

**HAIGAZIAN UNIVERSITY**

**THE IMPACT OF LEBANESE CUSTOMERS' PERCEPTION  
ON THEIR BANKS' NEW PRODUCT DEVELOPMENT  
PROCESS.**

**By**

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A Thesis

Submitted in Partial Fulfillment of the Requirements for the

Degree of Master of Business Administration

To the Faculty of Business Administration and Economics

At Haigazian University

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# HAIGAZIAN UNIVERSITY

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## **AN ABSTRACT OF THE THESIS OF**

**Liza yeghia Tchobanian                      for      Master of Business Administration**

**Major: Management**

**Title   :   The Impact Of Lebanese Customers’ Perception On Their Banks’ New  
Product Development.**

This research was conducted in order to determine the characteristics of successful product development which are the factors that influence customers’ choice of banking products and their adoption and have an impact on their satisfaction and loyalty. Also to determine whether the customers of Lebanese banks perceive their banks’ new product development process to be successfully meeting their expectations and whether this perception contributes to their being satisfied, loyal and advocates of their banks. Another objective of the research was to determine whether there is a difference between the customers of Lebanese “Alpha” banks and the customers of the rest of the banks in terms of perceptions and impact of perceptions.

An empirical study was performed, using survey research. The data was collected through a questionnaire administered to 140 respondents. The questionnaire was developed based on extensive literature review.

The results of the study indicated that out of all the independent variables “products meeting customers’ changing needs” and “products having friendly technology ” have significant effect on customers’ satisfaction, “products having anytime anywhere banking facilities”, “convenience of products” and “products meeting present needs of customers” have significant effect on customers’ loyalty, and “products meeting customers’ changing needs”, “innovative yet easy to use products” and “ products having anytime anywhere banking facilities” have significant effect on customers’ advocacy to their banks.

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# **CHAPTER ONE: INTRODUCTION**

## **1.1 Significance of the Thesis**

The highly competitive global market we are living in nowadays is redefining the way many organizations do business. A competitive global market in its strict definition sums up an economic cycle with winners or losers. Managing new product development (NPD) in one way or another is a direct indicative to distinguish between winners and losers in the market. The losers are usually organizations, banks, companies which continue to do the same thing that they did before, yet hope for a different outcome. The winners are those that will emerge stronger than their competitors; to do so a new and powerful approach in the field of product development is required. New product development (NPD) is currently of the most prominent yet intricate activities in the market (Clark and Wheelwright, 1995). This concept has unsurprisingly been one of the top appealing subjects by not only business researchers but also practitioners in the market due to its widespread recognition as a strong indicator and determining factor of competitive benefit for businesses in the marketplace (Singh, 2006).

In today's competitive marketplace, banking is the most progressive industry and new product development is appreciated now more than ever before as a key component of sustainable growth, and thus the best banks succeed to bring about fruitful innovative products annually to be more competitive in the market. Banks' new products have become increasingly more complex and diverse in response to competitive pressures and the constantly changing consumer demands. The interaction between the new innovative product and the bank is chiefly associated with subsequent success of the product. New products must be embraced by every bank which intends to survive in the market place.



The moment banks realized the importance of the new products and became aware of their benefits the number of new products launched into the marketplace amplified dramatically. Banks have been in the pole position with respect to the other firms in the industry that are integrating the concept of new product development mainly through technologies not only to improve service efficiency but also the service quality and to achieve success in order to remain a key player in the market compared to their competitors. This concept will also lead to lowering cost which in turn will provide the opportunity of increasing market share on one hand and expansion on the other and most importantly will achieve higher levels of customer satisfaction. NPD points the customer in the spotlight, and the way customers perceive these new products is an important subject that banks should take into consideration when applying the new product development concept, since this is one of the main reasons why the customer prefers their product or service over the others. Therefore the need to offer new products and services of value to attract and keep customers is not any more a matter of choice, but a necessity for most banks. So for the banks the product developments have become actual tools to sustain their vitality in the present day competitive market and to satisfy the needs of the customers.

This research will focus mainly on how Lebanese customers perceive the Lebanese banks and to what extent they believe that these banks are implementing the concept of new product development, also and the extent of satisfaction they are getting from these new products.

## **1.2 The Need for New Product Development**

A successful product development is a path for organizations in order to improve and sustain their competitive position in the market. The undercurrents of markets, technology, and competition have conveyed changes to almost every sector in the market and have made NPD

most probably one of the most influential business activities. It is essential that businesses utilize NPD to stay on top of their competition at all times, new products often change our lives in almost every aspect be it at work or at home and even in most instances the way we think, they even raise the level of sophistication at certain instants. Businesses cannot survive if they continually offer the same unchanged product; otherwise sales would decrease reducing profit. New product development is defined as the use of new information obtained from the wants of the market at that time to offer a new product or service needed by the consumers (Afuah, 1998, pp. 13). New product development generates offerings that are either genuinely new to the world or the market or a specific industry (Garcia and Calantone 2002, p. 118).

A new product or service can achieve success only if the product in its development process successfully chains current technological trends together with the wants and needs of the consumers. New services or products may be modified versions of previously utilized ones or can act as supplements to them or can even be improved versions to existing ones, and may be entirely novel products based on new technological enhancements that require no support from previously used services or products. Apart from all the existing challenges in the development of a new product the real challenge remains the launching of a new product or service that will win.

Business firms spend large sums of money for NPD and the process of development of a new service or product by the banks, for example, arises either due to the development of a novel technology or the generation of a competitive service or product or due a modification in the current legal charter. Banks' survival in the competitive market depends mainly on two factors; the first being the quality of the service provided and second being the product or service itself being provided by the bank, to reach the best quality and attaining long-term success in the banking sector banks need to develop new products and services. And due to the above

mentioned reasons NPD is most probably the activity of utmost importance and significance within the banking sector.

It is also however one of the riskiest ventures a bank undertakes, sometimes years and many millions are spent in the development of products that usually fail far more frequently than they win. The best banks are always the ones that succeed to create new successful products annually. With the flare-up in technological advances, it is currently possible to virtually share any piece of information be it visual, auditory or even in simple data form within milliseconds. The banking industry has of course been taking part in the technological revolution to keep itself up-to-date with the current trends especially in converting its paper and branch banks into digitized and networked banks.

The digital revolution has not only changed how banks run especially when it comes to their accounting and management system but is currently focused on digitalizing the means of delivery of the services on one hand and their interactions with the customers on the other. A typical transaction that once cost almost a dollar in a typical bank or sixty cents via a phone call as claimed by the Finance and Development magazine can currently cost as little as two cents (Nsouli and Schaechter 2002) and this is primarily due to the new development of the new banking products and services.

### **1.3 Why Study New Product Development**

Due to the vast changes on many levels be it with respect to technology or the constantly changing needs of ways of customers that are getting more and more sophisticated with the vast change of trends or be it due to the economic uncertainties and a market that keeps on rapidly and frequently changing and creating fierce competition banks need not only adopt and face these challenges effectively to ensure their survival but also have to successfully differentiate

themselves from their competitors by depending on the benefits of novel products and services since differentiability based on price only which happens to be very limited has proven to be very insufficient (Lovelock 2001; Flier et al. 2001).

Therefore banks look at new products and services not only as key factors for their growth but also to differentiate themselves in the market and most importantly to shift from traditional banking to a digital one. NPD together with technology revolutionized the delivery of banking services to the consumers be it modern interactive ATMs, online banking and mobile applications.

It is obligatory for banks to arrange their services and products with accordance to customers' needs, their sophistication and even the technological advancements. Thus successfully develop a new product a firm must have excellent knowledge firstly of its customers, their wants and needs and secondly of the market where the new product or service will be launched.

So every bank must be focused on continuously developing ways to stay in touch and on good terms with its customers who are becoming increasingly sophisticated, and thus to remain competitive in the market by having a large clientele.

There are many reasons to study new product development at banks, but two general objectives stand out:

- ✓ The degree to which customers can actually benefit from the newly developed banking products and services.
- ✓ The NPD serves the public and promotes a competent and successful banking system.

Many different decisions of the banking sector are involved with NPD and its actual costs and benefits. These originate from the fact that banking industry is the key importance to economy and some major banks have been faced with severe financial problems in the past years which

means NPD is regarded as a key factor to solve problems and ensure the survival of these firms on the market.

In addition NPD at banks has been drawing major attention as a modern solution to vast technological changes in the industry especially with the development of mobile and online banking, networking and data processing as well as the development of intricate new means of financial instruments and practices for risk management. These advancements have not only made banking at ease but have also managed to bring customers closer and closer to the bank for they not only save time but also have made banking for customers as easy and less time consuming venture which in time attracts more customers to the banks and allows their expansion.

A literature review on NPD will follow.

## Chapter Two

### Literature Review

In the following pages we will discuss the major components of NPD as describes by different researchers and theoreticians.

We will start by a definition of NPD and describe the different stages of the NPD process.

#### **2.1 Definition of New Product Development**

Growth is essential for survival and in order to grow firms must keep on learning and adopting means which ensure their growth and hence their survival in the market. The learning process is ensured primarily by research and most importantly by making a difference in the marketplace, i.e. firms survive if they take the role of a pioneer in the market (George Gruenwald, 1995).

New products range from a product that is completely novel to the market to a product or service that is new to an industry or to a service that is modified and even a product that is perceived to the consumer as new yet it could simply be a modified version, of a previously existing product.

A successfully launched new product benefits not only the market but also the firms implementing it as well as the consumers utilizing it. A new product increases sales, ensures economic growth and profitability. NPD converts opportunities and technological advancements into winning products in the market and ensures economic success. Thus a new product concept should possess two characteristics quality and profitability:

- ✓ Quality is a direct indicative of the extant of satisfaction as customer receives from the new product or service.

- ✓ Profitability is a direct indicative of profit generated via the new product or service.

Cooper (1995) suggests ten performance measures of NPD utilized by a company which are:

Success rate	Percentage of sales
Profitability relative to spending	Technical success rating
Sale impact	Profit impact
Success in meeting sales objectives	Success in meeting profit objectives
Profitability relative to competitors	Overall success

Due to changes in technology and consumers' wants, the importance of new product development has increased and thus every organization has started opting for its survival in the marketplace, and the survival is highly conceivable either by the development of a novel product or service or by the use of an imitative concept or product or even with a product that has undergone minor or major modifications and is re-launched in the market (Dodgson 2000). This concept is more illustrated in the below by Cooper (1993) in the following table.

