Global Business Strategy and Innovation in Banking

by

Harry Reddy
M.S. in Computer Science, 1988
B.S. in Electronics, 1986

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Signature of Author .................................................................

Alfred P. Sloan School of Management
Management of Technology Program
May 7, 2004

Certified by ..............................................................................

Arnoldo C. Hax
Alfred P. Sloan Professor of Management, MIT Sloan School of Management
Thesis Supervisor

Accepted by ..............................................................................

David A. Weber
Director, MIT Management of Technology Program
Co-Director, MIT Sloan Fellows Program in Innovation and Global Leadership
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ABSTRACT

The banking industry is known to have certainty only about uncertainty, change is only constant in adopting the technologies for developing innovative products and services, and yet the opportunities of arbitrage are everywhere including in economical settings and business strategies. The retail banking industry will be analyzed to understand why some banks make sustainable profits while others are less successful. We will analyze what business strategies would best work for such dynamic industry even as banking appears to be a commodity business. A systematic study will be set out to model the dynamics of different positioning of Delta Model and the effect of the underlying interactions. We will walk through the analysis of why the innovation along with the customer targeting and the operational effectiveness are crucial to implement the right business strategies. We also study banking case studies relevant to the business strategies. Finally, we present the conclusions with some recommendations in order for banks to thrive in the industry for years to come during both war times and peace times.

Thesis Supervisor: Professor Arnoldo C. Hax
Title: Alfred P. Sloan Professor of Management, MIT Sloan School of Management
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Chapter 1

Introduction

1.1 Purpose of the Thesis

This thesis (1) explores the characteristics of retail banking industry, (2) analyze the banks using Hax’s Delta Model strategy framework using different methodologies, (3) and finally draw conclusions and suggest the recommendations for banks in order to sustain the superior performance during both bad and good times of the industry.

1.2 Scope of this Thesis

First, this thesis mainly focuses on retail banks with particular emphasis on common products and services in the industry. The strategic framework is limited to analyzing the business performance of banks in terms of profits, growth, etc. We apply the Delta Model strategic framework for explaining the benefits of the each strategic postioning.

The models we use are limited to system dynamics, statistical data analysis using techniques such regression and case methods.
1.3 Thesis Structure

Thesis structure is shown in the following figure. The first chapter is simply an introduction, second chapter describes the retain banking industry in general, the third chapter describes about the different business strategy frameworks, fourth chapter analyzes the data for Delta Model using different methodologies, and finally fifth chapter focus on drawing conclusions and recommendations.

Figure 1. Thesis Structure.

- Chapter 1: Introduction (General information)
  - Industry
  - Chapter 2: Dynamics of Banking Industry
    - Target Banks
  - Strategy
  - Chapter 3: Business Strategy Frameworks
    - Target Framework
  - Chapter 4: Analysis of Banks Using Different Methodologies
    - Learning
  - Chapter 5: Conclusion and Recommendations
Chapter 2

Banking Industry

2.1 US Banking

The US Banking industry is vibrant and dynamic, and this is evident with the cyclical nature of banking profits. For example in 2002, shareholders lost about $350 billion in market capitalization in the banking industry in 2002. Total returns for shareholders were minus 11 percent - which nevertheless still outperformed the overall stock market, where a well-diversified shareholder lost 17 percent of investment on average. Among nations, Germany and Switzerland were hit hardest. Among segments, asset management, investment banking, and transaction banking were the worst performers [BCG].

Figure 2. US Banks Shareholder Returns

The ten largest banks raised their share in worldwide market capitalization from 19 percent in 1998 to 24 percent in 2002, mainly through mergers and acquisitions. Today’s largest three banks (Citigroup, Bank of America, and HSBC Holdings) have increased
their market cap on average by 25 percent per year, reaching a total market cap of more than $100 billion each [BCG].

**Figure 3. Market Capitalization**

![Bar chart showing the concentration of market capitalization is increasing.](image)

*Source: BCG*

Average return on equity (ROE) after tax improved from 14.3 percent in 2001 to 16.5 percent in 2002. However, cost of equity increased too, leaving the economic spread between ROE and the cost of equity unchanged over 2002. Only a few countries experienced a real profitability squeeze in 2002 (such as Germany with an average ROE below 1 percent for listed banks). Globally, 76 percent of equity capital earned profits above its cost of equity. Equity growth declined further from 7 percent in 2001 to 5 percent in 2002 [BCG].

**Figure 4. Return On Equity**

![Bar chart showing average ROE is still relatively high with slight increase in 2002.](image)

*Source: BCG*
The above analysis on banking industry shows that the few largest banks are eating up most of the industry profits and it is interesting to know why such phenomenon exists when most of the banks are perceived to have necessary expertise and knowledge. To identify the drivers behind such phenomenon we have to look into business strategies that the banks are following.

2.1 Japanese Banking

The Japanese banking industry is second largest in the world, after only US. Banks play a dominant role in the Japanese financial markets. Banks' share is 59.5% of the total fund-raising and 60.1% of the total loan. The market share break down is shown below.

![Figure 7. Market share breakdown](image)

Notes: (1) Funds include deposits, debentures and trusts.

(2)  ❇️:Banks

Source: Bank of Japan
The performance charts of the ten biggest bank holding companies (BHCs) and all other banks are shown.

**Figure 5. Total Capital Ratios**

![Average Total Capital Ratios Chart]

**Figure 6. Quarterly ROE**

![Quarterly Return on Equity Chart]
The structure of the Japanese banking systems is shown below.

Central Bank

Bank of Japan

Private financial institutions

Depository institutions

City banks (8)
Regional banks (64)
Member banks of the Second Association of Regional Banks (56)
Foreign banks (54)
Long-term credit banks (3)
Trust banks (32)
Others (3)

Cooperative-type financial institutions

Shinkin Central Bank
Shinkin banks (369)
National Federation of Credit Cooperatives
Credit cooperatives (277)
Shoko Chukin Bank
Rokinren Bank
Labor banks (29)
Norinchukin Bank
Credit federations of agricultural cooperatives (46)
Agricultural cooperatives (1,163)
Credit federations of fishery cooperatives (34)
Fishery cooperatives (780)

Other financial institutions

Insurance companies

Life insurance companies (44)
Non-life insurance companies (30)
Securities firms (292)

Public financial institutions

Postal Savings

Government financial institutions

Development Bank of Japan
Japan Bank for International Cooperation
Finance Corporations (7)

Notes: Figures in parentheses represent the number of financial institutions in each category as of the end of 5/2001.
The Japanese Bankers Association made public on June 28, 2001 the financial statements of *All Banks* (136 domestic banks including 9 city banks, 64 regional banks, 54 member banks of the Second Association of Regional Banks, 8 trust banks, and 1 long-term credit bank) for the fiscal year ending in March 2001. Operating profits of the banks were 446.4 billion yen. Although it remained black for the second consecutive year, the amount was much less than the previous year (2,348.2 billion yen in FY 1999). The breakdown shows 48 banks posting higher profits, 51 banks posting lower profits, and 37 banks posting operating losses. (1) Increase in provision for possible loan losses and write-offs of loans, and (2) decrease in profit from stock sales due to the stagnated stock market are the main reasons for the decrease in operating profits. Net interest income (interest income - interest expenses) of the banks decreased to 9,386.6 billion yen (-363.2 billion yen, -3.7% compared with FY 1999) after two years of increase. Net income was-175.6 billion yen, returned to the red from 907.5 billion yen in FY 1999. Changes in accounting method due to the introduction of retirement benefit accounting affected the income negatively.

**Operating Profits and Net Income of All Banks**

![Graph showing operating profits and net income for All Banks]

*Note: Decrease in the number of All Banks in this period is not adjusted in the above chart.*

**Figure 8. Banking Industry Structure**
The Japanese banks profits were plummeted to lowest levels in 1990’s and seemed to be recovered from negative level to zero-level by 2003. Although the operating profits in general are recovered to positive level (just above the zero-level), the net income is still negative level (just under zero-level). There were mega mergers of various banks in Japan in late 1990’s and early 2000’s but the benefits of such mergers are yet to prove. The NPL (non-performing loans) are increasing year after a year despite huge write-offs each year. That means banks do know yet for sure as to how much is the real NPL each bank possess! The Japanese banks have to devise right business strategies to turn-around the situation.

3.1 Banking Innovation

In order to consider a general overview of how to perform R&D activities in banking, we focus on three aspects of R&D performance: (1) generating new ideas and screening them, (2) understanding customers’ needs, and (3) conducting trials and experimentation to determine the utility and effectiveness of potential new innovations.

The first step in R&D activities in banking is to generate new ideas. After starting with broad range of possibilities, the list should be gradually refined and selections made. Wheelwright & Clark (1992) illustrated this concept in their “Development Funnel”. In
its simplest form, the development funnel offers a graphical structure for thinking about the generation and screening of alternative development options, and combining some subset of these into a product concept. A variety of different product and process ideas enter the funnel for investigation, but only a fraction become part of a full-fledged development project. Those are examined carefully before entering the narrow neck of the funnel, where significant resources are expended to transform the selected ideas into a commercial product and process. The nature of the funnel is defined by the way an organization identifies, screens, reviews, and converges on the content of a development project as it moves from idea to reality. The funnel establishes the overall framework for development: the generation and review of alternatives, the sequence of critical decisions, and the nature of decision making.

According to Wheelwright & Clark (1992), managing the development funnel involves three different tasks or challenges. The first is to widen the funnel’s mouth. To be effective, the organization must expand its knowledge base and access to information in order to increase the number of new product and new process ideas.

The second challenge is to narrow the funnel’s neck. After generating a variety of alternative concepts and ideas, management must screen them and focus resources on the most attractive opportunities. The author note that the narrowing process must be based on a set of screening criteria that fit the company’s technological opportunities while making effective use of its development resources in meeting strategic and financial needs. The goal is not just to apply limited resources to selected projects with the highest
expected payoffs, but to create a portfolio of projects that will meet the business objectives of the firm while enhancing the firm’s strategic ability to carry out future projects.

The third challenge is to ensure that the selected projects deliver on the objectives that were anticipated when the project was originally approved.

As Wheelwright and Clark depict in the development funnel, it is crucial to inject great ideas into R&D projects and to carefully screen them for creating innovative products. What ideas are required in R&D activities? And by what measures should those ideas be screened? The answers to those questions are traditionally summarized in one word: Customer.

The second step of R&D is to pay attention to customer needs. Most researches emphasized the importance of the role of customer in the development process for generating innovative or breakthrough new products. Especially, von Hippel (1988) indicated that involving customers in the early stage of product development process could contribute to develop products met with customer needs, which is ‘user innovation’. Moreover, he noted that only ‘Lead Users’ innovation form the basis for new products and services of value to manufacturers. At this point, they defined ‘Lead Users’ as users who have needs that foreshadow general demand in the marketplace and expect to obtain high benefit from a solution to their needs, separating from ‘target customers’ used by the marketing method. Furthermore, in Thomke & von Hippel (2002), as one of the solutions for how we could involve customers in the development process of new
products, they illustrated the ‘Customers as Innovators’ (CAI) method which meant shifting parts of development process to customers, and also showed that ‘toolkit’ translating manufacturer’s language (solution information) into customer’s one (needs information) could be crucial for the innovation.

The third aspect of R&D is required to conduct trials to determine the utility and effectiveness of potential new innovations. Thomke (2001) pointed out that a major development project can require literally thousands of experiments, all with the same objective—to learn whether the product concept or proposed technical solution holds promise for addressing a need or problem, then incorporating that information into the next round of tests so the best product ultimately results. He also noted that in the past the testing process was relatively expensive, so firms were frugal about the number of experimental iterations. Today, however, new technologies such as computer simulation, rapid prototyping, and combinatorial chemistry enable companies to create learning more rapidly, and that knowledge can be incorporated in more experiments at less expense. Moreover, new technologies affect everything, from the development process itself (including the R&D organization), to how new knowledge (learning) is created. Thus, Thomke suggests, for companies to be more innovative, they must overcome both managerial as well as technical challenges.

Meanwhile, I wonder if many of them seem applicable to the world of service such as banking. To challenge in applying those successful R&D methods to services might be accompanied with some difficulty in contrast with manufactured goods. The most
different point from manufactured goods is that a service is intangible. Even the products as banks call them are considered as service from the standpoint of customers. For sake of clarity, we use service to refer both product and service offered by bank. Since services exist only in the moment of its delivery to a customer, and many are tailored to individual buyers at the point of purchase, it is difficult to isolate in a ‘laboratory’ and perform ‘trial-and-error’ process enough to examine if they really meet with customer needs or not.

In addition to those characteristics of service goods, financial industry has particular circumstances hardly generating the innovation and appeared to have become one of the most underdeveloped industries in terms of the innovation. For more than 60 years, in many countries, governments have been prohibiting the financial institutes from entering new business fields for keeping their countries’ financial situations stable by the ‘fire wall’ partitioning them off sub-industries such as banking, security and insurance. As a result, those regulations have made the financial industry anticompetitive and discouraged it to create innovative services. In the late 1990’s, however, since the deregulation came to the financial industry gradually and the internet technology emerged rapidly, many firms faced the problem how to develop their new services differentiating from their competitors and entering new business fields such as security and insurance business. Now, most financial institutes are searching for solutions reflecting their customer needs to their new services in order to innovate on their financial business.
In conclusion the innovation is banking is centered around customer and bonding relationships; after all the banking is trust based business!
Chapter 3

Business Strategy Frameworks

3.1 Non-Delta Frameworks

Porter presented two primary frameworks: a) Five Forces Model to study the industry analysis, b) Low Cost, Differentiation or Focus Model to position the business in the market. When we do the industry analysis in Five Forces Model for a bank, it looks as follows.

Source: Framework is applied by the author to the banking but original framework itself is sourced from Porter, Michael E. Towards a dynamic theory of strategy. Strategic Management Journal, vol. 12 95-117 (1991)
Out of five forces, only one force is High (Industry Rivalry), so one could conclude that the banking industry is attractive, but it explains little about the change of business strategies pertaining to all these five forces, and it’s this change in business strategies that is impacting significantly on the industry analysis and is important to see if the industry is attractive or not. However, by and large the five forces will be a useful framework for analyzing the industry.

The Porter’s low cost / differentiation framework is presented below to study how a bank could position itself in the market.

