common systems development environment
THESIS PROCESSING SLIP

FIXED FIELD: ill. ___________ name ___________

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