High	New Product Lines		New to the World Products
Newness to Company	Improving existing products	Additions to existing products	
Low		Repositioning	
Figure 1: Categories of a new product (Cooper 1993)	Low	Newness to market	High

The study of NPD as well as the procedures and means that they are developed through to come to light is very essential because NPD is not only accountable for employment and economic progress but also for technological improvement and higher standards of living. Managing these

procedures however has proven to be cumbersome and challenging for the firms employing it since it not only requires the use of both financial and human resources extensively but it is also very time sensitive. Apart from these tedious processes NPD still proves to be very risky since 25 – 45 % of these products are doomed to fail and some don't even make it to the market even after all the resources employed to obtain it (Crawford, 1987; Cooper, 2001).

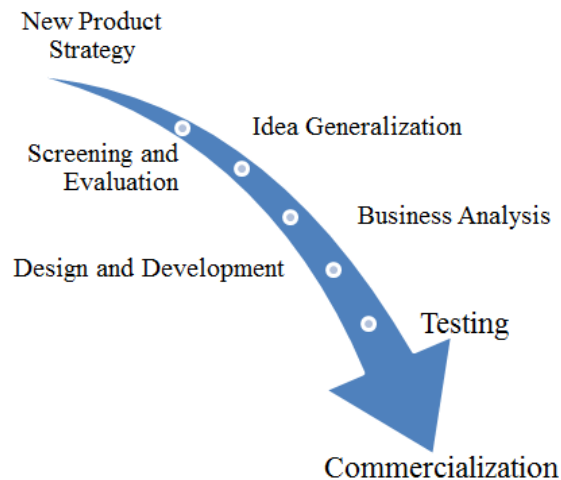
Even with all the thorough research on achieving guaranteed success for NPD, firms still deliver new products that fail once launched in the market. This fact places NPD among the most perplexed as well as the riskiest task a firm has to undertake bearing in mind that the more the resources and time invested in NPD the higher the pressure in maximizing returns become.

The NPD process involves two main features: the developing phase and the market launching process. The former begins with the generation of an initial product concept that evolves over a sequence of stages that includes evaluation of the concept, its development, testing and launch into the market (Booz, Allen & Hamilton, 1982). This is the information gathering and evaluation stages. Throughout the evolvement of the product evaluation and testing provide important insight about the product success, the firms become more knowledgeable about the product and would either be reassured or uncertain about its launch. This phase creates room for evaluation which in turn can give the green light for launch or require reassessment of the initial decision to launch the product. Hence the evaluation phase is essential in the course of the development of the initial idea into a modified and improved NP or its utter rejection thus limiting the failure and minimizing the risk and the loss of resources in vain.

The NPD process tends to be quit diverse since it depends on the firms whose needs and resources tend to be quit variable from one firm to another. Thus, some companies have some quit personalized NPD processes that depend primarily on their specific needs as well as their own available resources.



A generic model however has been devised by Booz, Allen & Hamilton, better known as the BAH model that underlies the general steps of most suggested NPD processes. It was found by Booz, Allen & Hamilton, that all the firms that had a personalized formal NPD process managed to successfully launch a somewhat successful product to the market stating that their processes pass through the BAH model stages in one way or another.

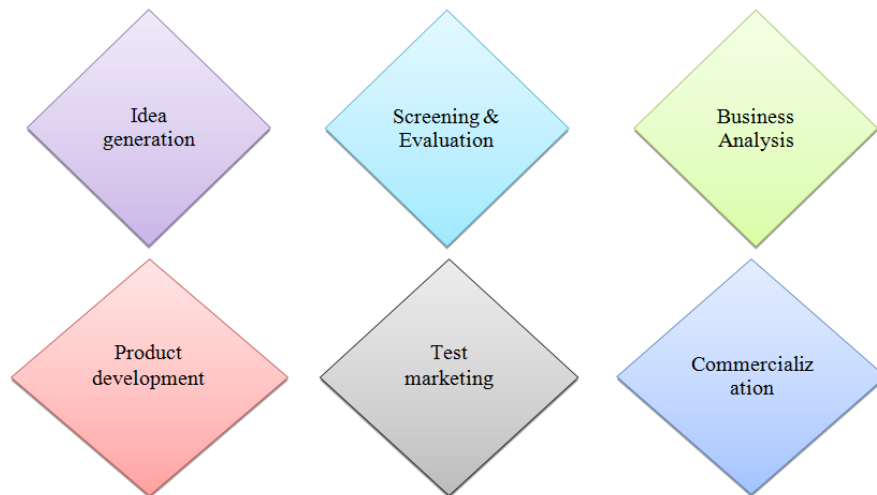


Amidst the competitive marketplace the companies that survive are those ones that successfully manage to fulfill and satisfy their consumers' needs better than the rest of the firms' products. Thus it is imperative that companies primarily research the needs and wants of their consumer base and then compose ideas and concepts that will provide utmost consumer satisfaction. Bearing the above in mind and together with the fact that statistically only one new concept out of seven generated ones actually succeeds, when four initially enter development and one and half gets launched to the market, makes NPD one of the most crucial decisions to be undertaken by a firm and it is extremely critical in order to know how to choose the best product that will lead to the efficiency, effectiveness and competitive advantage of the company and be crucial for its survival.

## 2.2 Stages of the New Product Development Process

Nowadays it is very challenging for any bank to carry on with an existing product continuously so they end up spending a lot time and resources on the development of new products. As mentioned previously, developing a new product is done through many stages. The process of passing through these stages is the sequential process for moving a new service or product from being just a brainstormed concept into launching it effectively and efficiently. Each stage is intended to collect data required to transfer the project ahead to the next level or “decision point”.

The NPD process starts off with brainstorming the initial concept be it via a meeting or through a workshop, these concepts come about from a thorough study of the present technology and customers and it is best if study combines understanding of both. The stages of the process are presented in the document below.



Stages of New Product Development (Booz, Allen & Hamilton, 1982)

In order to know if the concept can proceed ahead the developmental process an evaluation takes place, if the concept passes the evaluation the new product continues along with the process if it fails to do so it is rejected.

- **Idea Generation**

The need for NPD becomes apparent when the utilized product of the firm tends to become obsolete with respect to either time or technology or even both at some instances. The process of NPD is then initiated by the generation of an idea which can be done through background research of the market like for example customer liking or disliking, or competitor strategy etc...

New concepts can be created by:

- ✓ Conducting marketing research to come up with an invention of the consumers' needs and wants
- ✓ Accepting suggestions from consumers and/ or employees
- ✓ Brainstorming ideas for NP ideas
- ✓ Searching in various national and/or international markets for new-product ideas
- ✓ Consulting expert agents and getting feedback from services offered by competitors.
- ✓ Analyzing and examining the new products of the competitors

- **Screening and Evaluation**

The second stage of product development process is the idea screening, in this stage the bank has a number of ideas where the good ones are accepted and the bad ones that could not be profitable for the bank are rejected. Prior to any selection or rejection of an idea, the following questions have to be probed:

- ✓ Is the introduction of a new product essential?
- ✓ Would the current plant and machinery (resources) produce the new product?
- ✓ Would the current marketing network be able to sell the new product?
- ✓ When would the new product breakeven?

If positive feedback is received after probing the previous questions the NPD is adopted or else it is rejected. If rejected this means that the new product ideas are either outside the fields of the bank's interests or the bank does not have the necessary resources or technology to produce that product. And if the bank accepts the wrong ideas and implements it, loss of resources follow which include monetary, time, and energy losses. So the sooner a bad concept is rejected the better it is for the firm. This step is essential to avoid product failure.

- **Business Analysis**

Business analysis is of high importance in NPD. It is where the bank discovers whether the new concept is commercially gainful or not. It is through business analysis that following become apparent to the bank:

- ✓ To explore if the newly developed product is commercially profitable or not.
- ✓ What would the cost of the newly developed product be?
- ✓ Is the new product developed in demand?
- ✓ Is the demand for the new product seasonal or regular?
- ✓ Does the new product have any competitors?
- ✓ What would the total sales of the newly developed product be?
- ✓ What will be the expenses on advertising, sales promotion, etc... the budget.
- ✓ How much profit the new product will earn.

So, the banks study the new concept from the business point of view. If it is profitable it is adapted else it is rejected.

- **Product Development**

In this stage the bank decides to present the new concept to the marketplace. The bank takes the required steps to create and then issue the new product to the market. A development report is prepared with the result of the studies and handed to the management, including (i) the required plan design; (II) the production facilities' design; (III) the tools requirements; (IV) the marketing test plan; and (V) the financial program survey. Hence, it is the duty of the production department to create the product and the marketing department to issue it while the finance department delivers the finance for introducing the new concept and finally the advertising department plans the ads. However, all this is done on a small scale to be followed by the Test Marketing step.

- **Test Marketing**

This is the stage where the product is introduced in a very small market on a very small scale. In order to introduce the product on a large scale in later advanced stages, it should achieve success in this small marketplace. However, if the product fails to yield expected results in the test market the bank searches for possible reasons for failure. Once the reasons of failure become apparent to the bank, it then makes the necessary changes in the new concept prior to re-launching in the small market again. If the new concept fails yet again the bank rejects the product. Thus test marketing it is a safety device. Even though it requires a lot of time and resources, its helps avoid large scale failure.

- **Commercialization**

If the previous stage, the test marketing, is a success, then the bank introduces the new product all over the country, on a large scale. At this stage the bank makes a large investment in the new

product, produces it and distributes it on a huge scale. The bank publicizes the new product to the mass media like the TV, radios, newspapers and even magazines, etc. This is the last stage the launching or the commercialization stage where the bank engages and commits to introducing the product into the marketplace.

### 2.3 New Product Development Life-Cycle Strategies

Once launched a firm opts of a long market life for the product. A lot of resources went into the realization of the final product so every firm wishes to make a decent amount of money to cover all the expenses used to create that product. The life cycle of a product ranges from the product development to the decline stage where the product becomes obsolete. Every product has a timeline unique to it so not all products strictly follow the five stage life cycle model; some decline quite shortly after launching others stay in their mature phase for a very long time.