<table>
<thead>
<tr>
<th>Strategic Scope</th>
<th>Strategic Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broad Scope – targets whole market</td>
<td>Low Cost</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Narrow scope – targets only one segment</td>
<td>Differentiation</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Low Cost</td>
</tr>
<tr>
<td></td>
<td>Differentiation</td>
</tr>
<tr>
<td></td>
<td>Cost Focus</td>
</tr>
</tbody>
</table>

Although these models are very useful frameworks for any bank to adopt at the beginning, it’s very difficult to limit itself forever to only one segment as growth of the segment saturates.

An alternative to Porter’s frameworks is way of looking at the order or sequential nature of Strategic Decision making would be the resource based view of strategy (Ghemawat and Rivkin, 1999).

A perspective that much more favors intra-firm analysis of capabilities and resources and their leverage (Hamel & Prahalad, 1994):

This alternative approach where efforts are made to identify the firm-specific capabilities first seems advantageous in that it allows for a more dynamic, incremental perception of strategy to form.

It is not as static as the approach that chooses the industry first, and it is preferable in its perception of the firm’s capabilities as the primary driving force of its strategy, not the preliminary choice of industry.

Management is advised to analyze the core capabilities and the unique resources first and only after that, consider how and where these could lead to competitive market positions and the earning of high rents. Then the constant reconsideration of strategic factor placements and decisions is of major importance. “Neither janitor, nor sales rep nor
Chief executive should ever believe [Industry leadership] has been achieved” (Hamel & Prahalad, 1994) as this would distract management from constant incremental adaptation of strategy.

Taking this door into the realm of strategy formulation sets a scene more fertile to dynamic strategy management. Hamel and Prahalad sum up this effect quite appropriately by the notion of Loss of intellectual Leadership.

So a weakness of Porters approach to strategy could be summarized as the misidentification of extra-firm factors (industry composition) as the primary driving force, and the resulting lack of detail about strategy implementation and its dynamic management.

So, the dynamic nature of strategy might be another force that could explain well about the industry attractiveness. Also, complimentary force could be yet another one to explain the Internet or technology based industries.

In conclusion the non-delta frameworks are either intra-firm based or external-firm based but none of these frameworks address the dynamic nature of business strategies, network externalities, complementary effects, and customers bonding that are paramount to explain the current business strategies. Further, none of these frameworks explains the systematic framework/process to devise business strategies.
3.2 Delta Framework

The Hax & Wilde’s Delta framework is about the Best Product, Total Customer Solution, and finally System Lock-in. This framework seems to be not only presenting the strategy framework to position in the market but how to do customer bonding thereby gaining not just market share but customer share. Eventually by dominant exchange, complimentary effect or proprietary technologies, one could gain the system lock-in effect. However, even if the system lock-in is not achieved, at least driving the strategy towards that end appears to be resulting optimal results for banks long time. In other words, the Delta framework addresses the shortcomings of other frameworks.

The Delta model is an integrated strategy framework as explained here; the flowchart diagram is shown to explain it in brief. The process used to identify the key elements of the strategic plan, to outline action plans, and to define appropriate performance measures is shown in the figure below. There are twelve sections in total to explain the strategy process.
Figure 10. Delta Model Integrated Strategy Framework

The Section 1 is the overview of the business, the Section 2 is the Delta Model positioning which identifies the basis upon which its strategy will be defined and implemented. Section 3 defines the customer segmentation to be used by the business, and the mission of the business is defined as a result of the analysis and documentation provided in Section 4.

Section 5, an analysis of the industry structure, and Section 6, an analysis of company’s competitive positioning, act to identify the strengths, weaknesses, opportunities and threats awaiting the company as it enters the market.

Based upon the analyses of Sections 5 and 6, the Strategic Agenda for the company as a
business is explored in detail in Section 7. The specific “adaptive processes”, Customer Targeting (Section 8), Operational Effectiveness (Section 9) and Innovation (Section 10), follow on naturally from the Strategic Agenda and act to further clarify and focus the strategic activities of the business.

Once the appropriate strategic thrusts for the business and adaptive processes have been defined, a budget can be developed which includes both strategic funding and allocated operational revenues and expenses, as provided in Section 11.

Finally, the aggregate and granular measures which will be used to gauge performance of the company – and the people and processes that make it up – are examined in Section 12.

Let’s consider the Delta Model framework to evaluate the business strategies of banks in the following-chapters.
Chapter 4

Analysis of Banking Strategies using Delta Model Framework

4.1 Introduction
The banking industry is experiencing the commodity style situation in the market and hence several banks are choosing approaches such as mergers and acquisitions to stay in the business. However, there are some banks that seem never stop in creating growth for their shareholders. How is this possible that some banks do great while others perish in this information intensive world where secrecy of success is hard to keep while embracing imitation of success is nothing new for any banks? To explain this one must go through the understanding of what it takes to succeed in such seemingly highly saturated industry. The success of a bank is largely dependent on two major factors: (1) Innovation and (2) Business Strategy. One could argue that Innovation itself is dependent on right Business Strategy, and linking the R&D strategy with the other business strategies to create customer bonding is the only business strategy that describes whether or not a particular bank succeed in the market.

While Porter’s theory of strategy focus on external industry and Resource Based View theory focus on internal resources, Hax’s Delta Model focus on integrated view of both internal and external and is well suited for explaining both traditional and network-era banks. The Porter’s framework is market oriented and Resource Based View framework is firm oriented, but Delta Model framework is customer oriented that is paramount in
achieving the customer bonding. As Prof. Hax often says the commodity concept exists only among the inept people who failed to create customer bonding or customer segmentation which help de-commoditize everything [Hax and Majluf 1996]. While other two strategy frameworks have largely static description, the Delta Model describes the dynamic nature of business strategies. Further, The Delta Model framework emphasizes the importance of process of strategy formulation and it’s this process (not strategy alone) that creates real value for any bank.

![Figure 11. Hax’s Delta Model](image)

As shown in the above Delta Model, the business strategies could evolve over the period of time from BP (Best Product) to TCS (Total Customer Solutions) to SLI (System Lock-In) or from BP to SLI directly. Thus, the business strategies need not be constant and hence have a scope for expansion into ultimate system lock-in level where competitors would be locked out and customers would be locked-in. While Porter’s
theory and Resource Based View theory treat the company’s strategy as a zero-some game where one should kill another to succeed by either outside-in approach or inside-out approach that has fixed market-pie, but Hax’s Delta Model theory treats the company’s strategy as a positive-sum game where one or many could succeed by complementing each other or by expanding the market-pie. While both other theories are not suitable for commodity-type banking industry, the Delta Model theory would better explain not only the dynamics of such industry but also the distinctive positioning that banks could adopt to achieve the sustainable competitive advantages.

4.2 Approaches to Delta Model Framework Analysis
We have approached the analysis of banking industry using the Delta Model strategic framework as follows:

1. “System Dynamics Approach” – Draw the system dynamics diagrams based on three distinct positioning within Delta Model strategy framework and explain the dynamics of each activity together with the importance of inter-connections among these activities.

2. “Data Approach” - Gather the data on several US banks and international banks, and then do the statistical analysis on strategic positioning.

3. “Survey Approach” - Prepare the questionnaire, conduct the interview, and do the statistical analysis on strategic positioning. Hypotheses will be formed and these hypotheses will be tested against the survey.

4. “Case Approach” - Present the banking case studies
4.3 Analysis by “System Dynamics Approach”

4.3.1 Introduction

The business strategy is both complex and dynamic and it needs a systematic study to understand the real dynamics of the business strategies. We need to system thinking approach to understand the business dynamics in holistic view. Jay Forrester developed the system dynamics in 1950’s at MIT [Sterman 2000]. We are going to use this system dynamics approach to evaluate the market dynamics, firm dynamics, customer dynamics, competitor dynamics and complementary dynamics from the Hax Delta Model’s strategic positioning point of view.

We have used Vensim system dynamics tool to design the dynamics of strategic positioning of BP, TCS and SLI among banks. They are very intuitive and understandable for not only the planners of the strategy but also the participants of the strategy design, which is paramount according to the Delta Model strategy framework. It’s not how well the strategy is designed but ultimately it comes to people whether or not they are involved in the process of such strategy formulation.

Towards this end of involvement, the system dynamics approach would help involve the people in different processes and activities under different strategic positioning.

Further, people in the company may not know every detail of the business activities or processes and they might be unable to express their needs accurately and using the tool
like this would help alleviate such problem because they become immersed in the design and will do the learning by experimentation.

Finally, the work done by all the participants could be shared and could have a dialectical discussion to arrive at a unified and desired strategy positioning to reflect the bank’s needs and position in the market for attaining sustainable superior competitive advantage in the industry.

The system dynamics is grouped into three parts: BP, TCS and SLI positioning systems. The brief notations of the system dynamics notations are explained below.

Reinforcing Loop: This is the positive loop denoted by R, which increases the influence on the loop.

Balancing Loop: This is the negative loop denoted by B, which decreases the influence on the loop.

Casual Loop: This is the loop to explain the particular dynamics within the system, which could be either reinforcing loop or balancing loop.

Variables and sign (+/-): The arc between two variables and a sign at the end denote that if one variable increases what would happen to another one (+ \( \rightarrow \) increases; - \( \rightarrow \) decreases).
4.3.2 Best Product Positioning System

The following is the system dynamics diagram for the BP (Best Product) positioning within the Delta Model framework.

There are several reinforcing and balancing loops as shown above to increase the attractiveness of the product to the bank using BP approach and this attractiveness results in higher profits. The upper loops in blue color are related to Low Price Positioning Strategy, the lower loops in red color are related to Product Differentiation Positioning
Strategy, and the middle loops in yellow color are common for both these strategies. The description of the casual loops is given below.

**Low Price Strategy Casual Loop**

This is one of the two strategies that could be adopted with BP (Best Product) positioning. At first, adopting this strategy requires cutting the *Price of the company*, which would increase the *Price advantage of the company*, which in turn increases the *Attractiveness to the product of the company by BP*, which in turn increases the *Number of customers of the company* and *Sales from each customer of the company*, which in turn increases the *Number of sales of the company*, which in turn increases the *Revenue of the company*, which in turn increases the *Profit of the company*, which makes increase *Investment for improving the process of the company*, which in turn increases the *Productivity of the company*, which in turn decreases *Cost of the company*, which makes further decrease in the *Price of the company*.

The *Low price strategy* casual loop is supported by an additional reinforcing loop, *Process innovation*. As *Cost of the company* decreases *Profit of the company* would increases, which in turn makes *Investment for improving the process of the company* increases, which in turn *Productivity of the company* increases, which makes further decrease in the *Cost of the company*.

The *Low price strategy* casual loop creates an effective BP positioning strategy, but there are two main balancing loops (*Price war* and *Profit margin erosion*) that would inhibit the success of this positioning. For example, the average brokerage commissions charged by top-10 online brokers dropped from $53 at the beginning of 1996 to $16 in mid-1998 [Credit Suisse First Boston 1998]. As *Price of the company* decreases the *Price advantage of the company* increases, which
increases the Target profit margin of the company, which increases the Profit margin of the company, which in turn increases the Price of the company, which in turn decreases the Price advantage of the company, thus leading to Profit margin erosion balancing loop or negative loop. Similarly, as Price advantage of the company increases the Pressure on competitors to lower the price would increase, which decreases the Price of competitors, which in turn decreases the Price advantage of the company, thus creating a Price war balancing loop.

Therefore, adopting the “Low price BP positioning strategy” could often lead to price war or profit margin erosion for the company. That’s why the banking industry is very sensitive to the dynamics of this positioning strategy.

**Product Differentiation Strategy Casual Loop**

This is another strategy that could be adopted with BP (Best Product) positioning. The adoption of this strategy requires differentiating the Product characteristics of the company, which would increase the Advantage in product characteristics of the company, which in turn increases the Attractiveness to the product of the company by BP, which increases the Number of customers of the company and Sales from each customer of the company, which increase the Number of sales of the company, which increases the Revenue of the company, which in turn increases the Profits of the company, which make possible in increasing Investment for R&D of the company, which in turn further increases the differentiation of Product characteristics of the company, thus creating a reinforcing loop for Product differentiation.
However, there exists a counter-balancing loop called *Threat of substitutes* to limit the product differentiation in the banking industry. As *Advantage in product characteristics of the company* increases the *Pressure on competitors to imitate the product* increases, which increases the *Product characteristics of the competitors*, which in turn decreases the *Advantage in product characteristics of the company*, thus creating a balancing loop of *Threat of substitution* for *Product differentiation*.

The common variable for both Low-price and Product-differentiation strategies is the *Attractiveness to the product of the company by BP*, which describes product economics.

The imitation of products and services are quite normal in banking industry, hence the “Product differentiation BP positioning strategy” alone is not sufficient to sustain the profits over long period of time.
4.3.3 Total Customer Solution Positioning System

The following is the system dynamics diagram for the TCS (Total Customer Solution) positioning within the Delta Model framework.

Figure 13. TCS – System Dynamics

There are several reinforcing and balancing loops as shown above to increase the attractiveness of solution to the bank using TCS approach, and this attractiveness results in higher profits. The upper loops in brown color are related to common positioning strategies of BP and TCS, and upper loops in light brown color are related to common
positioning strategies of TCS and SLI, whereas the loops in green color are related to the Customer Integration, Horizontal Breadth and Customer Experience strategies of TCS positioning. The description of the casual loops is given below.

**Customer Integration Strategy Casual Loop**

The *Customer integration* is one of mainly three ways of attaining the TCS positioning. At first, adopting this strategy requires integrating the customer with the company by improving the *Customer learning curve to the company's product*, which would increase the *Customer’s benefit*, which in turn increases the *Attractiveness to the company*, which in turn increases the *Attractiveness to the product of the company by TCS*, which in turn increases the *Sales from each customer of the company* and *Number of customers of the company*, which increase the *Number of sales of the company*, which in turn increases the *Revenue of the company*, which increases the *Profit of the company*, which makes increasing in *Investment for R&D of the company*, which in turn increases the creation of *Process integrative products*, which in turn further improves the *Customer learning curve to the company's product*, thus it creates a reinforcing loop called *Customer integration*.

Further, the *Customer integration* reinforcing loop is supported by another positive loop called *Customer bonding*. As the *Attractiveness to the company* is increased the *Customer bonding to the company* would increase, which increases *Switching cost*, which decreases the *Attractiveness to competitors*, which in turn further increases the *Attractiveness to the company*, thus creating reinforcing loop of *Customer integration*. 

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The banks constantly look for ways to achieve the customer bonding in order to make sustainable profits.

**Horizontal Breadth Strategy Casual Loop**

The *Horizontal breadth* is second way of attaining the TCS positioning. Adopting this strategy requires increasing the *Product breadth*, which decreases the *Procurement cost to customers*, which in turn increases the *Customer’s benefit*, which in turn increases the *Attractiveness to the product of the company by TCS*, which in turn increases the *Sales from each customer of the company* and *Number of customers of the company*, which increase the *Number of sales of the company*, which in turn increases the *Revenue of the company*, which increases the *Profit of the company*, which makes increasing in *Investment for R&D of the company*, which in turn further increases the creation of *Product breadth*, thus it creates a reinforcing loop called *Horizontal breadth*.

The successful banks always try to extend the product breadth to create value to their customers, which indirectly help the banks to reap sustainable profits.

**Customer Experience Strategy Casual Loop**

The *Customer experience* is third way of attaining the TCS positioning. Adopting this strategy requires increasing the *Product customization*, which increases the *Differentiation of customer assets*, which in turn increases the *Customer’s benefit*, which in turn increases the *Attractiveness to the product of the company by TCS*, which in turn increases the *Sales from each customer of the company* and *Number of customers of the company*. 


company, which increase the Number of sales of the company, which in turn increases the Revenue of the company, which increases the Profit of the company, which makes increasing in Investment for R&D of the company, which in turn further increases the creation of Product customization, thus it creates a reinforcing loop called Customer experience.

The creation of positive customer experience is another good way of retaining the customer and bank could offer this customer with various products and services to have sustainable profits. The selling revenue to each customer or customer share is important to measure the performance of bank’s TCS positioning. The dynamics of TCS positioning would also include the dynamics of BP positioning.

Thus, the banks could adopt strategies of Customer integration, Horizontal breadth, or Customer experience to help position in TCS. However, it’s not necessary that bank should adopt all the three strategies in order to attain the TCS positioning. Some banks would attain with one or two such strategies depending on the focus on particular customer segments or particular geographic regions.
4.3.4 System Lock-In Positioning System

The following is the system dynamics diagram for the SLI (System Lock-In) positioning within the Delta Model framework.

**Figure 14. SLI – System Dynamics**

There are several reinforcing and balancing loops as shown above to increase the attractiveness of the system to the bank using by SLI approach, and these loops together with attractiveness would determine the profitability of a bank. The upper loops in brown color are related to common positioning strategies of TCS and SLI, whereas the
loops in orange color are related to Dominant Exchange, Proprietary Standard and Exclusive Channel of SLI positioning. The description of the casual loops is given below.

**Dominant Exchange Strategy Casual Loop**

The *Dominant exchange* is one of the three different ways of attaining the SLI position. To achieve the *Dominant exchange* the bank has to first increase the *Value added by customer size*, which would increase the *System benefit of the products*, which in turn increase the *Attractiveness to the product of the company by SLI*, which increases the *Number of customers of the company*, which in turn further increases the *Value added by customer size*, thus it creates a reinforcing loop.

*As Attractiveness to the product of the company by SLI increases Sales from each customer of the company* increases as well, which in turn increases the *Profits* as described in BP positioning.

The banks try to create system benefits by creating value added with large number of customer accounts, and by doing that they hope to create a dominant exchange with which the customers would be locked-in and the competitors would be locked-out.

**Proprietary Standards Strategy Casual Loop**

The *Proprietary standards* is second way of attaining the SLI position. To achieve the *Proprietary standards* the bank has to increase the *Number of complementors of the*
company, which would increase the Value added by complementors to the company’s products, which increase the System benefit of the products, which in turn increase the Attractiveness to the product of the company by SLI, which increases the Number of customers of the company, which in turn increases the Number of sales of the company, which increases the Market share of the company, which in turn further increases the Number of complementors of the company, thus it creates a reinforcing loop.

The banks create system benefits by maintaining the large number of complementors, using which proprietary standards would be established. And, establishing such proprietary standards is difficult to achieve given the commodity nature of retail banking business. However, if a bank in fact establishes the proprietary standards in the industry then the banks could easily lock-in the customers and lock-out the competitors.

**Exclusive Channel Strategy Casual Loop**

The *Exclusive channel* is third way of attaining the SLI position. To achieve the *Exclusive channel* the bank has to increase the Number of exclusive/dominant channels, which would increase the Attractiveness for the channel to sell the product of the company, which increase the Attractiveness to the product of the company by SLI, which increases the Number of customers of the company, which in turn increases the Number of sales of the company, which increases the Market share of the company, which in turn further increases the Number of exclusive/dominant channels, thus it creates a reinforcing loop.
The banks create attractiveness to sell the products by creating more and more exclusive channels or by creating dominant channels. That way, banks would establish exclusive channel position strategy in the market. However, establishing such positioning strategy is very critical to lock-in the customers and lock-out the competitors.

As proprietary standards and exclusive channel approach are very difficult to achieve because of involvement of complementors and exclusivity of channels, the dominant exchange is relatively easier to achieve. If a bank knows how to create large customer size then that bank should be able to achieve the dominant exchange with appropriate internal strategies.

The SLI positioning could theoretically be achieved together with BP without TCS. However, banks will have a hard time attaining such position. Most of the banks are heading for TCS before targeting for SLI.
4.4 Analysis by “Data Approach”

4.4.1 Introduction

To collect the data on banks, we have used several sources such as S&P’s Compustat database, Global Financial database, SNL database, SEC’s filings, company websites, regulatory body websites and other financial organizations like OECD and BIS. We have noticed that data on financial institutions are ironically mess that had to be fixed at first. The missing data was added by sourcing from several sources. The data had to be aggregated when banks were under gone M&A activity which was predominant in US. The books had to be consolidated when banks got consolidated, which was overwhelming in Japan. The exchange rate of 100 Japanese yen per 1 US dollar is used for such calculation. The earnings had to be restated when some banks switched to Euro currency from 1999/2000, which is the case in Europe. The recent exchange rates (April, 2004) were used for such calculations. Then, we eliminated the years for which data exist for few banks only. Finally, we ended-up with 477 banks that have complete data in our database for total of 11 years from 1992 to 2002.

After updating the data for its consistency and accuracy, we have adopted JMP, a statistical analysis tool, and Microsoft Excel tools to do the actual analysis on the data.

For positioning data on BP and TCS, we have adopted an innovative research method based on Internet search count using key words “<company name> “Best Product”” and “<company name> “Customer Oriented””, respectively. Interestingly, they search count
appear to be good match with that of survey results, hence used for all banks. There was no such search conducted on SLI positioning because of the fact that survey results showed no such positioning currently exists among banks. This further supports the theory of banking as commodity industry. Finally, these search results are weighed as percentage of individual positioning within both the positioning together as follows.

\[
\%BP = \frac{BP \text{ Search Count}}{BP \text{ Search Count} + TCS \text{ Search Count}}
\]

\[
\%TCS = \frac{TCS \text{ Search Count}}{BP \text{ Search Count} + TCS \text{ Search Count}}
\]

We didn’t consider \%SLI here, so \%BP + \%TCS would become 100%. However, we have also considered \%SLI at later stage based on similar formulae as follows.

\[
\%BP = \frac{BP \text{ Search Count}}{BP \text{ Search Count} + TCS \text{ Search Count} + SLI \text{ Search Count}}
\]

\[
\%TCS = \frac{TCS \text{ Search Count}}{BP \text{ Search Count} + TCS \text{ Search Count} + SLI \text{ Search Count}}
\]

\[
\%SLI = \frac{SLI \text{ Search Count}}{BP \text{ Search Count} + TCS \text{ Search Count} + SLI \text{ Search Count}}
\]
The search count and corresponding percentage weights for sample banks are shown below.

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50
4.4.2 Findings

4.4.2.1. Positioning and shareholder value

Using the above data, we have plotted the ternary diagram to represent the sample in terms of %BP, %TCS and %SLI as shown below.

Figure 15. Banks Positioning

\[ \text{Diagram of ternary plot with points distributed along the triangle}\]
The results show that all the points are aligned on the transition path from BP positioning to TCS positioning, thus the indication is that more banks have to focus on TCS positioning to de-commoditize the product or service offerings to the customers.

Having noticed that there is no single bank which has currently attained SLI position in the industry, although some of them may have a potential to gain such positioning in the future, we wanted to explore how the BP and TCS positioning translate into creating real value for the banks. To do such measurement of value creation based on positioning, we have plotted regression using TCS positioning against the earnings growth over the period of 11 years from 1992 to 2002. The data for 41 banks is shown below.
This table consists of %TCS and Earnings Growth for the same banks listed in previous table, and from % BP could be calculated by subtracting %TCS from unity as %SLI is considered by all these banks as zero. For the sake of clarity we need to note that these banks do have products or services that have a degree of SLI (System Lock-In) position but they nevertheless don’t seem to think that their banks have attained SLI position as a whole.

The competitors lock-out and customers lock-in are not achieved at the bank level, though some products of banks have achieved so.

The earnings growth over the period of 11 years ranges from about -600 to 600 except two outliers.

Table 2. TCS-Earnings

The regression plot for the above data is shown below.
The regression equation is:

\[ \text{Earnings Growth} = 56.944 + 3.8627 \times \text{(%TCS)} \]

This regression shows that as %TCS increased the Earnings Growth is increased by 3.8 times, indicating that there is a strong positive correlation. The plot shows clear evidence that the shareholder value created by banks increased as the positioning moved from BP to TCS.

On the plot, we could notice that there are two distinct groups: one is below 30% and another is above 50%. Some banks of the first group have negative growth whereas all banks of second group have positive growth. The first group banks are heavy BP oriented and such banks appeared to be having a difficulty in sustaining the growth. On the other hand, the second group banks are heavy TCS oriented and they appear to be having consistent sustainable growth.

A different regression is plotted for earnings growth against both %BP and %TCS
positioning as shown below.

**SUMMARY OUTPUT**

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<td>Adjusted R Square</td>
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<td>Observations</td>
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**ANOVA**

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**Coefficients**

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<th>t Stat</th>
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<td>%BP</td>
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<td>-2.4E+08</td>
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<tr>
<td>%TCS</td>
<td>5.6</td>
<td>1.19E+08</td>
<td>4.69E-08</td>
<td>-2.4E+08</td>
<td>2.42E+08</td>
</tr>
</tbody>
</table>

According to the above the regression becomes:

\[
Earnings\ Growth = -116.787 + 1.737307\ (%BP) + 5.6\ (%TCS)
\]

This equation suggests that the TCS positioning has almost three times (387%) more effect than BP positioning on earnings growth, however, the statistical significance is at low level.
4.4.2.2. Distributions of Total Earnings by banks in all regions (US, Japan and Europe)

The distribution plot of earnings for all banks in all regions is shown below.

The distribution of total earnings falls largely between -2 and 10. The majority of banks don’t have any profits at all, but the number of banks are more clustered around $1 or $2 billions earnings, thus reflecting the fact that handful of banks are making profits while most of the banks either making little or not making any profits at all.

This distribution clearly shows that majority of banks are making either thin profits or no profits at all. Out of total of 477, 203 banks have zero profits, only 66 have profit of $1 billion each and 13 have loss of $1 billion each. We have noticed that there are 88 earning levels among banks. This simply reinforces the fact that many banks are not making any profit.
4.4.2.3. Distribution of Total Earnings by banks in US.

The distribution plot of earnings within all US banks is shown below.

The above distribution shows that 32 out of 72 banks have no profit at all while 18 banks have only $1 billion profit and only bank has profit of $20 billion. These banks are spread across 11 levels and are narrowly concentrated.

About 20 banks either have zero profit or $1 billion profit and rest all have negligible amount of profits, thus indicating that the banking industry is commodity industry and making money in this industry is no easy task.
4.4.2.4. Distributions of Total Earnings in Japan:

The distribution plot of earnings within Japanese banks is shown below.

Out of the total of 122 Japanese banks, the distribution is highly dispersed (88 levels) with 22 banks have no profits and all other at varying degree positioned so uniquely! This shows that the Japanese banks are not learning from each other.

When you compare these earnings in Japan with the earnings in US of previous distribution, it shows that Japanese earnings are highly fragmented with broad range of positive and negative, which indicates most of the banks in Japan are following no good strategy and thus ending up with same negative results.
This variation in profits for banks in Japan might be due to their BP ("Best Product") positioning and they don’t seem to have good positioning strategy such as TCS in order to make profits on customer segments that are valued.

### 4.4.2.5. Distribution of Total Earnings in Switzerland:

The distribution of banks within Switzerland is shown below.

Out of 38 Swiss banks, 29 have no profits and 5 have $1 billion profit, and the industry is highly concentrated (only 5 levels).

The Swiss banks appear to follow US banks in terms of stability of profits, however, the variation of profits of Swiss banks is smaller than that of US. It might be due to the fact that most of Swiss banks are already consolidated and have well defined customer segments that each dominates in.
4.4.2.6. Distribution of Total Earnings in Germany:

The distribution of banks within Germany is shown below.

Out of 45 banks in Germany, 23 have no profits and 12 have $1 billion profit, and the industry is highly concentrated (only 8 levels). The banking industry of Germany seems to resemble the banking industry of US in terms of positive profits but they have more concentration than US. This could be due to the consolidation of various banks in Germany in 1980’s and 1990’s.
4.4.2.7. Distribution of Total Earnings in France:

The distribution of banks within France is shown below.

Out of 52 French banks, half of them have no profits and 11 of them have $1 billion profit, and the industry has 16 levels.

The variability in profits for French banks appears to be some extent similar to that of Japanese banks. Being a European country, French banking industry seem to be positioning away from other successful European banking industries such as Germany and Switzerland. They do have broad range of negative profits as well. This could be due to the fact that their positioning is primarily BP (Best Product) based. However, the most of profits are centered within 0-2 billion profits. The dominance of banks at the center of the variability is similar to US banks.
4.4.2.8. Distribution of Total Earnings in UK:

The distribution of banks within UK is shown below.

Out of 26 British banks, nearly half of them have no profits, 4 of them have $1 billion profit, and the industry is concentrated with 9 levels.

The UK banks appear to be similar to US, Germany, and Swiss banks but contrast with French banks. Especially, the banks in UK seem to be similar to banks in US in terms of variability of profits and the range of banks competing in each segment.

The positioning UK banks recently adopting is TCS using latest technologies such as Web Services to create account aggregation, which would benefit the customers to see the complete view of their accounts, irrespective of which bank own those accounts. Here, one could say that this will make the banking products more of commodity as the
differentiation will be gone. But, the banks that have good customer relations and banks that provide integrated customer services will not have any problem of loosing the customers.

4.4.2.9. Distribution of Total Earnings in Hong Kong:

The distribution of banks within Hong Kong is shown below.