Below is a brief description for the five stages:

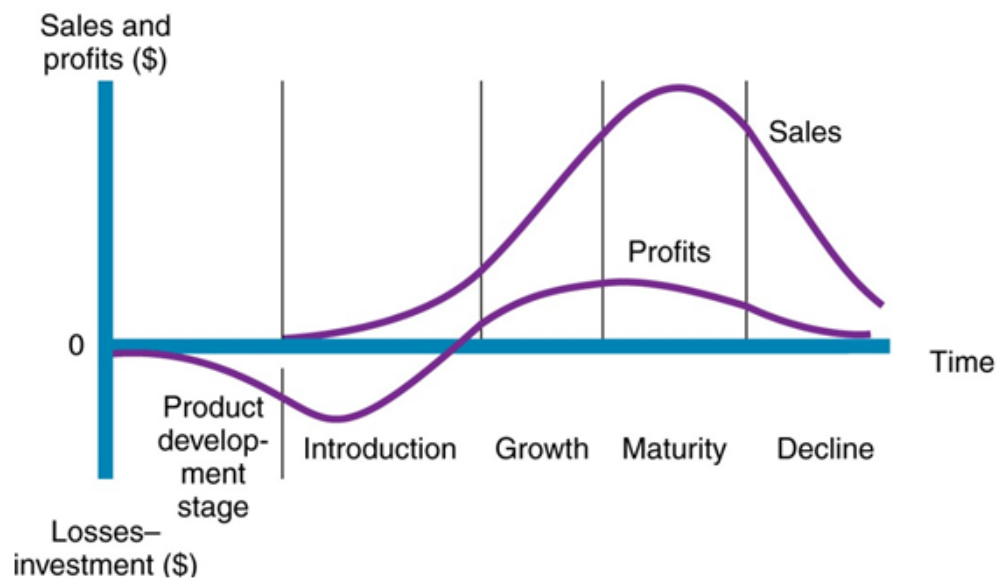


Figure 2.6: Stages of Product Life Cycle (Graeme 2001)

Source: Graeme 2001.165

- **Product Development Stage**

This stage is initiated with the adoption of a new concept whereby the firm spends resources to develop a new concept or product this stage is characterized by expenses and costs are sales are null:

In this stage:

- ✓ The bank develops a new product idea
- ✓ Sales are zero, no sales
- ✓ Very high investment costs
- ✓ Negative profits

- **Introduction**

Once the product is launched to the market it undergrows a slow growth this stage is characterized by almost nonexistent sales due to the product introduction expenses.

This stage is characterized by:

- ✓ Sales are low
- ✓ High promotion and distribution expenses
- ✓ Very high cost for every customer attained
- ✓ Profits are negative
- ✓ The targeted customers are the Innovators
- ✓ Competition is low

- **Growth**

The stage where the newly produced product satisfies the marketplace is called the growth stage. At this stage sales will start to climb quickly; this is the stage where the product gets rapid market acceptance and the profits increase.

This stage has the following characteristics:

- ✓ Fast sales increase
- ✓ Increase of profits
- ✓ The customers targeted are the early adopters.
- ✓ Competition grows and banks also must meet the competition
- ✓ Banks enter new distribution channels and new market segments

- **Maturity**

Once most potential consumers have already made use of the product, the product enters a slow sale phase. The profits level off and decrease either due to competition or the launching of a newer product. This stage is longer than the rest.

This stage has:

- ✓ Sales are the highest
- ✓ Lowest customer cost
- ✓ Very High profits
- ✓ Customers being targeted are the middle majority
- ✓ Competition starts to decline
- ✓ Dropping out of weaker competitors , the industry contains only well-established competitors
- ✓ The bank tries to increase consumption by finding new market segments and new users for its products
- ✓ The bank might also try modifying the product, changing characteristics such as (I) quality, (II) features, (III) style, or (IV) packaging to attract new users or to keep the product a bit longer in the market.

- **Decline**

Sales decline either due to competition, or loss of interest of the consumers in the product due to increases in their sophistication or change of taste and some products become obsolete due to



new technological enhancements. Sales decline means profit drop and keeping a product that is declining could be very costly not only due to absence of profit but also due to being late in the replacing the product with newer investments and lagging behind in the marketplace.

This stage is characterized by:

- ✓ Sales decline
- ✓ Low customer cost
- ✓ Profits Decline
- ✓ Customers targeted are the Laggards
- ✓ Competition declines

On the pages that follow we will discuss NPD and its impact on customer Satisfaction, sales and the market, as well as we will discuss reasons for New Product failure.

## **2.4 NPD and Its Impact on Customer Satisfaction, Sales, Profit and the Market**

The ultimate basis of an existing business is generation of profit while satisfying its consumers. NPD plays the factor that ensures survival and success of these organizations which in today's environment have to maintain a good image, continuously improve and effectively adapt to change. Once firms can successfully manage to define and produce a service that caters to the exact need of consumers on one hand and does so while keeping them satisfied, only then firms can ensure survival and dominance in the market as well as increased sales and profits (Crawford, 2003). New product development has great effect on customer satisfaction, sales, profit and to develop new markets.

## **New Product Development and Customer Satisfaction**

The extent to which customers' expectations of a service or a product is met or exceeded is defined as customer satisfaction. Thus across the firms in the market customer satisfaction remains a top concern. Therefore, any organization that does not have customers' satisfaction as a primary priority is at the mercy of its marketplace.

To assess product performance firms use satisfaction ratings as a feedback from customers (Business Week, 1990). New product development helps organizations to bring new changes that make customers more satisfied and successfully fulfill their needs. If one organization takes the new product development concept seriously it can increase customer satisfaction since the customers would be under the impression that the organization thinks about its customers first.

According to Anderson and Sullivan (1993), claim that a consumer only repurchases a service or a product when he/she remains satisfied the previous time.

New product development, with its focus on the customer, has shown great success especially when it ensures the return of the customers since they were happy with what they got the first time and once satisfied with product they will come back for more. For this reason organizations that usually survive are the ones which effectively and constantly produce new services or products that satisfy customers' wants and needs (Griffin and Page 1996).

On the other hand the industry has to invest a lot of money and time on enhancing productivity and development of new products because new product development does not insure 100% success rate at all time. Hence satisfying the customers' needs through developing of new product is very important for increasing productivity.

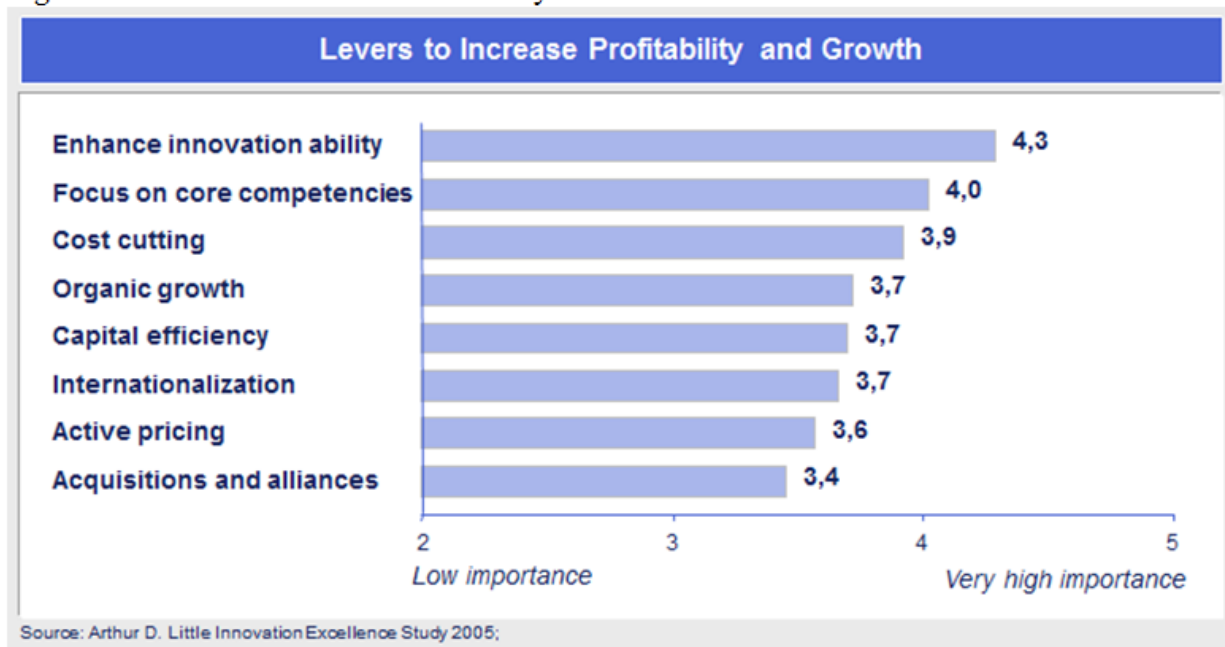
## **New Product Development and Its Impact on Sales and Profit**

In a highly competitive environment growth in sales is an important goal for many organizations to maintain profits on one hand and ensure the survival in the market on the other. The organizations have to manage costs and replace the declining products by developing new products or modifying them to benefit the customers' needs. The engine that drives a company's growth and profitability is NPD. If new products are not developed, sales and profit decline, and competitors will take advantage of the market change to increase their own sales and thus the takeover of their profit, or might drive the organization out of the market.

Sources non-existent today must generate 50% revenue within five years' time ahead; this could only be done by new developed services and products (Ulrich and Eppinger, 1995). Organizations are under continual pressure to improve product and to lower cost through product development and according to Arthur D. Little (2005) a study reveals that new product development is rated as the number one to increase profitability and growth among organizations, even higher than cost cutting and mergers and acquisitions (Figure 2.3). On the long run new players with similar goods and services would emerge which will be potential competitors that reduce the profit. Thus, in order to ensure the survival of the organization and its continuity in the market without any decline in the profit organizations have to keep on the development of the NPD for the sake of the organization's future.

The following chart emphasizes that NPD (Enhance innovation ability) tops the list of levers that boosts up growth and profitability.