Out of 15 Hong Kong banks, 6 of them have no profits, 3 of them have $1 billion profit, and the industry is concentrated with 8 levels.

The banks in Hong Kong seem to be similar to banks in Japan and banks in France to some extent. Although, the variability is small in negative range unlike Japanese banks, the striking difference is that most of banks that make profits are segmented in equal number. It could be because the banks in Hong Kong are heavily segmented based on businesses types and customer types.
4.4.2.10. Distribution of Total Earnings in Italy:

The distribution of banks within Italy is shown below.

Out of 55 Italian banks, 18 of them have no profits, 4 of them have $1 billion profit, and the industry is dispersed with 26 levels.

The banks in Italy are more fragmented than the banks in France and some Italian banks have negative profits similar to Japanese banks. However, the overall variability is smaller than Japanese. The negative profits and higher variability than any other counter parts in Europe, the Italian banks have problem with mergers and acquisition because their business in many cases are still run by family generations, and some family business try to control rather than adopt new strategies that deliver superior profits.
4.4.3.1 The Correlation between Strategic Positioning and Earnings among global banks.

The 3-dimensional correlation between strategic positioning of BP & TCS and the bank’s earnings are shown below.

**Figure 16. Strategic Positioning – Earnings Correlation**

The above diagram shows that as one move from BP positioning to TCS positioning the earnings coming from TCS increase and earnings coming from BP decrease. This further supports that when the banks face commodity kind situation they have to move on to TCS positioning to get additional revenues when they are stuck with flat earnings with BP positioning.
4.4.3.2 The Growth of Four Major Global Banks in US and Japan.

The Bank of America (BAC), The Bank One (ONE), Citicorp (C), Mitsubishi Tokyo Bank (MTB), and Mitsubishi Tokyo Bank in Japan (MTB-JP) are chosen to analyze the growth as shown below.

**Figure 17. Historical earnings of Main Comparative Banks**

While the growth of BAC and C are growing steadily the ONE and MTB are flat. However, the interesting point is that when MTB in US is flat the same bank in Japan is falling down with exception of 2001 and 2002 which is due to the consolidations among different banks in Japan. The MTB vs. MTB-JP would explain why they make profits in US by adopting adequate risk monitoring procedures in place and would fail to make profits in Japan where adoption of risk monitoring process is difficult to achieve due to decades-old customs of lending based on gut feeling and instincts rather than scientific methods of evaluation.
The Bank of America’s profit growth regression is shown below.

Figure 18. Regression – Bank of America

The earnings are increased by magnitude of 860 year after a year in case Bank of America, and this could growth could be attributed to TCS positioning.

The Bank One’s profit growth regression is shown below.

Figure 19. Regression – Bank One

The Bank One’s profit growth is only 184 which is far less than Bank of America, and this low growth could be attributed to pure BP positioning.
The Citicorp’s profit growth regression is shown below.

**Figure 20. Regression - Citicorp**

The Citicorp has more growth than Bank of America (~890) and this could be explainable because it has stronger TCS positioning than BoA, and further the growth trajectory of Citicorp is in steps that could be explained from the positioning point of view as they moved from BP to TCS which created step-growth.

The Mitsubishi Tokyo Bank (US) has following regression of profit growth.

**Figure 21. Regression – Mitsubishi Tokyo Bank (US)**
The Mitsubishi Bank in US has a poor growth (~35) as it is positioned as BP, nevertheless it has positive sustainable growth like other successful US banks.

The Mitsubishi Tokyo Bank (Japan) has following regression of profit growth.

**Figure 22. Regression – Mitsubishi Tokyo Bank (Japan)**

![Graph showing regression analysis](image)

The MTB-JP’s position in the industry is alarming as it’s not making any profits for shareholders. How come Mitsubishi Bank in US is making profits but Mitsubishi Japanese Bank is making losses? The answer might lie in their strategic positioning and market fundamentals. As for the strategic positioning, the bank in Japan is heavily positioned as BP while the same bank in US is positioned as partly TCS, and this positioning could be the reason why it is not doing well in Japan.

When we plot for the earnings growth for these banks one could see, as evidenced below, that except Bank of America and Citicorp other banks have a hard time even penetrating the first wall of market penetration (BP) and not able to enter into the second wall of market penetration (TCS).
The Citicorp and Bank of America are performing well in terms of creating the sustainable shareholder value and which could be due to the positioning moving to TCS. Although none of these banks are considered to be entered into System Lock-In (SLI) position, some of these banks are already entered into this position at individual product or service level. When we do the search count for SLI based on “Dominant Position” keyword, we have found this phenomenon as shown below:

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70
4.4.3.3 The Earnings vs. Cumulative Earnings plot among major Global Banks in US, Japan and Europe.

The plots of both cumulative earnings and earnings for each major bank are shown below.

The earnings of Wells Fargo varied from 0 to about $5,000 million with two dips in the period from 1992 through 2002. However, the cumulative earnings increased exponentially. The regression line drawn for the cumulative earnings intersected the cumulative earnings curve at two different locations only.
The earnings of Bank One varied from about 0 to about $3,000 million with two dips in the period from 1992 through 2002. However, the cumulative earnings increased at various degrees. The regression line drawn for the cumulative earnings intersected the curve at four different locations.

The earnings of Key Bank varied from about 0 to about $1,000 million with one dip in the period from 1992 through 2002. However, the cumulative earnings increased at steep. The regression line drawn for the cumulative earnings intersected the curve at two different locations but it looks almost straight line.
The earnings of Citicorp varied from about 0 to about $10,000 million with one dip in the period from 1992 through 2002. However, the cumulative earnings increased exponentially. The regression line drawn for the cumulative earnings intersected the curve at two different locations.

The earnings of Bank of America varied from about 0 to about $8,000 million with two dips in the period from 1992 through 2002. However, the cumulative earnings increased exponentially. The regression line drawn for the cumulative earnings intersected the curve at two different locations.
The earnings of Mitsubishi Tokyo Bank (US) varied from about -175 to about $75 million with deep oscillations (three dips) in the period from 1992 through 2002. However, the cumulative earnings decreased with an oscillation as well. The regression line drawn for the cumulative earnings intersected the curve at five different locations.

The earnings of DKB (Japan) varied from about -550 to about 200 million with increasing-step dips (two dips) in the period from 1992 through 2000. However, the cumulative earnings decreased in increasing oscillation. The regression line drawn for the cumulative earnings intersected the curve at five different locations.
The earnings of Bank of Tokyo (Japan) varied from about -900 to about 200 million with one deep dip in the period from 1992 through 2000. However, the cumulative earnings decreased with deep dip as well. The regression line drawn for the cumulative earnings intersected the curve at three different locations.

The earnings of IBJ (Japan) varied from about -350 to about 100 million with step-wise two dips in the period from 1992 through 2000. However, the cumulative earnings decreased with an oscillation. The regression line drawn for the cumulative earnings intersected the curve at four different locations.
The earnings of Mizuho Bank (Japan) varied from about -250,000 to about 40,000 million with one deep dip in the period from 1992 through 2002. However, the cumulative earnings decreased with deep dip as well. The regression line drawn for the cumulative earnings intersected the curve at three different locations.

The earnings of Sanwa Bank (Japan) varied from about -1,900 to about 100 million with step-wise three dips in the period from 1992 through 2000. However, the cumulative earnings decreased with an oscillation. The regression line drawn for the cumulative earnings intersected the curve at three different locations.
The earnings of Toyama Bank (Japan) varied from about 100 to about 500 million with oscillation having two dips in the period from 1996 through 2001. However, the cumulative earnings increased in almost straight line. The regression line drawn for the cumulative earnings intersected the curve at three different locations.

The earnings of Sakura Bank (Japan) varied from about -500 to about 50 million with increasing oscillations (two dips) in the period from 1992 through 2000. The cumulative earnings decreased with an oscillation as well. The regression line drawn for the cumulative earnings intersected the curve at three different locations.
The earnings of Suruga Bank (Japan) varied from about -14000 to about 10000 million with fluctuations (two dips) in the period from 1992 through 2000. The cumulative earnings increased with one large dip. The regression line drawn for the cumulative earnings intersected the curve at three different locations.

The earnings of BNP Pariba (France) varied from about 0 to about 20000 million exponentially with one dip in the period from 1996 through 2002. However, the cumulative earnings increased exponentially. The regression line drawn for the cumulative earnings intersected the curve at two different locations.
The earnings of Credit Lyonnais (France) varied from about -12000 to about 5000 million with two dips in the period from 1996 through 2002. However, the cumulative earnings varied with one large dip. The regression line drawn for the cumulative earnings intersected the curve at two different locations.

The earnings of Barclays Bank (UK) varied from about 0 to about 2000 million with one dip in the period from 1996 through 2002. However, the cumulative earnings increased exponentially. The regression line drawn for the cumulative earnings intersected the curve at two different locations.
The earnings of Lloyds Bank (UK) varied from about 0 to about 2500 million with one dip in the period from 1996 through 2002. However, the cumulative earnings increased exponentially. The regression line drawn for the cumulative earnings intersected the curve at two different locations.

The earnings of HSBC Bank (Hong Kong) varied from about 4000 to about 8000 million with one dip in the period from 1996 through 2002. However, the cumulative earnings increased in straight line. The regression line drawn for the cumulative earnings almost followed through the curve.
The earnings of UBS (Switzerland) varied from about 0 to about 8000 million with two dips in the period from 1996 through 2002. However, the cumulative earnings increased exponentially. The regression line drawn for the cumulative earnings intersected the curve at two different locations.

The earnings of Royal Bank of Canada (Canada) varied from about 0 to about 2500 million with three dips in the period from 1996 through 2001. However, the cumulative earnings increased exponentially. The regression line drawn for the cumulative earnings intersected the curve at two different locations.
The earnings of Deutsche Bank (Germany) varied from about 0 to about 10000 million with three dips in the period from 1996 through 2002. However, the cumulative earnings increased exponentially. The regression line drawn for the cumulative earnings intersected the curve at three different locations.

The intersection points of regression line with the cumulative earnings curve will give the indication as to whether or not a bank is making sustainable profit over the period of time, and the number of dips in earnings will give an indication as to whether or not a bank has stable profits. It appears that the stable bank such Citicorp, HSBC, Royal Bank of Canada and Barclays are making sustainable profits with focus on TCS positioning. They however seem to positioning themselves in SLI position for some products in some customer segments or geography segments but they are not able to achieve the SLI position at bank level.

The conclusion of the above analysis is that the banks increase the earnings by 3 times as they move from BP (Best Product) to TCS (Total Customer Solutions) positioning. The negative earnings growth is never achieved while a bank is heavily positioned at TCS.
Whether Japanese bank or US bank, the earnings growth is dependent upon the positioning. Japanese banks such as Mitsubishi Tokyo Bank have attained sustainable growth when they adopted the right positioning and right segmentation in US. The banks are able to de-commoditize the product and service offerings by customer bonding (TCS) and thereby reaping the profits. Banks do have SLI positioning at product or service level, but not at bank level.
4.5 Analysis by “Survey Approach”

4.5.1 Introduction

The survey has been designed with 28 questions under five different groups pertaining to business strategies and relative earnings among global banks across all regions. We ended-up having total of 14 people who were interviewed for the survey.

All the responses are on the scale from 1 to 5 except the question 27 that is on the scale from 1 to 3 (“1” being BP position, “2” being TCS position and “3” being SLI position) and question 28 that is on the scale from 1 to 2 (“1” being commodity view and “2” being de-commodity view).

The questions were designed in such a way that the validation checks are built-in to verify the accuracy of the responses. The aggregate questions were also included to see if the responses are consistent.

The questions 1 and 2 will explain if the bank has a BP positioning, questions 3 through 14 explain about TCS positioning, questions 15 through 17 identify SLI positioning, questions 18 through 20 explain about the effectiveness if the R&D investment, and questions 21 through 26 measure the bank’s performance results. The question 27 would identify the type of bank’s positioning (BP, TCS, or SLI). The question 28 identifies if the bank is in pure commodity product/service game or de-commoditizing the products/services.
The question 3 is aggregate question for questions 4, 5 and 6. The 7 is aggregate question for questions 8, 9 and 10. The question 11 is aggregate question for questions 12, 13 and 14. The aggregate questions are designed in order to reduce the inconsistency among the responses.

The question 25 is about profits and is what the bank perceives in general at any given point of time (e.g., short-term profits), whereas the question 26 is for long-term profits.

The question 27 further identifies the categories of G1, G2 and G3, which correspond to BP, TCS and SLI positioning.

The people who are responded with the survey have been briefed about the each question and particularly about the positioning, so that they all a common understanding.
The survey questionnaire summary is shown below:

**Table 5. Survey Format**

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<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>G1. BP</strong></td>
<td></td>
</tr>
<tr>
<td>1. Low price?</td>
<td></td>
</tr>
<tr>
<td>2. Product differentiation?</td>
<td></td>
</tr>
<tr>
<td><strong>G2. TCS</strong></td>
<td></td>
</tr>
<tr>
<td>3. Horizontal Breadth (Product Breadth)?</td>
<td></td>
</tr>
<tr>
<td>4. Customer potential based offers?</td>
<td></td>
</tr>
<tr>
<td>5. Cross-LOB need profiles?</td>
<td></td>
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<tr>
<td>6. Contact channel optimization?</td>
<td></td>
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<tr>
<td>7. Customer Integration (Customer Bonding)?</td>
<td></td>
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<tr>
<td>8. Sales organization?</td>
<td></td>
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<tr>
<td>9. Value-led customization?</td>
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<td>10. Tenure-enhancing products?</td>
<td></td>
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<tr>
<td>11. Redefining Customer Experience?</td>
<td></td>
</tr>
<tr>
<td>12. Complete customer information available for sales and service?</td>
<td></td>
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<tr>
<td>13. Customers directed to appropriate service channels?</td>
<td></td>
</tr>
<tr>
<td>14. Customer needs collection?</td>
<td></td>
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<tr>
<td><strong>G3. SLI</strong></td>
<td></td>
</tr>
<tr>
<td>15. Proprietary standards?</td>
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<tr>
<td>16. Dominent exchange?</td>
<td></td>
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<tr>
<td>17. Exclusive channel?</td>
<td></td>
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<tr>
<td><strong>G4. R&amp;D</strong></td>
<td></td>
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<tr>
<td>18. Operational Effectiveness (eg., Risk Mgmt)?</td>
<td></td>
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<tr>
<td>19. Innovation?</td>
<td></td>
</tr>
<tr>
<td>20. Customer Targeting (eg., Segmentation)?</td>
<td></td>
</tr>
<tr>
<td><strong>G5. General</strong></td>
<td></td>
</tr>
<tr>
<td>21. Customer share?</td>
<td></td>
</tr>
<tr>
<td>22. Market share?</td>
<td></td>
</tr>
<tr>
<td>23. Customer acquisition?</td>
<td></td>
</tr>
<tr>
<td>24. Customer retention?</td>
<td></td>
</tr>
<tr>
<td>25. Profits?</td>
<td></td>
</tr>
<tr>
<td>26. Long-term profits?</td>
<td></td>
</tr>
<tr>
<td>27. Positioning (1-&gt; BP, 2-&gt; TCS, 3-&gt;SLI)?</td>
<td></td>
</tr>
<tr>
<td>28. Pure commodity play with the banking products vs decommodotizaion(*1=&quot;yes&quot;, *2=&quot;no&quot;)?</td>
<td></td>
</tr>
</tbody>
</table>
4.5.2 Hypotheses Design

There are total of 9 (H1 ~ H9) hypotheses made to help study the impact of different strategic positioning within Delta Model framework on important variables such as customer bonding and economic profits that it creates. The complete table of hypotheses is shown below.

Table 6. Hypothesis and Questions Relationships

<table>
<thead>
<tr>
<th>Number</th>
<th>Hypothesis</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Customer bonding increases profitable market share</td>
<td>Q7-&gt;Q22, Q25</td>
</tr>
<tr>
<td>H2</td>
<td>Customer share is more important than market share</td>
<td>Q21, Q22-&gt;Q25</td>
</tr>
<tr>
<td>H3</td>
<td>Customer bonding increases the customer acquisition and retention</td>
<td>Q7-&gt;Q23, Q24</td>
</tr>
<tr>
<td>H4</td>
<td>Profits of TCS is twice that of BP and profits of SLI is thrice that of BP</td>
<td>Q27-&gt;Q25, Q26</td>
</tr>
<tr>
<td>H5</td>
<td>Sustainable commodity industry like banking is difficult to achieve the SLI position</td>
<td>Q28-&gt;Q15, Q16, Q17, Q27</td>
</tr>
<tr>
<td>H6</td>
<td>R&amp;D for OE increases long-term profits</td>
<td>Q18-&gt;Q26, Q25</td>
</tr>
<tr>
<td>H7</td>
<td>R&amp;D for Innovation increases profits</td>
<td>Q19-&gt;Q25, Q26</td>
</tr>
<tr>
<td>H8</td>
<td>R&amp;D for CT increases profits</td>
<td>Q20-&gt;Q25, Q26</td>
</tr>
<tr>
<td>H9</td>
<td>Decommodotization increases profits</td>
<td>Q28-&gt;Q25</td>
</tr>
</tbody>
</table>
<pre><code>                          |                        | (Q7, Q20-&gt;Q28)         |
</code></pre>

The relationship column in the above table refers to the impact of responses among different questions. For example, hypothesis 1 says that Q7->D22,Q25, which means that if high rating of Q7 response leads to high rating on Q22 and Q25 then hypothesis H1 will holds good. The question in parenthesis such as (.Q25) denotes it is additional
optional verification.

4.5.3 Survey Responses

The survey results are shown below in summary form. There are 14 banks (A ~ M) were interviewed for 28 questions (1 ~ 28) each.

Table 7. Survey Responses

| Interview | Question | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
|-----------|----------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| A         |          | 2 | 3 | 5 | 5 | 5 | 4 | 3 | 3 | 3 | 2  | 1  | 2  | 1  | 3  | 4  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 2  | 1  |    |    |    |    |    |    |
| B         |          | 2 | 4 | 4 | 4 | 3 | 4 | 5 | 4 | 5 | 5  | 3  | 3  | 3  | 4  | 2  | 2  | 1  | 4  | 4  | 5  | 5  | 4  | 3  | 4  | 5  | 4  | 2  | 2  |    |
| C         |          | 4 | 1 | 2 | 2 | 1 | 3 | 2 | 3 | 2 | 1  | 2  | 1  | 2  | 1  | 1  | 1  | 3  | 2  | 4  | 2  | 1  | 2  | 2  | 2  | 1  | 1  |    |    |    |
| D         |          | 2 | 4 | 4 | 4 | 3 | 5 | 5 | 5 | 5 | 5  | 5  | 4  | 4  | 5  | 1  | 2  | 1  | 4  | 5  | 5  | 5  | 5  | 3  | 5  | 5  | 4  | 2  | 2  |    |
| E         |          | 1 | 4 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 1  | 3  | 4  | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 1  |    |    |
| F         |          | 2 | 5 | 5 | 5 | 5 | 5 | 3 | 3 | 4 | 2  | 3  | 4  | 3  | 3  | 3  | 2  | 1  | 1  | 3  | 4  | 3  | 4  | 3  | 4  | 3  | 3  | 3  | 2  | 2  |
| G         |          | 2 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 4 | 5  | 5  | 4  | 5  | 5  | 2  | 2  | 1  | 4  | 5  | 5  | 4  | 3  | 3  | 4  | 4  | 4  | 2  | 2  |    |
| H         |          | 3 | 4 | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 3  | 3  | 3  | 3  | 2  | 1  | 1  | 1  | 3  | 3  | 3  | 2  | 2  | 2  | 2  | 2  | 2  | 3  | 2  | 1  |
| I         |          | 3 | 4 | 4 | 3 | 5 | 4 | 5 | 5 | 5 | 4  | 4  | 4  | 5  | 1  | 2  | 1  | 5  | 5  | 5  | 5  | 4  | 3  | 5  | 5  | 5  | 2  | 2  |    |
| J         |          | 3 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 2  | 3  | 2  | 1  | 1  | 1  | 1  | 2  | 2  | 1  | 1  | 2  | 1  | 1  | 1  | 1  | 1  |    |    |
| K         |          | 2 | 4 | 4 | 3 | 5 | 5 | 5 | 4 | 5  | 5  | 4  | 4  | 4  | 5  | 2  | 2  | 1  | 4  | 5  | 5  | 5  | 5  | 3  | 5  | 5  | 4  | 2  | 2  |
| L         |          | 2 | 3 | 5 | 5 | 5 | 4 | 3 | 3 | 3  | 2  | 3  | 4  | 3  | 2  | 1  | 2  | 2  | 3  | 4  | 3  | 3  | 3  | 3  | 3  | 3  | 3  | 2  | 2  |
| M         |          | 2 | 4 | 4 | 4 | 3 | 5 | 4 | 5 | 5  | 3  | 3  | 3  | 4  | 1  | 1  | 1  | 4  | 4  | 5  | 5  | 4  | 3  | 4  | 5  | 4  | 2  | 2  |    |
| N         |          | 2 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2  | 2  | 3  | 4  | 3  | 3  | 2  | 2  | 1  | 1  | 3  | 4  | 3  | 3  | 2  | 2  | 2  | 3  | 2  | 2  | 1  |

All the responses are on the scale from 1 to 5 except the Q27 and Q28. The Q27 has a scale from 1 to 3, and Q28 has a scale from 1 to 2.
4.5.4 Analysis Findings

The statistical tool such as JMP software and Microsoft Excel are used to do the analyses.

The findings of the analyses are shown below.

When the regression was done for profits with respect to positioning we have found that banks operating in TCS positioning have 197% more profits than those banks operating in BP positioning as shown below.

Table 8. Survey Data Regression Output of Profits w.r.t. BP and TCS positioning

<table>
<thead>
<tr>
<th>SUMMARY OUTPUT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regression Statistics</strong></td>
</tr>
<tr>
<td>Multiple R</td>
</tr>
<tr>
<td>R Square</td>
</tr>
<tr>
<td>Adjusted R Square</td>
</tr>
<tr>
<td>Standard Error</td>
</tr>
<tr>
<td>Observations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>df</td>
</tr>
<tr>
<td>Regression 1</td>
</tr>
<tr>
<td>Residual 12</td>
</tr>
<tr>
<td>Total 13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Standard Error</th>
<th>t Stat</th>
<th>P-value</th>
<th>Lower 95%</th>
<th>Upper 95%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.17778</td>
<td>0.575065</td>
<td>-0.30914</td>
<td>-1.43074</td>
<td>1.075181</td>
</tr>
<tr>
<td>27</td>
<td>1.977778</td>
<td>0.336038</td>
<td>5.885571</td>
<td>7.42E-05</td>
<td>1.245613</td>
</tr>
</tbody>
</table>
The regression equation is:

\[ \text{Profits} = -0.17 + 1.97 \text{ (TCS)} \]

Since none of the survey answers has SLI positioning the regression is estimated to only BP and TCS positioning. According to the equation, it is evident that profits will go up by 197% when positioning is moved from BP to TCS for banks.
4.5.4.1 Distributions of Responses.

The distributions of each question’s responses are as presented below. The questions are here presented as columns. For example, Column 1 (R1) refers to the responses of question 1. The responses to questions are plotted with distribution and their variability is drawn in box plots. The distribution refers to the number of banks responded against particular response of each question.

**Column 1 (R1: Low Price)**

According to the distribution presented here, the majority of banks choose low price strategy as a moderate within BP positioning. For example, majority of the banks choose 2 on the scale of 1-5, meaning that low price is not overwhelming.

The variability of the response is within 2/3rd of the box plot, and it tells us that low price is not the strategy banks adopting to win in the market.
The distribution tells us that majority of the banks choose product differentiation strategy as an overwhelming within BP positioning. For example, majority of the banks choose 4 on the scale of 1-5 and none of the banks choose 2, meaning that product differentiation is overwhelming.

The variability of the response is within whole box plot, and it tells us that product differentiation strategy is accepted by all banks.

According to the distribution, the number of banks choosing product breadth strategy is evenly split between choice 2 and 4. That means the banks are having either excellent product breadth or moderate product breadth and they seem to have any single dominant strategy for all banks.

The variability of the response is within whole box plot, and it tells us that product breadth is either bank has it or not that matters to establish TCS positioning.
The distribution tells us that majority of banks choose customer potential offers as an excellent strategy within TCS positioning. For example, majority of the banks choose 4 on the scale of 1-5 and none of the banks choose 3, meaning that product customer-based product offers are crucial.

The variability of the response is within almost whole box plot, and it tells us that customer potential offers are accepted by most of the banks.

According to the distribution, the number of banks that choose particular choice is following the normal curve and they are evenly split between choice 2 and 3, which means that the banks are engaged in identification of cross-LOB needs but still there is a room to improve within TCS positioning.

The variability of the response is almost centered in the box plot, and it tells us that cross-LOB needs are important, but not very critical.
The distribution tells us that the banks that choose contact channel optimization are evenly split among choices 2, 3 and 4, which means that contact channel is important but with varying degree within TCS positioning.

The variability of the response is centered in the box plot, and it tells us that contact channel’s significance is accepted by all banks.

According to the distribution, the number of banks that choose particular choice is in decreasing order from good to excellent, so this tells us that all banks are following to integrate the customers to enhance the customer bonding but they are at varying degree in terms of achievement within TCS positioning.

The variability of the response is skewed to good in the box plot, and it tells us that the customer integration is hard to achieve but nevertheless it’s critical.
The distribution tells us that the banks that choose sales force organization are evenly split among choices 2, 3 and 4, which means that sales force is important but with varying degree within TCS positioning.

The variability of the response is centered in the box plot, and it tells us that sales force’s significance is accepted by all banks to enhance the customer bonding.

According to the distribution, the number of banks that choose particular choice is in decreasing order from good to excellent, so this tells us that all banks are following to do value-led customizations to enhance the customer bonding but they are at varying degree in terms of achievement within TCS positioning.

The variability of the response is skewed to good in the box plot, and hence the customization is no easy task.
According to the distribution, the number of banks that choose particular choice is following the normal curve and they are heavily centered with choice 2, which means that the banks are engaged in enhancing the life of product within TCS positioning, but not all banks are successful in the pursuit of improving customer bonding.

The variability of the response is throughout the box plot, and it tells us that introducing tenure-enhancing products is depending on the bank.

The distribution tells us that the number of banks that choose redefining the customer experience is varied from choices 2 though 4 and choice 3 being predominant. It means that majority of the banks are redefining the customer experience and others are either started to follow them within TCS positioning. It’s noteworthy to mention that some banks have excellent achievement in redefining the customer experience to enhance the TCS positioning.
The distribution tells us that majority of banks make complete customer information available for sale and service to increase the customer experience within TCS positioning. However, the banks’ choices varied from excellent to moderate to good, which means all of them are successful in making use of customer information for the benefit of their banks.

The variability of the response is from 2 to 4 as shown in the box plot.

According to the distribution, the number of banks that choose particular choice is varied across full range with majority opting for moderate/excellent service channels using to which customers could be directed when appropriate within TCS positioning. Other banks could be having hard time achieving this flexibility of seamless channel switching and it requires innovation and IT spending.

The variability of the response to create positive customer experience is throughout the box plot.
According to the distribution, the number of banks that choose particular choice is in decreasing order from good to excellent, so this tells us that all banks are following to collect the customer needs to enhance the customer experience but they are at varying degree in terms of achievement within TCS positioning.

The variability of the response is skewed to good in the box plot, and hence the customer needs collection is no easy task.

The distribution tells us that the banks are not achieving proprietary standards, mostly in poor status. The banks are either at poor or good but nothing superior achievement of SLI position. It’s interesting to see that the banks are attempting to create proprietary standards but they never achieved superior lock-in position.

The variability of the response is skewed to the poor in the box plot.
Column 16 (R16: Dominant Exchange)

The distribution tells us that the banks are achieving dominant exchange at best at good level. The banks are evenly split between poor or good choice but nothing superior achievement of SLI position. It’s interesting to see that the banks are attempting to create proprietary standards but they never achieved superior lock-in position. The dominant exchange seems to be the promising option to pursue SLI position.

The variability of the response is even between poor and good as shown in the box plot.

Column 17 (R17: Exclusive Channel)

According to the distribution, the majority of banks are at poor (choice 1) in maintaining the exclusive channel to create SLI positioning. However there are some banks which are able to establish good channels that are exclusive. The exclusive channel for particular product is not same as for whole bank.

The variability of the response is skewed to the poor/good in the box plot.
The distribution tells us that the banks are either good or moderate in achieving the OE (Operational Effectiveness) such as risk management with right R&D, and some banks are still poor in this area with no bank left at good. This means that banks are either good or bad at OE, nothing in between!