Figure2.3: Levers to Increase Profitability and Growth



Source: Arthur D. Little Innovation Excellence Study 2005

## NPD and Its Impact on the Markets

Competition in the markets has been further increased by NPD and its impact on the market. NPD particularly the capability of an organization to constantly develop and produce new competitive products and services that overtake and beat its competitors in the market was proved to help a firm in building its own competitive advantages in the market (Kok, 1996).

In a dynamic marketplace, the development of new services and products is a must to stay ahead of the competition since consumers' needs and tastes often change with the emergence of new trends and lifestyles, products must also change. Consumers must be constantly supplied with a variety of services and products that have better quality and lower prices. Moreover, it is essential to mention that it is very expensive and difficult to survive in a competitive market when the demand for a new, cheaper and better products increase. To stay ahead in the competitive market new product development is the main driving force.

The process of offering an improved or a new product to the market is called product development. By acknowledging the needs of the marketplace, any organization can perceive approaches to change or add features to its products; generate few quality levels, or even include more sizes or types by producing newer forms of popular plans in order to meet the changing needs of the customers. The planning of the NP-s is not optional anymore; it must be carried out simply to stay ahead competition not only for the sake of today but also for the sake of staying frontier of the dynamic marketplace of the future (Perreault and McCarthy, 1996).

When an organization does not have a formal NPD process this indirectly implies that the firm intentionally or unintentionally has chosen to exclude its current products from the market which could mean going out of the marketplace in the near future.

The market success depends on the organizations capability to distinguish its customers' current needs and to rapidly produce products that satisfy those needs. The success of the organization and its growth is mainly contributed by the effective development of needed services and products and thus will impact positively on the market. Having a successful market means that the market is more profitable so the organization must deliver customers with better benefits that cost less to produce, and costs less to develop and all these can be achieved by developing new products in a consistent manner by the market. So in brief organizations should ensure their survival in today's dynamic marketplace by creating and sustaining competitive advantage (Porter, 1985).

## **2.5 Reasons for New Product Failures**

The success of NPD mainly relies on the product quality and marketing strategies of the bank, sometimes the product fails even after utilizing the best technological approaches and advancements as well as enhanced qualities.

There are common mistakes that kill many banks' new product development; the most significant explanation for product failure is that the newly produced service or product is not genuinely new or does not really add a major benefit to the previous product. This implies that the newly produced product has minimal advantage in comparison to the already available products and furthermore it does not succeed in offering distinctive advantage to the customers.

More reasons of product failure are when the bank underestimates the rivalry. Sometimes the cost of the new product is much higher than expected even though the concept might be good enough, this happens when the bank rushes to launch the product with incomplete developing and marketing plan, on the other hand moving slowly can create problems too.

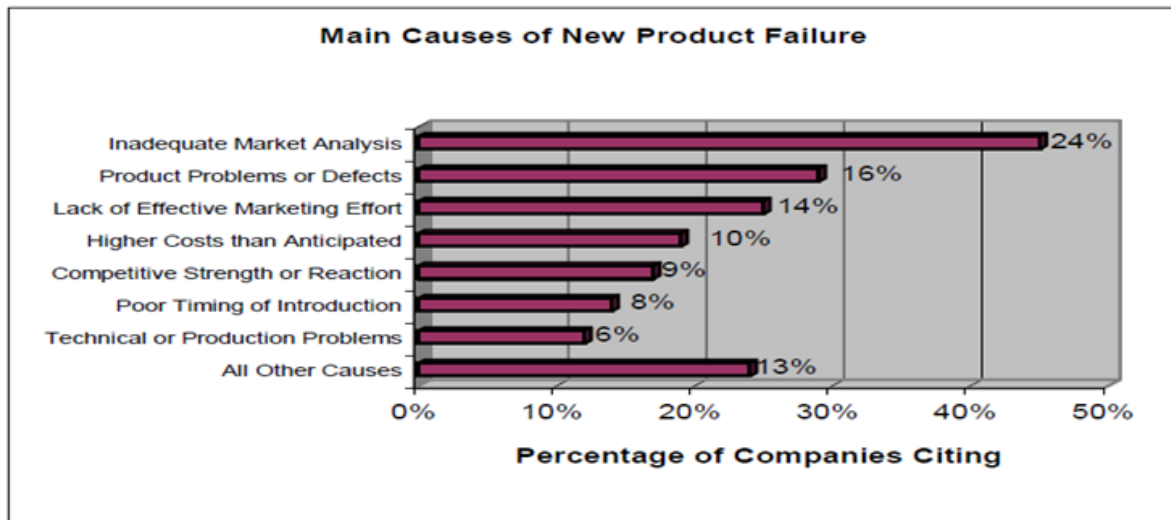
Two other reasons to consider new product as failure, could be when the new product does not generate sufficient revenue to allow the bank to breakeven or the product does generate sufficient revenues to breakeven but the profit objectives are not achieved, in other words the product makes money but not as much money as the bank hoped for. These are not the only reasons, but avoiding the below mistakes can greatly improve the chances for success. The major reasons for product failure are:

- ✓ Lack of differentiating advantage.
- ✓ Inadequate banking business plan.
- ✓ Target market being too small.
- ✓ Limited access to the market.
- ✓ Underestimating the competitors and the competition.
- ✓ Failure to adapt the product to meet customer needs.
- ✓ Poor sales & marketing.
- ✓ Poor timing.
- ✓ Poor management.

- ✓ Poor quality of product or service.
- ✓ Poor pricing strategy.
- ✓ Poor marketing plan.
- ✓ Poorly implemented marketing mix.
- ✓ Legal arguments.
- ✓ Failure to plan ahead, beyond the day-to-day running of the product.
- ✓ Targeting the wrong group.
- ✓ Weak positioning strategy.
- ✓ Failure to understand the demographic area.
- ✓ Technological problems.
- ✓ Not providing anything different than the current products on the market.

Besides the above mentioned reasons for the failure of NPD (Mr. Robert Cooper, in his book winning at New Products) and as shown in the table below, inadequate market analysis is the most common mentioned reason for newly produced products failure together with not fully understanding and identifying the exact needs of the consumers or the incorrect timing of launching a service or product.

Figure 2.4: Main Causes of New Product Failure



*Robert G. Cooper, Winning at New Products, 2001<sup>3</sup>*

Source: Robert Cooper, in his book “Winning at New Products”, 2001

## Banking Sector and the Lebanese Banks an Overview

### 2.6 New product Development and The Banking Sector

Historically, banks have not offered their clients many options. Now, however, as banks face market forces, globalization, new technology, economic uncertainties, increased competition and more sophisticated clients, they have to offer new product and services to their clients' demand at prices that they are willing to pay, and are compelled to find new products or services that move in parallel with the banks principal objectives which is to attract customer deposit. To grow their customer base and increase their share of customers, banks need to deliver the new “right products” to the “right customers”. The need to offer new product and services to attract customers is therefore not a matter of choice but a necessity for most banks. Products produced by banks are mainly concepts and ideas instead of tangible products. The decision of developing



products is an essential component of every bank's strategy as well as for future planning (Connolly and Penta 2003).

Banks are not any more localized; this is due to globalization. To face the rapid markets and deregulation changes, banks gradually are depending on NPD to increase profitability, ensure growth and compete effectively. Banks nowadays are relying more and more on NPD and technology such as internet and mobile banking, ATM banking, etc... in order to create new markets on one hand or to penetrate in already existing one.

Moreover, in the banking industry NPD has modified the traditional banking practices. Falodun (2002) evaluated the development of new product as a dynamic management process that must be embraced by every bank which intends to survive in the market place. ReidenBach (1991), on the other hand emphasized the need to always fashion out new services by banks in order to secure customers patronage. So the success of new products or services development depends on selecting the right mix of NP strategies and the developmental process. NPD has become veritable tool employed by banks to sustain their being kept alive in the present day competitive market whereas the true test lies in the ability of a new concept to truly differentiate itself from the rest of the competition.

Banks nowadays are more technology driven supported by banking together with advanced software applications. Banks that are being the dominant ones in the marketplace are the ones which have the potential to invest and integrate IT.

For this reason most banks nominate managers and create departments that are responsible and involved in the NPD activities.

## **2.7 Effect of New Product Development on the Banking Sector**

Effectiveness and efficiency are interrelated when discussing the way banks are affected by the new product development. Efficiency refers to the ability of bank to do the things right while effectiveness is about doing the right things (Druker, 1954). All banks are in the business to satisfy customers' needs efficiently and effectively, and they do this through their product and services. Success in the banking sector will inevitably depend on the ability of the banks to meet the changing needs and behaviors of its customers (Rolt 2009). To be able to follow and meet the changes, the banking industry has rapidly moved to invest in NPD and especially via integrating technological advancements as a means to control cost, attract new consumers and markets as well as to meet the changing needs of current customers (Joseph and Stone 2003).

Those banks that do not deliver a need satisfying product have no reason to exist. Philip Kotler (1998) proposes the following definition: a product can only be named as such if it has the credentials to provide satisfaction to its customers.

In a bank context, all banking services (including checking, saving accounts, certificate of deposit, safekeeping services, lockbox operation, cash management services, and loans, etc...) are products. Recently banks have become more aware of the importance of NPD thus the utilization of NP-s has significantly increased.

The boost in NPD usage lead to several positive effects on the banking sector such as profit maximization or cost minimization, growth, sales maximization, improved productivity in terms of better quality and higher quantity of products and services, speed, customer satisfaction, loyalty and good corporate image, increase in market share, individual enhancement and bank development and change, etc...

Moreover, new product development plays global role in the banking industry in that it has a strong effect on financial criteria, customer criteria, opportunities criteria.

- ✓ The first effect is on financial criteria that include the financial indicators of the success of a new product such as, profitability, sales, cost, return on investment and market share.
- ✓ The second effect is about customer satisfaction that can be measured by, whether a new product attracts new customers or opens up new market opportunities.
- ✓ The third effect is much broader in its scope as it is related to overall opportunities that a new product may provide to a bank. For example, a new product may improve the profitability of other products, a new product may provide a platform for the development of other new products and a bank may acquire more experience and new skills from new product development.

### **Financial criteria**

- ✓ Enhanced profitability.
- ✓ Sales growth against objective.
- ✓ Increased market share.
- ✓ Reduced operating cost.
- ✓ Reduced labor costs.
- ✓ Increased return on investment.

### **Customer criteria**

- ✓ Customer satisfaction with new products.
- ✓ Increase in number of new customers.
- ✓ Opening up new market.
- ✓ Increase customer loyalty.
- ✓ Enhanced image with the customers.
- ✓ Less customer complaints.
- ✓ Improve the banks' reputation amongst customers.

### **Opportunities criteria**

- ✓ Improved profitability of other products.
- ✓ Provided a platform for other new products.
- ✓ Improved NPD capabilities.
- ✓ Relocate the ability of employees to more productive activities.

## **2.8 Banks Play an Integral Role in Society**

Banking is still considered public interest even though the ultimate reason behind a banks' operation is the generation of the profit. And this is mainly due to its importance for the whole society and its benefits to the economy. The banking sector is the main participant in any society and has strong impact on it which sometimes is very difficult to examine. There are many ups and downs in the whole history of banks all over the world thus the banks are key players of a society's development. As a direct example the currency of any country is directly related to the banking sector of this specific society.

Moreover the banking industries have unique characteristics which are of key importance to the society that may distinguish it from any other sector or other financial institutions due to the services they can offer. Banks can provide and offer wide range of services to the society, including insurance, securities brokerage and underwriting, mutual funds, leasing, data processing of financial information, and operation of thrift associations, consumer finance companies, mortgage companies, and industrial banks. Consequently, banks contribute greatly to the society's growth by playing an intermediating role between borrowers and lenders as well as providing financial resources to other industries and hence facilitating production.

The banking system is also important since any instability in the banking system has the potential to lead to a financial instability and an economic crisis which would impact the society

negatively. The banking sector offers several facilities and opportunities to the society and thus to the customers, this includes:

- ✓ Funding the development of businesses.
- ✓ Funding households, and thereby assisting people in finding somewhere to live.
- ✓ Being a place of safekeeping for people's surplus cash and giving them the opportunity to earn return on their savings.
- ✓ Providing the country's payment system.
- ✓ Helping to manage the population's desired holdings of cash.

On the other hand most of the banks actually developed in response to financial crises and other historical and political events. In addition to the technological innovation, new financial theories, ideas as well as changes in the competitive environment and expanding international relationships are factors that encourage efficiency and competition and ensures an adequate level of banking services throughout the society and help banks to utilize their resources wisely. All these factors and more are important to keep the customers and remain in the business and be an integral player in the society. In summary, banks play an important role in the societies through their deposit-taking, lending, and all the other activities. Although this combination of activities is no longer unique to the banking industry, banks still remain the major providers of many of these services.

## **2.9 Banks are the Backbone of the Global Economy**

Before the establishment of banks, the financial activities were handled by money lenders and individuals and at that time the interest rates were very high, there was no security of public savings and no uniformity regarding loans. So to overcome such problems the organized banking sector was established, which was fully regulated by the government at first.

The bank is a financial institution that provides banking and other financial services. Banks are granted by financial supervision authorities that provide the rights for the banks to conduct the most fundamental banking services such as accepting deposits and making loans. Banks are the backbone of the global economy, providing capital for agriculture, manufacturing, services, construction, innovation, infrastructure, job creation and overall prosperity.

Banks also play an integral role in society, affecting not only the expenditure of spending individual consumers, but also the growth of entire industries. So the health of the economy is closely related to the soundness of the banking system. Although banks create no new wealth but their borrowing, lending and related activities facilitate the process of production, distribution, exchange and consumption of wealth. In this way they become very effective partners in the process of economic development. If there would be no banks then a great portion of a capital of the country would remain idle.

In other words banks are essential for each country's economy, since no growth can be achieved unless savings are efficiently channeled into investment. Bankers, economists, and regulators nowadays are concerned with financial stability more than ever. They generally accept that banks play a vital role in the economy and that failures in the banking sector are costly to the whole economy, and therefore, banking stability is very important (Chu, 1996).

Bank's most important task is to collect credit from different sources and lend money to the entrepreneurs; they are intermediaries between people with shortages and surpluses of capital, also banks provide clearing and settlement systems to facilitate trade. In addition most people and businesses pay their bills with bank checking accounts, etc. One of the major roles banks play as instruments of the government's monetary policy, being the backbone of the economic development and growth. Some of the banks products include savings, lending, investment, mediation and advice, payments, guarantees, and ownership and trust of real estate. These core

activities generate two principal sources of income: interest earnings and provision earnings. In the first case, a bank is working on its own behalf and risk; and in the second case on behalf of and at the risk of its clients. It is usual to distinguish between different banking departments such as investment banking, commercial banking, corporate banking, private banking, trade finance, electronic banking, securities, financing and loans, savings and so on. Some of these banks even specialize in one or more of these areas. Universal banks usually cover all activities. The following functions of the bank explain the need of the bank and its importance:

- ✓ Offer security to the customers' savings.
- ✓ Control the money supply and credit.
- ✓ Encourage public confidence in the working of the financial system,
- ✓ Increase savings speedily and efficiently.
- ✓ Avoid focus of financial powers in the hands of a few individuals and institutions.
- ✓ Set equal norms, rules and conditions (i.e. rate of interest, period of lending etc...) to all types of customers

Over the past years especially since 1990, advancement in communication technology has changed the way banks operate and conduct their business. Banks start to provide their services online to their customers with easy access as well as other value-added benefits. The banking industry gained the opportunity to improve the quality of services offered to their customers providing a wide range of services while reducing the cost, this mechanism revived the service structure of the banking industry and provided customers with convenience and comforts which benefited the economy as well.

Banks are therefore special because of these functions and in order to keep this success the banking sector has to develop more new products especially with the help of the technology to keep itself differentiated from other sectors and keep the improvement of the economic cycle ongoing. Moreover the lessons learned from the economic crisis have influenced the banking

sector perception and have led to new regulatory innovations that have and continue on shaping the banks' new business models. So the new product development plays critical role in the development of the banking sector and this will lead to the development of the economy and the satisfaction of the customers which in return will benefit the whole society.

## **2.10 Lebanese Banks Overview**

The banking industry is one of the leading sectors, as well as one of the fastest growing industries in Lebanon that has consistently outperformed the rest of the sectors. It is a mirror image of the economy of the country. Banks in Lebanon fall under the authority of the Bank of Lebanon (BDL), the country's central bank, which is the regulatory authority.

The Lebanese banking system is characterized by a large number of banks operating in a competitive environment. There are 71 banks, with the top 19 banks accounting for 80% of the market. The branch network is well developed with an aggregate of 742 branches and a ratio of one branch per 5,500 people. In comparison, banks in the Middle East average one branch per 20,000 people and the European average is one per 4,500 people, this show that Lebanon is considered overbooked with banks and the number of branches.

Several Lebanese banks appeared in the Bankers top 100 list for several years, which is not common for banks in small countries like Lebanon. Lebanese banks have branches, affiliated companies, subsidiaries, sister banks and representative offices which are spread in 25 countries around the world with more than 80 units. Lebanese banks have a high level of liquidity and the structure and quality of their capital is generally in line with international regulatory standards on bank capital adequacy and liquidity, especially Basle III standards.

Politics in Lebanon has a major impact on the performance of the banks. Despite this impact, the banking system in Lebanon remains to maintain solidarity and effectiveness in its activities. The



1975-1990 war destroyed most of the country's economy. Regardless of the major economic changes accompanied with the demographic changes in Lebanon during the civil war the banking system remained powerful. At the end of the war in 1990, the Lebanese banks played a major role in reconstructing the country by funding the government. The Lebanese government needed huge funds for after-war reconstruction and rehabilitation. The banks provided the governmental treasury most of their internal debt. Despite the fact that the Lebanese economy has witnessed various difficulties and problems, the Lebanese banking sector has maintained its prosperity and remained one of the most successful and prosperous banking sectors in the Middle East due to a variety of reasons (Haslem, 2003).

Moreover, despite the political instability, the banking system in Lebanon benefits from many important strengths that allow the smart and major players to take advantage of the good opportunities that the market is presenting, and mitigate the challenges these banks are facing. The fundamental changes that have occurred in Lebanese banking in the last few years have altered both the quantitative and qualitative characteristics of the sector: Change not only affected the size and performance of banks, but also their strategy and product offering. Thus the ongoing consolidation trend in the sector is likely to continue.

Larger banks are expected to grow faster than their smaller competitors as they have better access to outside capital, marketing, technology, and personnel resources. The opening up of regional markets may also prove to be profitable for Lebanese banks. In response, banks have expanded their activities in new and complimentary areas such as insurance, portfolio management and investment banking. Most of the top 10 banks in Lebanon are attempting to build their own investment banking, capital markets, and private banking arms.

The strengths of the Lebanese banking sector are represented by the liberal economic system, the mature central banking authority, the widespread and developed banking culture, the support

from BDL in the case of crisis, the enhanced BDL regulations and supervision, the healthy banking system, Banking Secrecy Law, sound bank management, improved risk management, diversity in banks funding activities, and high systemic liquidity. In addition to the factors listed above, the absence of state interference and an imperfect liberal system have played and will continue to play a major role in the profitability of the Lebanese banking system. Abs Allen said regarding the banking sector in Lebanon: "We don't know what you're doing, but whatever it is, keep doing it" (Allen, 1990, p.23). Below are some general characteristics that also contribute to make Lebanon an attractive business environment:

- ✓ Banking secrecy Law, this law, inducted in 1956, forbids the revelation of any information related to any client unless in the case of bankruptcy or lawsuit.
- ✓ Free Foreign Exchange System, any person can import or withdraw his/her capital freely in any currency with no restrictions or declarations.
- ✓ Fiscal Framework, moderate tax rates and in some cases tax exemptions are applicable to income earned abroad and offshore companies.
- ✓ Money Laundering, in 2001, a law “Fighting Money Laundering” was issued for Lebanese Banks to prevent money laundering operations. An investigation commission named Special Investigation Commission SIC was created by the Central Bank to regulate the banks.
- ✓ The introduction of a range of new services

## **2.11 Lebanese Banks and New Product Development**

Today the Lebanese banks’ environment is very dynamic and experiencing rapid changes as a result of creativity, new product development, technological changes, increased awareness and demands from customers. Lebanese banks operate in a complex and competitive environment

characterized by the above changes conditions and highly unpredictable economic climate. Ovia (2005) opined that the revolution in new product development has made the banking sector change from the traditional mode of operations to presumably better ways with technological innovation that improves efficiency.