The variability of the response is skewed to moderate in the box plot.

According to the distribution, the majority of banks are excellent in creating the innovation with R&D expenditure. However there are some banks which are able to establish either good or moderate innovations but no bank believes it is poor in innovation.

The variability of the response is skewed to the excellent/moderate in the box plot.
The distribution shows us that all banks are doing the customer targeting but they are varied from good to excellent. The customer targeting is adopted by the banks with customer segmentation and geography segmentation using R&D, however their success is evenly split among the banks.

The variability of the response is centered in the box plot.

According to the distribution, the number of banks that choose particular choice is in normal distribution with the majority of banks centered at good position. Very few banks are excellent in achieving the customer share while some banks are poor in customer share approach.

The variability of the response is centered at good/moderate in the box plot.
The distribution shows us that all banks are conscious of gaining the market share but their achievement is varied from poor to excellent. It’s interesting to observe that very few have excellent customer share but many have excellent market share!.

The variability of the response is throughout the box plot.

According to the distribution, the banks are either good or moderate customer acquisition with majority at moderate position. This means that most of the banks are working towards acquiring the customers to boost the market share.

The variability of the response is centered at good/moderate in the box plot, meaning that this performance criterion is universally important. We may have to compare the customer acquisition with customer retention to see the net achievement.
Column 24 (R24: Customer Retention)

The distribution shows us that all banks are conscious of maintaining the higher customer retention but some banks are poor in customer retention while majority are at moderate level. It’s interesting to observe that the customer retention is more varied than customer acquisition.

The variability of the response is throughout the box plot.

Column 25 (R25: Profits)

According to the distribution, the banks are following the normal distribution in terms of achieving profits, with majority achieving the moderate. However, some banks achieve poor profits and some others achieve excellent profits.

The variability of the response is throughout the box plot, meaning that this performance criterion is universally important but poor performing banks are struggling to improve on this front.
The distribution shows us that all banks are conscious of maintaining the long-term profits but they are varied in achieving the results. The range of profits is from 1 to 4, meaning good to excellent with no particular increasing or decreasing pattern.

The variability of the response is throughout the box plot. It’s important to note that long-term profits of banks are better than short-term profits for some banks.

According to the distribution, the majority of banks are having strategy of TCS positioning and the rest are of BP positioning. However, there is no single bank which identifies itself as in SLI position. Nevertheless, some banks do have SLI position at the particular product or service level but the banks don’t seem to have SLI position at the aggregate level.

The variability of the response is limited to choice 1 or 2.
According to the distribution, the majority of banks are having strategy to de-commoditize the products and services that are generally perceived as commodities in the market. However, the banks are evenly split between commodity players and de-commodity players in the industry, which might be the reason why those banks which play commodity game are not reaping the profits. Even those banks which believe in de-commoditizing are not performing well (just choice 2), thus there is great room to improve further de-commoditizing the banking products or service.

The summary of above distribution analysis is explained below.

The product differentiation appears to be the key as opposed to low price in BP positioning. The need-profiles of Cross-LOB have much room to improve in achieving the horizontal product breadth of TCS positioning. The Value-led customization and Tenure-enhancing products will have to be increased to gain the customer bonding, thus further enhancing the TCS positioning. The collection of customer needs and establishment of appropriate service channels to direct the customers automatically are
critical to improve the redefinition of customer experience among the banks, which would enhance the TCS positioning.

The banks appear to be trying to achieve the SLI position mainly by establishing the dominant exchanges and they seem to have difficulties in creating exclusive channels. Most of the banks are appear to be doing customer segmentation however there is much room to catch-up with the leaders in the industry. The operational effectiveness is another area banks seem to have room to improve. Those banks that are poor in innovation need to improve their status in the market. Although many banks are trying to establish market share, only few banks are good in customer share.

While majority of banks are focusing on customer acquisition, few banks are in fact achieving the good customer retention that is the key for bank. Even though short-term profits are low some time because of capital expenditure, the R&D appears to be creating the long-term profits.

All banks are positioned either at BP positioning or TCS positioning, and none of them are at SLI positioning. However, some products or services seem to have SLI position within banks, but no bank as whole seems to have the complete SLI position in the industry.

The banks are de-commoditizing the products and services to compete in the market, however, there are few banks that are still competing by playing the commodity game.
This shows that the arbitrage in banking still exists while the competition is heating up from all sides.

4.5.4.2. Hypothesis Testing among Banks

Hypothesis 1 (H1) states that the customer bonding increases profitable market share – achieving customer integration creates customer bonding that helps drive both market share and profits, thus not just market share but profitable market share.

The regression of response to question 22 (R22: MarketShare) by the response to question 7 (R7: Customer Integration) is shown below.

Figure 25. Bivariate Fit of R22: Market Share by R7: Customer Integration

R22: Market Share = 0.0609756 + 0.8780488 R7: Customer Integration. (1)

The statistical significance is achieved with RSquare = 0.78 and t-statistic substantially low. The equation (1) says that the customer integration of TCS has 87% effect on market share.
The regression of response to question 25 (R25: Profits) by the response to question 7 (R7: Customer Integration) is shown below.

**Figure 26. Bivariate Fit of R25: Profits by R7: Customer Integration**

![Graph showing the relationship between R25 and R7](image)

*R25: Profits = 0 + 1 R7: Customer Integration. (2)*

The statistical significance is achieved with RSquare = 0.92 and t-statistic substantially low.

The equation (2) says that the customer integration of TCS has 100% effect on profits.

By combining equation (1) & (2), we can conclude that customer integration approach of TCS increases both market share and profits, and hence increases the profitable market share. Therefore, the hypothesis H1 holds good. Simply increasing the market share is of no use in adopting the business strategy but it would be useful only when the market share results in profits as is the case with customer integration approach of TCS.
**Hypothesis 2 (H2)** states that customer share is more important than market share – profits are more affected by customer share rather than market, which focus on customer wallet rather than market as whole.

The regression of response to question 25 (R25: Profits) by the response to question 21 (R21: Customer Share) is shown below.

**Figure 27. Bivariate Fit of R25: Profits by R21: Customer Share**

\[ R25: \text{Profits} = 0.2388451 + 0.9501312 \times R21: \text{Customer Share}. \] (3)

The statistical significance is achieved with RSquare = 0.96 and t-statistic substantially low.

The equation (3) says that the customer share of TCS has 95% effect on profits.
The regression of response to question 25 (R25: Profits) by the response to question 22 (R22: Market Share) is shown below.

**Figure 28. Bivariate Fit of R25: Profits by R22: Market Share**

![Graph showing the bivariate fit of R25: Profits by R22: Market Share.](image)

*R25: Profits = 0.5389408 + 0.94081 R22: Market Share. (4)*

The statistical significance is achieved with RSquare = 0.79 and t-statistic substantially low.

The equation (4) says that the market share of TCS has 94% effect on profits.

By combining equation (3) & (3), we can conclude that effect on profits due to customer share approach of TCS (95%) is higher than the effect due to the market share approach of TCS (94%). Therefore, the hypothesis H2 holds good. Although, the difference is low, when the industry is in commodity business, achieving the customer share is the only way to gain additional profits.
Hypothesis 3 (H3) states that customer bonding increases customer acquisition and customer retention – customer acquisition without having good customer retention is useless effort in business strategy and customer retention might be more important than customer acquisition.

The regression of response to question 23 (R23: Customer Acquisition) by the response to question 7 (R7: Customer Bonding) is shown below.

Figure 29. Bivariate Fit of R23: Customer Acquisition by R7: Customer Bonding

R23: Customer Acquisition = 1.597561 + 0.304878 R7: Customer Bonding. (5)

The statistical significance is achieved with RSquare = 0.67 and t-statistic substantially low.

The equation (5) says that the customer bonding of TCS has 30% effect on customer acquisition.
The regression of response to question 24 (R24: Customer Retention) by the response to question 7 (R7: Customer Bonding) is shown below.

**Figure 30. Bivariate Fit of R24: Customer Retention by R7: Customer Bonding**

![Graph showing bivariate fit]

**R24: Customer Retention = 0.3170732 + 0.8658537 R7: Customer Bonding. (6)**

The statistical significance is achieved with RSquare = 0.84 and t-statistic substantially low.

The equation (6) says that the customer bonding of TCS has 86% effect on customer retention.

By combining equation (5) & (6), we can conclude that effect of customer bonding of TCS is more on customer retention (86%) as opposed on customer acquisition (30%), which is why customer bonding is very important to adopt the right business strategies. Therefore, the hypothesis H3 holds good. Establishing the customer bonding will achieve the customer retention thereby switching costs will be increased for customers.
**Hypothesis 4 (H4)** states that the profits of TCS is twice that of BP and profits of SLI is thrice that of BP – as the strategy positioning moves from BP to TCS the profits increase by two-fold and as it moves to SLI the profits increase by three-fold.

The regression of response to question 25 (R25: Profits) by the response to question 27 (R27: Positioning) is shown below.

**Figure 31. Bivariate Fit of R25: Profits by R27: Positioning**

\[ R25: \text{Profits} = -0.222222 + 2.222222 \times R27: \text{Positioning}. \]  

The statistical significance is achieved with RSquare = 0.62 and t-statistic substantially low. The equation (7) says that the profits are increased with 222% by moving the strategic position from BP to TCS in banking. This validates the hypothesis and the impact is twice.
Hypothesis 5 (H5) states that the sustainable commodity industry like banking is difficult to achieve the SLI positioning – as the industry is perceived to be commodity style and the have system level dominance in market place might be difficult to achieve.

The regression of response to question 15 (R15: Proprietary Standards) by the response to question 28 (R28: Commodity Play) is shown below.

Figure 32. Bivariate Fit of R15: Proprietary Standards by R28: Commodity Play

R15: Proprietary Standards = 1.1666667 + 0.1666667 R28: Commodity Play. (8)

The statistical significance is achieved with RSquare = 0.27 and low t-statistic.

The equation (8) says that the proprietary standards are increased with 1.6% by moving from the commodity game to de-commodity game in the banking. The negligible impact of only 1.6% by moving from commodity play to de-commodity play, achieving the proprietary standards might be difficult in banking.
The regression of response to question 16 (R16: Dominant Exchange) by the response to question 28 (R28: Commodity Play) is shown below.

**Figure 33. Bivariate Fit of R16: Dominant Exchange by R28: Commodity Play**

The regression equation is:

\[ R16: \text{Dominant Exchange} = 0.5833333 + 0.5833333 \times R28: \text{Commodity Play}. \]  \( \text{(9)} \)

The statistical significance is achieved with RSquare = 0.33 and with low t-statistic.

The equation (9) says that the dominant exchange is increased with 58% by moving from commodity game to de-commodity game in the banking. Although it has an effect of 58% we cannot conclude positively due to the low statistical significance in RSquare value.
The regression of response to question 17 (R17: Exclusive Channel) by the response to question 28 (R28: Commodity Play) is shown below.

**Figure 34. Bivariate Fit of R17: Exclusive Channel by R28: Commodity Play**

![Graph showing the relationship between R17 and R28.]

*R17: Exclusive Channel = 0.875 + 0.125 R28: Commodity Play. (10)*

The statistical significance is achieved with RSquare = 0.57 and t-statistic substantially low.

The equation (10) says that the commodity play in banking has 12% effect on achieving the exclusive channel.

The Dominant Exchange seems to be the only practical way to achieve the SLI positioning.
The regression of response to question 27 (R17: Positioning) by the response to question 28 (R28: Commodity Play) is shown below

**Figure 35. Bivariate Fit of R27: Positioning by R28: Commodity Play**

![Graph showing the bivariate fit of R27: Positioning by R28: Commodity Play.](image)

**R27: Positioning = 0.3333333 + 0.8333333 R28: Commodity Play. (11)**

The statistical significance is achieved with RSquare = 0.74 and t-statistic substantially low.

The equation (11) says that the commodity play in banking has 83% effect on achieving the positioning.

By combining equation (8) through (11), we can conclude that the de-commoditization has strong effect on positioning (83% according equation 11) and such positioning is possible by only achieving the dominant exchange (57% according to equation 10). Therefore, the hypothesis is proved to be wrong. Thus one could conclude that achieving SLI position in banking is possible with dominant exchange only, and the banks have to focus on doing just that in order to thrive in the industry for years to come.
**Hypothesis 6 (H6)** states that the R&D spending on OE (Operational Effectiveness) increases long-term profits, not necessarily short-term profits – as the spending on OE increases the process innovation it would take years to reap the benefits caused by such innovation.

The regression of response to question 26 (R26: Long-Term Profits) by the response to question 18 (R18: OE) is shown below.

**Figure 36. Bivariate Fit of R26: Long-Term Profits by R18: OE**

\[ R26: \text{Long-Term Profits} = -0.713376 + 1.1273885 \times R18: \text{OE}. \] (12)

The statistical significance is achieved with RSquare = 0.84 and t-statistic substantially low.

The equation (12) says that the spending on OE increases the 112\% long-term profits in banking.
The regression of response to question 25 (R25: Profits) by the response to question 18 (R18: OE) is shown below.

Figure 37. Bivariate Fit of R25: Profits by R18: OE

\[ R25: \text{Profits} = -1.019108 + 1.3248408 \times R18: \text{OE}. \] (13)

The statistical significance is achieved with RSquare = 0.77 and t-statistic substantially low. The equation (13) says that the spending on OE increases the 132% long-term profits in banking.

By combining equations (12) and (13), we can conclude that the overall profits are increased by 132% and long-term profits are increased by 112% as innovation in OE (Operational Effectiveness) increases. This is counter intuitive for the hypothesis. That means, in contrary to the hypothesis, both short term and long-term profits increase as spending in OE increases. This might be due to the fact that process innovation as a result of OE spending cut the costs in the banking resulting profits both in short term and long term.
Hypothesis 7 (H7) states that the R&D spending for innovation increases profits – as the spending on innovation results in product or service innovation that would create profits to the banks.

The regression of response to question 25 (R25: Profits) by the response to question 19 (R19: Innovation) is shown below.

**Figure 38. Bivariate Fit of R25: Profits by R19: Innovation**

\[ R25: \text{Profits} = -0.47561 + 1.0121951 \times R19: \text{Innovation}.\] (14)

The statistical significance is achieved with R Square = 0.47 and t-statistic substantially low.

The equation (14) says that the spending on Innovation increases the profits by 101% in banking.
The regression of response to question 26 (R26: Long-Term Profits) by the response to question 19 (R19: Innovation) is shown below.