The banks on the regional and international levels have put increasing pressure on Lebanese banks to broaden their range of services and improve efficiency. The banks of today are not the banks of tomorrow; their basic function as intermediaries between investors and borrowers is being diluted due to the technology and new product development. The Lebanese banks are trying to diversify their product portfolios by offering leasing, retail banking, financial advisory, insurance and loans, internet banking, mobile-phone, smartcards and other product and services. All these new products and services continuously change the way banks organize their relation worldwide and enhance the speed and quality of services delivery.

The rapid technological changes and the increase in new product and services in recent years improve four critical domains in the Lebanese banking sector, which are efficiency, quality, transparency and the way Lebanese banking services and products get delivered to customers. Effective product development creates a synergy between the customers and the Lebanese banks. Both gain from the interaction and this assists the banks in better understanding the needs of its customers. Kotelnikov (2008) observed that product development is the result of bringing to life, new ways to solve customers' problems that eventually benefit both the customer and the banks. Moreover Lebanese banks found it necessary for them to start developing new products and services to change the work organization, raise the productivity, cut costs and deliver the best services to their customers while concurrently increasing their profits.

Applying new product development will enable banks to face the foreign competition and the possible consequences of the coming peace. So the area of product development is an important

one in the banking sector. A product development strategy is considered successful in the Lebanese banking sector when the product or the service not only fulfills the needs and the requirements of customers, but also generates profit and creates value and competitive advantage to the bank. In other words, the two main characteristics of product development in the banking sector are quality and profitability. Quality represents how well the product satisfies the customers' needs, and profitability represents how much profits it generate for the bank.

New product development has had a major impact on the Lebanese banking sector, new product development has played a huge role in transforming the Lebanese banking sector into a more responsive sector ready to meet the challenges of a globalized economy. The following are some other reasons that show the impact of new product development on Lebanese banks:

- ✓ New product development allows the delivery of banking products and services more conveniently and effectively than ever before, thus creating new bases of competition
- ✓ Remote banking in which, enabling the customer to make inquiries regarding his accounts, on-line, without having to move from his/her office.
- ✓ Anytime, anywhere banking by the installation of ATMs which offer non-stop cash withdrawal, remittances and inquiry facilities.
- ✓ Help in meeting growing customer expectations and the competition for market share.
- ✓ It helps banks to differentiate its products from the others and increase the product and services value.
- ✓ The movement of Lebanese Banks from manual to automated processes.
- ✓ New product development is the key component to reduce transaction cost for the banks
- ✓ New product development helps produce high quality products and services at cheap prices, thus helping in competitiveness, productivity, growing and changing at an amazing speed.

- ✓ New product development has deeply changed the ways in which banks and consumers interact, and it is significantly affecting the economy, occupation and employment and the growth of the Lebanese Banking sector.
- ✓ Increases productivity, competitiveness, reduces prices, and generates wealth in the banking sector.
- ✓ Helps the Lebanese banks to expand product ranges, customizes services and responds better to demand.
- ✓ New product development has improved and is continuously helping to improve the quantity and quality of the Lebanese banks product and services.
- ✓ New product development increases the chances that Lebanese Banks that develop a better products and services into the market, win bids, sell products, improve productivity, and exert pressure on other competitors.

It is pertinent to note that banks in Lebanon offer the same products and services with slight variations which could be in terms of price, tenure, accessibility, presentation, etc... Hence for many banks to stay on the top of the ladder and improve, there is the need of coming up with new product developments that can effectively meet the desires of the intended market group. Banks in Lebanon must distinguish themselves from other competitors by the various products they offer and ensure that the new products and services are able to meet the needs of the market and customers because banking is a service oriented enterprise.

Thus what the factor that will draw the distinctive line between the winners and the losers in the Lebanese banking sector will be the adaptability of the bank that will be able to embrace the changes in the current trends successfully in order to face the challenges be it within currently existing ones or ones that are or will be emerging. Hence Lebanese banks have most certainly

need to integrate the new intelligent banking services and have their focus on long term planning while utilizing creative marketing schemes and sales techniques.

## **2.12 Examples of New Product Development from Lebanese Banks**

Lebanon is historically known for having an infamous banking industry in the Arab world and the MENA region, banking which grew steadily even after 1991. The reliability and the cash-flow of Lebanese banks aided in attracting a significant entry of funds into the banking sector. To support this growth and new business development, Lebanese banks think about the new product development and technology expenditure in a different way which means that new product development for Lebanese banks is more as an investment that will help them to improve the product and service efficiency and quality, thus increasing the market share ensuring the gain of more profit. Below are some examples from Lebanese Banks that show to what extent Lebanese Banks are investing in new product development.

### **Bank Audi**

Bank Audi - Audi Saradar Group SAL “Bank for All” is a private joint stock company that operates in Lebanon, and 11 different countries in like Europe, Middle East and North Africa (MENA) region. Bank Audi was granted in 2011 a license for the establishment in Turkey by the Banking Regulation and Supervisory Authority, the first one in over 12 years. Bank Audi Group provides a full range of products and services, including (I) commercial and corporate banking, (II) retail banking, (III) private banking, (IV) investment banking, (V) insurance activities and (VI) online brokerage to meet different segments’ needs. The list below represents some of Bank Audi’s results of using new product development:

In line with their constant effort to provide Bank Audi cardholders with the most advanced and convenient services, Bank Audi introduced the latest contactless payment technology:

- ✓ “Tap 2 Pay” is a new fast and innovative payment service, that allows any Bank Audi cardholder to link his MasterCard credit card to any NFC-enabled Smartphone and start paying with his mobile through a revolutionary NFC\* contactless payment technology.\*Near Field Communication

With Tap 2 Pay, cardholders can transform their everyday purchases into a fun and trendy experience. It is the ideal payment solution for traditional, cash only environments where speed is essential such as fast-food restaurants, supermarkets, cinemas, pharmacies, etc.

- ✓ “Novo”, the first smart kiosk banking channel in the region that provides customers with a new interactive banking experience based on the concept of “Forward Banking” thanks to a cutting-edge technology and a user-friendly interface. Characteristics of the Novo digital banking:

- Screen interactions, talk to a Bank Audi staff member via video conference.
- Customer needs satisfaction and easy access to banking.
- Operating in extended hours and open 365 days/year.
- Easily obtain information on Bank Audi’s products and services.
- Two latest generation ATMs enabling visitors to deposit money and cheques, and all the facilities provided by regular ATMs.

- ✓ Bank Audi encompasses one of the most differentiated and innovative card products (credit, debit, charge, prepaid, installment and co-branded cards), and it also encompasses one of the most technologically advanced electronic payment solutions, catering to

individuals', governmental institutions' and various corporations' needs provided via electronic terminals and e-Commerce, such as:

- “Enjoy Bank Audi Card Collection” a large collection of elaborately diverse cards distributed under different categories (Luxury, Classics, Convenience, Lifestyle, Colors, Occasions, American Express)
  - “Loyalty Program” Bank Audi cardholders can benefit from 3 different loyalty programs, each one tailored to satisfy a specific set of requirements and lifestyles: (Audi Rewards, Kids Rewards, Mileage Program, Airtime Talk “Loubnani card”)
  - “E-Services” a range of E-Services has been introduced by bank Audi, linked to its cards and provides cardholders with an efficient tool to control their card expenses and to detect fraud. (Audi Cards Online, Electronic statement, SMS alert service, SMS pull service, Audi Card Artist).
  - “Merchant and Government Solutions” Tailored to the needs of all consumers, merchants and financial institutions, Bank Audi is the first bank in Lebanon to implement a wide range of electronic payment services (POS Terminals, Audi E-Payment, Audi GPRS payment system “wireless payment solution”, and Government solutions)
  - “Online Payment Solutions” To answer its customers' needs, from settling mobile phone invoices and recharging mobile phone accounts to buying cinema tickets online, Bank Audi has developed a number of online payment facilities.
- ✓ “ATM new generation” enabling deposit cash and cheques, get scan copy of the cheques, withdrawal money which means no long queues, no charges, safe, accurate, fast and 24/7 services.



- ✓ “Pin-Pay or Mobile Banking”, a mobile payment application allowing customers to make transfers from and to their own accounts and to other customer accounts, recharge their mobile phones, print account statements, and perform balance inquiries, and receive SMS alerts whenever the balance of their account changes.
- ✓ “e-Recruitment”, the Bank was the first in Lebanon to enable candidates to apply for new jobs using the Internet in order to allow any candidate to apply for a job at Bank Audi and to allow any Bank Audi employee to move within the institution.

### **BLOM Bank**

BLOM Bank is one of the largest and most innovative banks in Lebanon with a customer base that includes leading companies in Lebanon and the region. BLOM Bank offers a full range of corporate, commercial, retail and private banking services that embody the latest in banking techniques, and is geared to meet the evolving requirements and expectations of its customer base. A sample of BLOM Bank’s new product development is summarized below:

- ✓ BLOM Bank launched the Middle East’s first Visa Platinum Corporate and Business card.
- ✓ BLOM offers prepaid cards as well as cards dedicated for internet banking, and together with the cellphone network provider Alfa has created another first for the Middle East, a co-branded credit card program that gives its members free talk time under certain Alfa deals.
- ✓ “Watan Card” created just for use by members of the Lebanese army and security forces to give an unusual degree of customer personalization.
- ✓ “Personalize your Card” system allows cardholders to order their card, on-line or through branches, with their choice of image selected from BLOM’s picture library.

- ✓ Telephone Banking, customers can receive SMS alerts whenever the balance of their account changes.
- ✓ “e-BLOM Internet banking service” the key to a wide range of online services, e-BLOM grant online, real-time access to customer’s accounts and transactions, along with other unique features such as:
  - Check accounts’ summary, statements and pending transactions.
  - Download the account summary and statement of accounts into a file that can import into Excel, financial applications and text based editors.
  - Transfer funds between accounts (including foreign exchange transactions between LBP, USD and EUR).
  - Conduct secure outgoing money transfers to preset beneficiaries inside or outside BLOM.
  - Request checkbooks.
  - Display the point of sale statement and download it into Excel or CSV format.
  - Set your BLOM cards’ safety limits.
  - Pay credit card bills.
  - Check your prepaid card’s available balance and replenish it online.
  - Calculate your vehicle tax.

Thus New product development is simply the most obvious way in which BLOM Bank is looking forward and through the new product development strategy BLOM is trying to stay in the leading position in Lebanon, increase its growth, customer satisfaction and generate higher profits.

## **Byblos Bank**

Byblos Bank a “Bank for Life” emerged as a major player in the Lebanese banking sector. Today it operates a network of 76 branches in Lebanon and has operations in 10 countries across Europe and the MENA region. Byblos Bank strives to differentiate itself in many ways by providing a diverse range of products and services through different divisions: Commercial Banking, Trade Finance, Project Financing, Asset Management, Private Banking, Personal Banking and Consumer Banking. Bank Byblos increases customer satisfaction by improving various procedures and practices, launching new products and services, and enhancing the features of existing ones. Byblos bank blazed a new trail for Lebanese banks with the establishment of e-Branch, which gives customers flexibility to carry out physical transactions at any time, day or night. In addition to the great emphasis placed on the Bank’s Cards Loyalty Program which proved as a highly effective means of communicating appreciation to the customers.

Byblos Bank took home top honors as “Most Improved Website” in the Financial Services Category at Internet Awards Middle East 2011. Judges were particularly impressed with the new site’s incorporation of the latest technologies and innovations, as well as the ease of navigation provided to visitors, all part of efforts to ensure maximum use of the internet in servicing the customers and providing them with accurate and reliable information (Byblos Bank 2011).

## **Bank MED**

One of the top five banks in Lebanon is Bank Med which makes up around 10% of the total of the Lebanese banking system today. Through its 51 branches spread all over Lebanon, and other branches in Cyprus, Switzerland, Suisse, Turkey and Riyadh Bank Med offers a wide range of products and services to both corporations and individuals. Their planning processes consider

both the needs of current and future stakeholders and are matched with best practices and the latest technology available around the world to enhance the value proposition and differentiate the customer experience”. (Bank Med Annual Report 2011)

New product development at Bank Med includes implementing new business applications and enhancing existing ones, as well as adding, replacing and upgrading complex hardware platforms and communication network such as Customer Relationship Management (CRM) solution, Priority Banking solution, State-of-the-art Mobile Banking platform, POS and E-Commerce Acquiring, Cards Services platform including Gift and Loyalty programs and Pin-Pay the mobile payment service.

In addition to the above mentioned new product development, Bank Med launched Med Cards E-Services, an online secure website allowing Credit/Charge cardholders to view their balance and other card details, and card statements with associated transactions, as well as allowing Pre-paid cardholders to view their balance and transactions. Bank Med ATM Recharge Services another development which facilities offered to cardholders to purchase mobile recharge cards or renew subscriptions via Bank Med ATMs.

The Bank also believes in sustainable development and green banking “Happy Planet campaign” is another new product development that was launched by Bank Med to raise awareness about issues pertaining to the environment and to educate the community about preserving the environment. All these new product developments increase the services that Bank Med offers and provide the Bank with a competitive advantage in the market

## **2.13 Competition**

Competition is the main reason of success or failure of a bank. Competition is defined as a process of rivalry between firms seeking to win customers’ business over time (Whish, 2005), as

well as to increase market share and get higher profits. There is a lot of difference in the nature of competition in the banking industry before and after banking improvements, since many new products have been introduced. Now all the work is done by technological tools like ATM, credit card, Mobile banking, Tele-banking, etc...

Banks, nowadays take profit into consideration rather than price. The roles have been reversed; customers who once were enslaved by the bank are now put in spotlight together with their needs. Increased competition in the banking sector leads to lower costs, lower loan rates and wider supply of loans, greater new product development and improved quality of services. Competition depends on the number of banks operating in a market and the ability of banks to achieve an appropriate size for serving their customers.

The competition in the market forces the banks to constantly develop new products to produce higher quality products and decrease costs to maintain or increase their market shares and make more profits (Motta 2004). Michael Porter (Porter 2006, cited in Streeter 2006) thinks that banking sector to succeed in the new era has to deliver something unique, but most banks do what others do, what he calls competition. He stated that "the worst thing you can do is compete with your rival on the same things. If you do, the competition almost always becomes a destructive arms race. Banks should strive to be unique, which requires choices." Thus competition is a driving force in keeping banks developing new products and services for customers.

In order to keep up in the very competitive environment and in order for large Lebanese banks not to lose their top positions in the market, they must distinguish themselves from other competitors by the various set of products they offer and ensure that the new products and services are able to meet the needs of the market and customers because above all banking is a service oriented enterprise.

The Lebanese banks also need to take advantage of the opportunities that the globalization is offering, this means that staying local means losing their market share and thus globalization is a requirement if the bank wants to better serve its clients and compete in the market. Going regional or global is vital not only to serve better the clients, but also for banks to be more efficient and more competitive in the local, regional or international market. With the new products and services development competition has grown up among the banks, only those banks that will face the competition with effective and efficient ways will survive in the market.

## **2.14 Features of Successful New product Development**

### **The Imitation Strategy**

The imitation strategy in its mediocre definition illustrates the concept of imitating a product previously provided by a competitor firm.

Imitating a product could be on two bases: a) pure imitation b) creative imitation or imitation with modifications.

The product imitation strategy however is not all bad, it may not provide anything new to the market but it surely improves the product provided by the imitating company.

A pure copy has the ability to generate a higher market share on the short run to the imitating company if it is provided to the market at lower prices than the rival's products yet with the same or somewhat the same features.

The mimicked product is not necessarily a true copy; some companies use the 'copy-but-improve' strategy which saves them both resources and time. Resources in the sense that they would not have to invest capital in already existing products but rather move forward by adding new modified features, this provides significant advantages over the competitors. And time in the

sense that the company mimicking a competitor product in its modified version saves noteworthy amount of time in the competition by providing an improved product to the market and starts competing with it on one hand while having improved the product in the firm on the other. This however could also backfire because customers might wait before trying out the new versions since they would be waiting for market feedback and would be approaching the product with uncertainty thus resulting in lower market share on the short run. On the long run however, creativity imitations may provide a higher market share once the product gains customer trust.

Finally whether purely imitated or modified, the imitation strategy could provide one ultimate benefit over alternative strategies: letting the rival companies take the hit with their experimentation and eventually join in the market with either type of imitated products. The advantage lies in the ability to see first-hand where the rival company went wrong with the product and explore what did not work in order to avoid the same mistakes while saving both resources and time.

## **Quality**

It is commonly mentioned that quality of a product surpasses the quantity. In business the product with the best quality is not only the one that stands out from the rest but also the one that probably has the longest market life. A product should not be distributed to consumers if the quality of the products is not right.

Nevertheless, achieving the best quality possible is not an easy task for every product has to undergo a probationary period prior to proper launching, course corrections if needed and last but not least the customers' feedback has to be taken into account since if a product is not right it

should not be marketed and the best way to know what was wrong with the product is via the involvement of the customers who are the one at the receiving end.

- ✓ Design quality: the extent to which a product meets the expectations of the consumer.
- ✓ Conformance quality: the ability to produce the product exactly according to the consumer specified specifications.

## **Speed vs Quality**

Speed refers to the time duration between the preliminary realizations of the concept to its actual launching in the market place. (Clark and Fujimoto, 1991) Speed is also referred to as the time of the development cycle. It is of key importance to mention that speed plays a key role in the acceptance of a production the market shares and profits.

Speed can for tell if a product needs fine tuning by ultimately cheating consumer acceptance, the sooner the market has a clear view of acceptance of the products the sooner it can realize a product that needs the needs of its consumers (Clark and Fujimoto, 1991, Kessler and Bierly, 2002). When the competitive environment changes so rapidly, development time becomes critical, companies have to respond swiftly yet with well-studied steps to every product launched to the market and to ultimate goal of every firm becomes to get the new product to the market first is a tricky business.

If a company launches a product first for the sake of being speeding without taking the required time to study the correct technology for the product or the proper design for it that product will most probably face inevitable loss.

In NPD speed is of key importance for it plays a critical role in profitability primarily with respect to product quality and secondary to the NPD expenses. Thus a firm's performance in the market can be assessed by speed of delivery of the product as well as its quality (Ittner and



Larcker, 1997). So ultimately to achieve success in the market both speed of delivery and quality of product are essential components delivery (Clark and Fujimoto, 1991)

Speed is expected to enhance product performance while being present on time when needed and showing no compromise in the quality of the product, thus hasty launching of a product to a market just for the sake of being speedy could do more harm to the firm than any benefits (McNally, Akdeniz and Calanton, 2011). Thus to achieve balanced excellence with respect to speed one tradeoff between qualities of product and speed launching could be sacrificed to ultimately benefit from speed and ensure productivity while ensuring quality.

As a conclusion, speed of launching is extremely crucial especially for banks but surviving in a highly competitive environment is evidently more important and since innovation could easily be irritated leaving very little credit to pioneers, quality of the product should not be ignored.

## **Technology**

With the revolution in information technology changes in the financial industry were inescapable, banks had to quickly adopt to these changes which requires them to adopt technological enhancements into their accounting management and communication systems.

The benefits of this integration tend to be numerous yet they could be summed up into three main features which are (1) ease of access like no time before, (2) avoiding time consumption by the click of a button instead of long time consuming procedures and finally (3) enhancing delivery of services and products (Alu 2000 and Yasuharou 2003).

The benefits of the integration of technology may be numerous indeed yet if they tend to be costly and unreasonably priced customers would actually refrain from using it regardless of all the benefits they provide according to Suganthi et al. (2001), the utilization of the new technologies relies primarily on the acceptance of the customers more than anything else.

Pyun et al (2002) together with Joseph and Stone (2003) have narrowed down the benefits of integration of technology to both customers and the banking institutions to the following:

- ✓ Controlling cost
- ✓ attracting customers
- ✓ meeting needs and expectations of current customers
- ✓ being user friendly
- ✓ deepening customer loyalty
- ✓ Increasing customer share.