**Figure 39. Bivariate Fit of R26: Long-Term Profits by R19: Innovation**

![Graph showing the bivariate fit of R26: Long-Term Profits by R19: Innovation](image)

\[ R26: \text{Long-Term Profits} = -0.268293 + 0.8658537 \times R19: \text{Innovation}. \] (15)

The statistical significance is achieved with RSquare = 0.51 and t-statistic substantially low.

The equation (15) says that the spending on Innovation increases the long-term profits by 86% in banking.

By combining equations (14) and (15), we can conclude that the profits are increased by 101% and long-term profits are increased by 86% as innovation increases. Therefore the hypothesis holds good here. However, the dilemma is as to why long-term profits are less than short-term profits and it could be probably because of the fact that innovation could easily be imitable by others in the banking industry thus there exits a need to constant innovation as explained by Delta Model strategic framework.

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Hypothesis 8 (H8) states that the R&D spending for customer targeting (CT) increases the profits – as the spending on customer targeting (or customer segmentation) increases the profits should increase due to the focused efforts on right profitable customers.

The regression of response to question 25 (R25: Profits) by the response to question 20 (R20: CT) is shown below.

Figure 40. Bivariate Fit of R25: Profits by R20: CT

\[ \text{R25: Profits} = -0.157895 + 0.9473684 \times \text{CT} \] (16)

The statistical significance is achieved with RSquare = 0.71 and t-statistic substantially low.

The equation (16) says that the spending on CT (Customer Targeting) increases the profits by 94\% in banking.
The regression of response to question 26 (R26: Long-Term Profits) by the response to question 20 (R20: CT) is shown below.

**Figure 41. Bivariate Fit of R26: Long-Term Profits by R20: CT**

![Graph showing the bivariate fit of R26: Long-Term Profits by R20: CT.](image)

**R26: Long-Term Profits = 0.0561404 + 0.7964912 R20: CT. (17)**

The statistical significance is achieved with RSquare = 0.76 and t-statistic substantially low.

The equation (17) says that the spending on Customer Targeting (CT) increases the long-term profits by 79% in banking. By combining equations (16) and (17), we can conclude that the profits are increased by 94% and long-term profits are increased by 79% as customer targeting increases. Therefore the hypothesis holds good here. This must be the reason why banks have to target the customers and segment to achieve the maximum benefit from them. For example Citibank uses relationship pricing to attract and retain the most valued customers while foregoing the less valued customers.
**Hypothesis 9 (H9)** states that the de-commoditization increases profits – as the commodity product or service is converted into high valued products it should generate the additional profits to the banks.

The regression of response to question 25 (R25: Profits) by the response to question 28 (R28: De-commoditization) is shown below.

**Figure 42. Bivariate Fit of R25: Profits by R28: De-commoditization**

![Graph showing the relationship between R25 (Profits) and R28 (De-commoditization)]

\[ R25: Profits = -0.041667 + 2.208333 R20: De-commoditization. \]  \(18\)

The statistical significance is achieved with RSquare = 0.65 and t-statistic substantially low.

According to the equation (18), the de-commoditization through TCS positioning has a 220% benefit in terms of profits for banks. Therefore the hypothesis is proved to be true. Thus, achieving the TCS by de-commoditizing the banking products or services is the key factor to have sustainable competitive advantage for banks.
In conclusion, the hypothesis testing reveals us that – the customer integration increases both profits and market share, and hence it increases the profitable market share, the customer share is more important than market share although the difference is smaller, customer bonding increases customer retention more than customer acquisition, the profits would be increased by two times when strategic option is moved from BP positioning to TCS positioning, the SLI position can be attained using dominant exchange, the spending in OE increases both short-term and long-term profits, the spending in Innovation increases the profits, the spending in CT increases the profits, and The de-commoditization would increase the profits.
4.6 Analysis by “Case Approach”

4.6.1 Introduction

Let’s consider the Citibank which is a global bank to study its business strategies for attaining the sustainable profits.

The Citibank (Citicorp or Citigroup) operates in over 100 countries, and it represents the world's most global financial services company. They have the scale, global infrastructure and experience to build and support integrated e-commerce service offerings, delivering an increasingly diverse and personalized set of global financial and business solutions for consumers, corporations, governments, and institutions. And as a local bank, serving growing companies in 78 emerging-market countries and territories, Citibank has the local market expertise to deliver tailored solutions around the world.

For financial reporting and internal operational purposes, Citigroup is largely organized into five groups: Citigroup Global Consumer Group, the Global Corporate and Investment Banking Group, Citigroup Global Investment Management, Citigroup International, and Smith Barney.

For our case study, let’s focus on retail banking, which is The Citigroup Global Consumer Group (GCG), comprising the financial service sector’s most diverse consumer product offerings such as banking services, credit cards, loans and insurance. It also offers
industry-leading advanced technology, a strong worldwide presence and a powerful global franchise in Citibank. In general, here onwards we refer Citigroup, Citicorp, or Citibank to mean Citigroup’s GCG group. In summary the Citigroup’s GCG group is divided into the following divisions.

- **Citibank**
  Banking, lending and investment services to individual consumers and small businesses, with up to $10 million in annual sales.

- **Cards**
  Credit and charge cards such as MasterCard®, VISA®, and private label.

- **CitiCapital**
  Provide truck, construction, material handling, healthcare and office equipment finance, as well as franchise and municipal finance.

- **CitiFinancial**
  Consumer finance and community-based lending services across North America, Europe, and Japan.

- **Primerica Financial Services**
  More than 100,000 full- and part-time representatives who help people plan their financial futures and resolve challenges along the way.

The branch networks of Citibank are extensively used for cross-selling other products and services within group divisions of Citigroup including Citigroup International division.

The Delta Model for Citibank is shown below.
The Citibank clearly started at Best Product (BP) by providing the differentiated financial products and services, then moved to Total Customer Solutions (TCS) by offering various globally diversified products and services that any customer could count on anything, anytime and anywhere. Now, the question arises can the Citigroup move to achieve the System Lock-in. The answer might depend on how effectively Citigroup utilizes the e-business to its advantage gaining the share of complementarities with collaborations, proprietary technologies and unified systems.

The system lock-in position for Citigroup depends on how successfully they sustain the complementor lock-in, competitor lock-out and has established proprietary standards.
However, the current competition is based on customer economics only. The company is focusing on reducing the customer costs and increasing the customer value and thus successfully achieved the strong customer share. The products and services are standardized and yet tailored to individual customer needs.

Let’s now examine some of the mini cases within Citibank to understand the business strategies it adopted and how they might fit in Delta Model strategy framework.

4.6.2 Citibank ATM Services

The Citibank was the first major bank who pushed the ATM technologies in 1980’s in the US and around the world. At the time, there were not many products or services that could be offered through ATM, and clearly there was no perceived differentiation over the traditional branch network. However, the senior management of Citibank had a clear vision that the technologies would defuse quickly in the market with many innovative products and services that could be offered through this new channel. Unlike other banks, Citibank had a CEO, John Reed, who believed in technologies and supported securing the budget within all business units to introduce the new products and services through ATM platform that had revolutionized the banking industry in just about 3 years.

For example, according to the Gartner study,
Strategic Planning Assumption: By 2007, 65 million U.S. adults will view their bills online, two-thirds of them at their banks' Web sites (0.7 chance).

The push for the ATM channel platform was neither intended to provide differentiated products/services nor low price products/services, but it was intended to provide customer satisfaction in banking with Citibank. The current product breadth offered through ATM includes:

- Fund transfer
- Account transaction
- Foreign exchange transaction
- Balance check and cash transactions
- Bill payments
- Integration with the global bank accounts

The ATM network itself grew from one bank to national banks to international banks to central banks of countries around the world. Thus Citibank established customer integration utilizing not only the technologies but also involving the industry players including regulators. It was a win-win situation for all. With this business strategy, Citibank not only could acquire new customers, but also retain them due to its leadership image in the banking industry.
4.6.3 Citibank 24x7 Products

Citibank was the first bank in Japan to extend the operation window for its products and services to 24 hours a day and 7 days a week in 1993. At the time there were many large Japanese banks, but nobody envisioned such services would become important to the customers. In fact, they openly criticized and wondered why Citibank was introducing such services. A manager of Fuji Bank said as follows.

“No Japanese customers would ever visit ATM after 5 pm and hence it is foolish to extend the ATM hours."

A representative of the Japanese central bank, Bank of Japan said as follows.

“According to the government regulation, if ATM runs out of the money in the night, there is no way the cash would be refilled by the bank personnel, but the regulation requires ATM should never run out of the money for more than 15 minutes, and therefore the extending service hours is not feasible under the current regulations.”

Unless the majority of banks and central bank cooperate, the Citibank couldn’t provide such service to customers because of the shared funds transfer network issues.

In spite of skepticism and opposition from several banks as well as the regulator (Bank of
Japan), Citibank continuously pursued its course with more vigor and convinced all over the time, and the success of this extended ATM hours is now shared by other banks as well. In the meantime, Citibank successfully integrated the customers using such products and services with extending hours benefits. In the process of creating such services, Citibank innovated many systems such the automated phone banking system, IVR (Interactive Voice Response System), paperless OCR system, and Citi-One integrated system. The Citi-One integrated system combined all internal customer accounts into one single view to help serve the customer efficiently. These all are truly based on Total Customer Solutions positioning approach.

4.6.4 Citibank Account Aggregation

Account aggregation is becoming very popular in the banking industry ever since Web Services technology was introduced by the software industry in the late 1990’s. Web Services provide a mechanism to integrate different systems of different organization in a seamless manner without any redundant software coding.

At that time people used to have multiple accounts with different banks, but there was no single unified way to access all those accounts. Citibank saw such need of the customers, understood the potential of web service technologies, and introduced account aggregation services which would integrate its customer account with the accounts of same customer at partnering banks. This service was successful and the customer satisfaction has gone up tremendously. Citibank might attain the SLI position with this service offering that
creates dominant exchange positioning in the industry.

The Citibank doesn’t seem to be interested in maintaining the exclusive channel positioning as it believes that such exclusivity may turn off both complementors and customers. For example, customers of Citibank could manage their accounts with the other banks (complementors) using account aggregation services. That way, they would be happy by being customers of Citibank. On the other hand, customers of other banks could also manage their accounts with Citibank using the other banks’ aggregation services and some of those customers might switch to Citibank in the future due to its leadership position and breadth of product offerings.

4.6.5 Citibank Relationship Pricing Model

Citibank is the first to introduce the relationship pricing model to effectively segment the customers based on their account balance, risk measurements and credit worthiness. In 1992, the number of accounts was growing at a phenomenal rate; however, the profit was not growing at the same rate, which made the bank to realize that it was better to lose unprofitable customers rather than retaining them.

There is free-lunch and Citibank follows this principle vigorously. However, it appears that some other banks are still having false dreams about free-lunches. For example, the non-performing loans (NPL) of Japanese banks skyrocketed due to their failure to account the customer risks and thereby many banks became bankrupt or had to be
consolidated. It’s still appalling to see that Chinese banks today have 1/3rd of their total loan portfolio is non-performing loan (NPL) and when I asked prominent bankers in China (during my recent visit there) as to why they are not learning from Japan about NPL’s potential to create a serious crisis, I was shocked to hear that it is market share growth that is most important than the risk measurement! It seems that Chinese banks are playing into the same trap as Japanese banks did in 1980’s during the bubble economy. Coincidentally, the Chinese government recently announced $2.5 billion free money for Chinese banks to write-off their NPL. The Chinese government reasoned it as a good thing to do under the circumstance that the international credit ratings of these banks could go down thereby foreign direct investment (FDI) will be severely impacted. It’s noteworthy to mention that the primary driver for Chine economy is the FDI unlike its Asian neighbor India where the growth is primary coming from entrepreneurship. Interestingly there was not much fuss about it in the world, maybe thinking that the Chinese NPL is small amount (nevertheless it is 30% of total loan portfolio in China!). I had an opportunity to ask one of the senior executive at one of the top Chinese banks as to how they could justify the tax payers money going as free for banks to write of NPL especially seeing the similar Japanese problem encountered before, and he said that $2.5 billion is nothing comparing to Japanese 100’s of billions of dollars. But, how could one compare China with Japan on absolute amount without considering the percentage of GDP basis when their GDP’s are significantly different? In terms of percentage of its own country’s GDP, the NPL of Chinese banks would be as serious as that of Japanese banks! As Hax Delta Model rightly suggests that using averages will not lead us anywhere, only the variability (the average with standard deviation) does.
To achieve the sustainable profits, Citibank quickly introduced the concept of fees on the customer relationship basis for not maintaining the minimum account balances, and it became very successful story in the banking industry. Soon many other banks followed the suite to do the same.

4.6.6 Citibank Credit Card

Citibank is the largest issuer of the credit card in the world. Although Capital One became successful credit card issuer with its innovative statistical models, Citibank remained the number one credit card issuer in the world. It issues credit cards, debit cards, and various hybrid cards. In 2002, Citibank had severed the relationship with its long-term credit card partner, Visa. According to Visa, Citibank was trying to enter into their space and dominate credit card business, and therefore wanted to limit the aggressive growth strategy of Citibank. On the other hand, Citibank thought the current fee structure agreement with Visa was unfair and wanted Visa to cut down the fees. Later, Citibank partnered with Master Card with competitive fee structure.

Being the number one issuer of credit cards in the industry and being the number one in the global retail banking industry, Citibank has a potential to attain the SLI positioning for credit card business by offering its own credit card rather than Visa or Master Cards similar to American Express. If they would be successful in doing so, Citibank will emerge as being in SLI positioning with proprietary standards.
Some analysts question whether growth will ever return to the levels that were considered normal for many banks in the '90s. The growth of credit card loan is at the lowest level seen in 20 years, so there is intense competition across that industry. The slowest growth could be partly attributed to lowest equity rates and hence people might not find a reason to choose credit cards. However, Citibank is still growing, which tells that there work towards lock-in position seems to be paying off.

4.6.7 Citibank E-business Initiative

When Internet’s promise became apparent in successfully creating new channel to reach the customers, Citibank quickly introduced online systems to offer its products and services in 1997. They not only provided the then existing products and services through Internet channel, but also created new offering tailored to the needs of the specific customer segment such as young customers, small business owners, affluent customers and international travelers.

Further they offered cross selling services through this new channel, such as investment banking products for retail bank customers, brokerage services for investment bank customers and retail bank customers, and insurance products for other group customers.

The Internet channel not only helped acquire new customers but also helped increase the satisfaction for the existing customers. The Citibank’s customer could visit ATM, pick up
the phone, fax order, or go online to conduct transactions without seeing any difference among all these channels. This was very important for Citibank to create a perception among its customers that banking with Citibank is simple, convenient and same banking experience with all channels.

Citibank focuses on streamlining end-to-end procurement processes through their global cash management, trade services and e-Business solutions. They have extensive experience in deploying and managing global applications, comprehensive network operations, and integrated hosting solutions.

Citibank is uniquely positioned to support the development and expansion of on-line, business-to-business marketplaces with secure payment services that help increase transaction throughput and market liquidity.

4.6.8 Citibank Smart Cards

In 1997, Citicorp spent $45 million on much publicized experiment in Manhattan, New York, on smart cards to help conveniently pay the small payments. This was the aggressive push yet again by Citibank to create another revolutionary channel for payment settlements. However, it was found little enthusiasm among consumers or retailers. According to the Citibank, although this initiative was not successful, “they did a pilot program not because they were sure that smart cards would immediately achieve fantastic success, but to learn how merchants and customers would interact with
this technology”. Some people say if Citibank introduced such smart cards directly to consumers by circumventing the merchants then the initiative would have been successful. However, Citibank choose not to disturb their Partnership pursuit for the sake of success of one initiative.

However, the hybrid Blue Card that can be used as either a smart card or a traditional revolving credit card was introduced by American Express with great success. The chip application incorporates a digital certificate that allows Amex customers to authenticate their online transactions with retailers hooked up to Amex's Web servers. The only piece of equipment customers need is an inexpensive card reader device linked to their PCs. Amex provided the readers for free in the first month of the card's introduction. A senior analyst at Tower Group Inc says as follows.

"The Blue Card has really rocked the industry. It brought the chip to the forefront, put American Express in a leadership position and linked smart cards to the Internet.”

The Blue Card's great achievement was circumventing the merchant interface required for most other smart card applications. Merchants have historically avoided smart cards because of the cost of replacing or upgrading their card-reading infrastructure.

Taking the advantage of latest market diffusion, the Citibank is once again planning to enter into this space to exert its leadership position based on the fact that there were the first one to introduce the smart cards in the market.
4.6.9 Citibank Partnering Strategy

Using technology, the initial response of American banks was to offer new products and services, thereby creating greater competition and, subsequently leading to greater risk-taking. Increased risks taken by banks necessitated greater capital, which need American banks met by either merging with traditional banks, which is the business strategy of Chase Manhattan or Banc One; or by seeking partners that offered non-traditional products and services, which I the business strategy of Citibank. Because of this partnering strategy, Citibank is able to establish complementors in non-traditional banking business such as travel industry and insurance that would create proprietary standards in the future that in turn help attain System Lock-In positioning.

4.6.10 Citibank CRM Strategy

The Citibank implemented the CRM (Customer Relationship Management) systems marry the technologies with business processes to reap the benefits of internal capabilities hidden in various systems, people, processes and organization structures.

[Gardner 2000] emphasized the importance of technology in coping with the changing world of banking. With the drop in its cost came a dramatic increase in the use of technology. Banks have increased the products and services offered, while reducing the cost of servicing their customers. This expanding use, however, has increased the risks associated with technological failures. As an example, Gardner cited the significant
cost associated with the Y2K problem - $600 million dollars for Citicorp alone. In addition to these risks are problems like fraud, the illegal use and plain operational errors arising from such critical applications as electronic fund transfers. Consequently, regulators now require risk management procedures and disaster management plans for technology-based products and services.

[Hempel and Simonson 1999] indicated that future applications of technology in banking will not be confined to the cost-efficient processing of financial transactions. At issue will be who does a better job of capturing and using information contained in the transactions themselves to get a bigger share of the financial business of the clients, the so-called customer relationship management or CRM.

Although the manufacturing industry aggressively implemented the supply chain system in late 1990’s and early 2000’s but some banks such Citibank have recently found that such systems are helpful for them in enhancing the visibility of the total value chain, not just at customer service level. Thus banking industry is transforming itself from service industry into more of a manufacturing industry, and that too with a greater accuracy of transactions than ever before.

**4.6.11 Citibank New Branch Initiative**

Citibank has introduced a new initiative to emphasize the importance of the branch offices to serve the customers well and to retain the profitable customers. Many
traditional banks such as Banc One and Chase Manhattan Bank tried to reduce the cost by cutting the number of branch offices, but it impacted badly their ability to serve the customers well. On the other hand, there are many online banks such as Sony Bank and Net Bank that have never established branch offices to avoid their huge costs.

The Citibank, however, made a conscious decision to increase the number of branch offices while offering online banking services, which utilized the best of both world class systems and integrated their customers by providing total customer solution with unique customer experiences. The customer experience itself is being transformed from one level to another higher level.

According to Joseph J. Plumeri II, head of Citigroup's North American branch system, he is waging an ambitious campaign to transform the bank's 450 U.S. "financial centers" (branches) into places where committed employees use advice-based selling to help customers with their financial services problems. In fact, he's downright evangelical about the matter. "I think a lot of people who walk in and out of bank branches every day need to be saved," he says. [Banking Strategies]. He further says it's the dialogue with customer that matters most, and he preferred to call them clients rather than customers.

I believe that the organization has to be a “dialectical being” in order to understand the customer’s requirements and to provide the value based solution to meet those requirements, and the spirit of this “dialectical being” cannot be achieved in trust based industry such as banking without having Total Customer Solutions positioning.
When Citigroup burst onto the scene with its powerful blend of banking, insurance and brokerage operations, however, consultants Carroll and John Rosen sounded an alarm about cross-selling. In "Making the Most of Citigroup," January 1999, the two pointed out that the foundation of cross-selling is establishing an advisory relationship with clients, but that advisors can hardly be objective if their every solution consists of a proprietary product offered by the parent company. In subsequent interviews [Banking Strategies], Citigroup's Joseph J. Plumeri (November 1999) and his successor, Marge Magner (November 2000), defended their products as being best-in-class. This indicates that Total Customer Solutions should be accompanied with Best Product strategies for banks to sustain in the business.

The total solutions offerings based on customer needs is also supported by some other banks. For example, Charles W. Scharf, EVP and Retail Head at U.S. Bancorp believes good service includes needs-based cross-selling. "You are not going to grow your business over time by saying 'thank you' to people. You're going to grow your business over time by doing the right things for customers, which means making their lives better with your products and services." [Banking Strategies]

In conclusion, Citibank would aggressively pursue the TCS positioning while at the same time it will try to establish the SLI positioning by deploying the technology that creates more personalized customer experiences. To do so, they will tap into a “small-town” style of an earlier era to mask their big-company size. The Citibank is constantly
looking to find ways to innovate and adopt strategic business strategies to help improve trust with customers, and it truly believes that the profits will follow with this trust.

4.6.12 Citibank Global Sourcing

Although there has been huge discussion about the outsourcing and its implications on US economy, Citibank has adopted the global sourcing strategy from 1980’s with innovative business model. The bulk of the work is not outsourced to offshore consulting companies; instead they source from their subsidiaries that were established in offshore back in 1980’s. That way, Citibank has established good working relationships with offshore subsidiaries to do the outsourcing software development but bulk of such activity will not come into purview of the current outsourcing / off shoring definition. Citibank did this long before everybody is trying to catch-up with it because they say the potential impact of such off-shoring service on delivering the Total Customer Solutions to its customers. The off-shoring provided the Citibank with benefits of not only cost effective but also ability to provide high quality products in a timely manner.
Chapter 5

Conclusions and Recommendations

5.1 Conclusion

The dynamics of banking industry is presented at first, followed by the literature study of business' strategy frameworks and then suitability of the Delta Model for banks is described. Finally, the Delta Model was analyzed for banking industry using three different approaches: System Dynamics Approach, Data Approach, Survey Approach and Case Approach.

The banking industry is found be in commodity-like industry and differentiating the products and services is difficult to achieve, and moreover imitation of the product or service of a bank is not a daunting task for other banks. However, some banks are making sustainable profits while others opting for M&A to stay in business.

The investigation of various business strategy frameworks revealed that the Five-forces of Porter’s strategy framework is useful to study the banking industry’s competition from outside-in but this framework is static and hence doesn’t explain the dynamic nature of banking industry. According to the Resource Based View strategy framework, the decision making could be made in sequential manner as time changes, but it explains
only from the standpoint of inside-out. According to the Core Competencies strategy framework, maintaining the firm-specific core capabilities provides competitive advantage, which is similar to Resource Based View.

The Hax’s Delta Model provides the complete integrated strategy framework for banks from the standpoint of both outside-in and inside-out. It immerses one in the process of making business strategies at both corporate and strategic business unit level. Further, it describes the adaptive process by linking the business strategies with drivers such as customer targeting, innovation and operational effectiveness. Finally, it provides granular metrics for performance measurement and feedback mechanism to adopt the dynamic business strategies for changing business or industry dynamics. Unlike alternative business strategy frameworks, Delta Model provides a dynamic view with three distinct positioning options centered on the product share, customer share and market share.

The customer bonding is another unique feature of the Delta Model that sets apart from the other strategy frameworks. In a nutshell, the Delta Model is about positive-sum business strategy game where in one could thrive in business without knocking off others, while Porter’s model is about zero-sum game where in one must kill others to sustain in the business. Whereas, both Resource Based View model and Core Competencies model are about finding arbitrage in the industry and building the internal resources accordingly. In other words, the Delta Model explains well both in war time and peace time of the industry.
Thus, the Delta Model is best suitable for banking industry which encountered several war times (burst times or recession times or economy contraction times) and several peace times (bubble times or boom times or economy expansion times), and moreover it doesn’t box-up the business strategy, rather it provides open process to steer the business strategies to meet the changing times in order to provide sustainable superior performance.

The analysis of the System Dynamics Approach gives us the total understanding of the all different intricacies involved in the strategic positioning associated with Delta Model, and how the activities and positionings would interact each other in holistic view. It revealed that SLI positioning is possible, in contrary to popular thinking, in the banking industry. However, the banks should attain such SLI positioning through TCS, not directly through BP.

The analysis of the Data Approach tells us that the banks increase the earnings by 3 (387%) times as they move from BP (Best Product) to TCS (Total Customer Solutions) positioning. However, the statistical significance of this finding is at low level. The negative earnings growth is never occurred when a bank is heavily positioned at TCS. Whether Japanese bank or American bank, the earnings growth is dependent upon the its positioning. Japanese banks such as Mitsubishi Tokyo Bank have attained sustainable growth when they adopted the right positioning and right customer segmentation in US. The banks are able to de-commoditize the product and service offerings by customer bonding (TCS) and thereby reaping the profits.
It proves the point of Delta Model that the profits should not necessarily come from products themselves but they could from customers’ willingness to pay for those products. In other words, overall value creation to customers could be higher than the value created by product itself, and sometimes the value captured by the banks could be higher than value created to customers because of additional value could come from long-term relationships of customer retention, customer bonding, system lock-in, etc.

The Banks do have SLI positioning currently at product or service level, but not at bank level as a whole. However, the banks appeared to be poised to attain such SLI position for number of dominant products or services in the near future.

The analysis of Survey Approach reveals that the earnings would increase by 197% when transitioned from BP to TCS positioning. This figure of 197% (twice) growth contrasts from the figure of 387% (thrice) obtained from Data Approach. Since the statistical significance of Data Approach is lower we could consider the 197% growth resulted from Survey Approach is more accurate. We could also draw an inference that there is at least 197% growth (maximum of 387% growth). It appears that the product differentiation is the key as opposed to low price in BP positioning. The need-profiles of Cross-LOB have much room to improve in achieving the horizontal product breadth of TCS positioning. The Value-led customization and Tenure-enhancing products will have to be increased to gain the customer bonding, thus further enhancing the TCS positioning. The collection of customer needs and establishment of appropriate service channels to direct the customers automatically are critical to improve the redefinition of
customer experience among the banks, which would enhance the TCS positioning.

The banks appear to be trying to achieve the SLI position mainly by establishing the dominant exchanges and they seem to have difficulties in creating exclusive channels. Most of the banks are appear to be doing customer segmentation however there is much room to catch-up with the leaders in the industry. The operational effectiveness is another area banks seem to have room to improve. Those banks that are poor in innovation need to improve their status in the market. Although many banks are trying to establish market share, only few banks are good in customer share.

While majority of banks are focusing on customer acquisition, few banks are in fact achieving the good customer retention that is the key for bank. Even though short-term profits are low some time because of capital expenditure, the R&D appears to be creating the long-term profits.

All banks are positioned either at BP positioning or TCS positioning, and none of them are at SLI positioning. However, some products or services seem to have SLI position within banks, but no bank as whole seems to have the complete SLI position in the industry.

The banks are de-commoditizing the products and services to compete in the market, however, there are few banks that are still competing by playing the commodity game. This shows that the arbitrage in banking still exists while the competition is heating up
from all sides.

The hypothesis testing reveals us that – H1 (true): the customer integration increases both profits and market share, and hence it increases the profitable market share, H2 (almost true): the customer share is more important than market share although the difference is smaller, H3 (true): customer bonding increases customer retention more than customer acquisition, H4 (true): the profits would be increased by two times when strategic option is moved from BP positioning to TCS positioning, H5 (false): the SLI position can be attained using dominant exchange, H6 (true and false): the spending in OE increases both short-term and long-term profits, H7 (true): the spending in Innovation increases the profits, H8 (true): the spending in CT increases the profits, and H9 (true): The de-commoditization would increase the profits.

5.2 Recommendations

Considering all the above findings and analysis, we would recommend that the banks may pursue the TCS positioning by customer bonding and adopt the strategic option of dominant exchange to secure the SLI position. Interestingly, unlike biotech companies (or some pharmaceutical companies), the banks cannot attain SLI positioning directly from BP positioning, and they have to go through the TCS positioning.
5.3 Further Research

The research work presented here could be extended to analyzing the performance of banks at each strategic business unit level or customer segment level in order to understand the intra-firm dynamics of strategies within each strategic positioning. The same analysis could be applied to other industries as well to compare and contrast the differences among the industries.

Further, we could apply the analysis by involving the external factors such as government regulations and economic considerations, and environmental factors such as social and political situations.

Finally, the system dynamics model could be simulated for specific banks using model’s stocks and flows concept in order to understand the effect of each strategic activity associated with the Delta Model’s strategic positioning and in relation to the banking industry’s overall performance.
Chapter 6

References


[18] Banking Strategies, BIS

[19] Tower group Inc

[20] Citibank website


[22] Boston Consulting Group

[23] Mckinsey & Company