On the other hand various studies by (Balachandhar et al, 2001; Idowu et al 2002; Yasuharu, 2003) have come to the conclusion that the integration of IT has induced positive feedback on a banks productivity by making the cashiers' work more at ease, facilitating the various transactions and enhancing service delivery be it to customers' or to the bank itself. These above mentioned factors in turn positively reinforce the bank's growth.

Moreover, a study by Singhal and Padmanabhan (2008) on customer perception towards internet banking provides a comprehensive framework of various factors which contribute to customers' perception such as:

- ✓ Convenience
- ✓ Reliability
- ✓ Time factor
- ✓ Real time access to information
- ✓ Faster transfer
- ✓ Easy to use, user-friendly
- ✓ Low transaction fee
- ✓ Anytime and anywhere banking facility

According to Williamson (2006), internet banking provides customers convenience and flexibility and can be provided at a lower cost than the traditional branch banking. Numerous

customers can be dealt with at once, decreasing the need to employ too many clerks and cashiers. Their administrative tasks are minimized and expenditures on forms and other bank stationery go down, which goes a long way to improve their profitability. As far as customers are concerned their account information is available all the time, regardless of location. They can reschedule their future payments from their bank account while sitting thousands of miles away; they can electronically transfer money from their accounts or receive money in their accounts within seconds.

The use of ATMs by consumers brings convenience, easy access and accurate record keeping of banking transactions. Therefore, the force of technology has led to the introduction of innovations in banking products, ATM being the most popular innovative product.

In conventional product development, companies look for new technologies that will better serve the existing needs of their customers. But if they want to create breakthrough products, they should seek to understand how those technologies could be used to address needs that customers may not realize they have to come up with these technology epiphanies (a perception of the essential nature or meaning of something) companies should turn to interpreters—experts from far-flung fields with a novel perspective on users—rather than to the users themselves (Verganti, 2011). These interpreters may come from inside or outside your organization. (Verganti, 2011). Normally, firms investigate customers' needs by asking them what they want or by closely scrutinizing them as they use a product.

In markets where everyone can easily gain access to new technologies, the big winners often are not the companies that obtain them first and use them to enhance existing products but are the companies that understand how those technologies can be used to create better customer experiences than existing applications do. And the biggest winners will be companies that learn to systematically produce one technology epiphany after another (Verganti, 2011).

While mobile banking is still in a relatively nascent state of maturity, it is a channel that will warrant more investment by banks to improve the customer experience. By 2015, more than 60 per cent of customers worldwide will likely use mobile banking. Although mobile is currently offering the least positive customer experience, it has also improved the most amongst all channels. To succeed in this market, banks will need to align their mobile strategies to better fit the size, profile and region of their targeted customer segments.

### Integrating Customer Needs with Technical Solutions.

The need to develop new products in the short term in order to ensure longer term survival is a fact of life. Nowadays, companies are facing pressure from both demand-pull and technology-push. On one hand, increasingly sophisticated customers are demanding ever more (usually technology-based) value for their money; while we also find rival companies taking advantage of barriers to entry that are often declining due to the application of new technologies from other industries. Those companies that can introduce products that succeed in the market place stand to gain at the expense of those who systematically introduce products that fail (Naude', Dangler and Blackman, 2009).

It's no good knowing what customers want in a product under development if the development team can't integrate that information with the available technical solutions. Without a way of capturing and integrating knowledge, the development process can quickly dissolve into chaos, with ad hoc design changes creating masses of rework because of unanticipated interactions with other components in the system. In the internet world, integrating mechanisms are dictated by the nature of the product–software.

It is our contention that banks that are unable to offer automated processes to meet the needs of their customer base will have difficulty in producing services to meet the specific needs of

individual segments. Banks and other financial institutions have been developing electronic means of delivering products since the mid 1970's. There were a number of reasons behind this change in approach (Naude', Dangler and Blackman, 2009).

These included the desire to:

- ✓ Reduce processing costs by eliminating manual processing by the service provider.
- ✓ Remove capacity restraints.
- ✓ Improve the timeliness of the response to customers.
- ✓ Reduce the occurrence of errors by minimizing the rekeying of information.
- ✓ Reduce head-count.

It is increasingly clear that the unit cost of meeting customers' requirements can be greatly reduced, and at the same time the capacity restraints of the existing manual process removed, by providing an automated service that is accessible to the customer. From a bank's perspective, it is relatively simple to develop an initial concept and to define the expected benefits to the customers based on the features required. However, difficulties have always arisen in testing the validity of IT-based products aimed at the financial institution marketplace. (Naude', Dangler and Blackman, 2009)

A number of practical issues have to be resolved including:

- ✓ Identifying potential customers.
- ✓ Concept feedback from potential customers.
- ✓ Accessing a broad enough customer base.
- ✓ Obtaining feedback from customers.
- ✓ Identifying suitable customers.
- ✓ Responding to customer requests in a timely fashion.

However, the possibility now exists to use the technology to build more of a strong relationship between the buyer and the supplier, to the extent where the interaction adds more value than traditional market. Potential advantages lie in the fact that a new channel of communication exists for relationship building between customer and supplier, whereby customers are not exposed to yet more market research, but rather become an integral part of the NPD process itself.

While this blurring of the lines between market research and NPD is something that we see as exciting and inevitable, it does also imply that customer's expectation levels will be raised, which puts additional innovative pressure on the supplier. As far as suppliers are concerned, however, a number of benefits of using this new channel of communication accrue, all of which combine to both lower the cost of market research and yet to increase its usefulness. Once a customer database has been built up, the major benefit is that new service concepts can be developed to meet the perceived needs of the customer group which can then be tested within very short lead times (Naude', Dangler and Blackman, 2009).

Therefore, it is important to develop new products alongside support systems in order to make the management of the product simple and cost effective. But there is a danger of technology being used solely as a cost control tool. Technology must be managed as a tool to give value to the consumer and the advanced use of it can provide the competitive advantage for a financial institution.

## **Expenses**

The crucial question companies must ask themselves is: how do we make a product or service a 'must have', at the same time, increasing market share and lowering costs? (Brown 2008).

The answer to this question lies in adopt a cost-effective approach to product development which involves the following:

- ✓ Companies should take a more strategic approach to cutting product development costs by upgrading their product development focus, practices and management.
- ✓ Moreover, companies must change the way they manage their new product pipelines and portfolios.

The following strategies are keys to this new approach:

1. Accelerating time to market; which is optimizing the product development strategy by accelerating time to market is a powerful competitive advantage in this current business environment (Ofek 2009). The ability to get new products to market ahead of the competition can generate a larger percentage of revenue from new products sold at premium prices and drive higher margins (Kim & Mauborgne 2007).
2. Re-evaluate your product portfolio and product roadmap; which is selecting the most valuable products, despite the high degree of uncertainty in early product development, and the appropriate allocation of resources to these products are key to achieving success in turbulent times.

Improving the effectiveness of product development however, is not necessarily about spending more; rather it is about spending less more wisely.

Moreover, significant cost savings can be gained by soliciting opinions during the product/service development stage of NPD:

- ✓ Reducing the need for in-house market research.
- ✓ Diminishing the risk of product failure.
- ✓ Potentially lowering inventory-holding costs

## **Innovation**

Irrespective of the economic climate, companies need to continually improve their existing products and develop new offerings if they are to survive and prosper. Those that fail to deliver innovation, either incremental or breakthrough, will ultimately fail. Product innovation decision has become a key element in the banks' strategy and planning for the future (Connolly and Penta 2003). Given this growing importance of NPD in the commercial banks, this attempt to highlight some of the key issues related to NPD is timely and significant.

A triad categorization by Kleinschmidt and Cooper (1991) appears to capture varying levels of innovativeness and a firm's new product strategy fairly well, this typology distinguishes among three types of innovation:

- ✓ Highly innovative products including new-to-the-world products and new to the firm lines.
- ✓ Moderately innovative products consisting of lines new to a firm, but not new to the world and existing items in existing product lines.
- ✓ Low innovative products including all product modifications, cost reductions and re-positioning.

By comparison, low innovative products are more likely to fail in the marketplace. A possible explanation for the negative performance impact is that these products are not innovative enough to benefit from the impact of product advantage and differentiation. Moreover, the lack of product differentiation and uniqueness has a negative effect on innovation performance.



The low cost and less risky option of developing moderately innovative products is likely to produce better outcomes, because banking products are intangibles and not patentable, they are much easier, faster and less expensive to imitate.

Because the potential customers are often unable to envision the true potential in a highly innovative product, it seems obvious that the product delivery staff would need special assistance and training in coping with customers' enquiries about new product. Likewise, the need for internal marketing of new products has been emphasized for pursuing a highly innovative strategy.

Moreover, the banking firms use cross-functional team extensively to develop highly innovative new products. One reason could be that for an unfamiliar product the functional tasks involved in developing the concept and bringing it to market are more difficult and challenging than when the new product is a more straight-forward line extension or modification.

As for moderately innovative products, it appears that a bank puts more emphasis on the commercialization stage of NPD. The proficiency in commercialization is essential because a moderately innovative product may face existing competitors' offerings that are firmly entrenched in the market, and potential customers that are more experienced and demanding.

In contrast, the firms that developed low innovative products emphasized the significance of business analysis as they undertook this activity to a large extent. It seems reasonable for a firm to conduct the stage of business analysis carefully to get a better idea of projected profit, sales and market share of a low innovative product. The main reason is that low innovative products lack differentiation and eventually customer demand declines therefore their market potentials need to be carefully assessed before taking the go/kill decision.

In summary, our study points to the notion that the banks might need to create different sets of rules for different product strategies.

## **Flexibility**

The rules of the game in product development are changing thus to compete effectively, companies must achieve flexibility in developing products. Flexibility in this context is the ability to react to change effectively and is an inescapable part of product development. It is also the ability to make changes in the product being developed or in how it is developed, even if it is relatively late in development, but while making sure it does so without being too disruptive (Preston 2009).

Flexibility can co-exist with process. It would be easy to conclude that the more flexibility, the better. But flexibility can be expensive, so it must be used with discretion. Companies have to understand where more flexibility will be most beneficial and, also, to identify where it might be harmful, for example, areas with system-wide impact.

The market needs a product that is meant to satisfy customers and the technologies required to satisfy them can change radically-even as the product is under development. Product developers in industries from computer workstations to banking increasingly face dynamic and unpredictable environments characterized by rapidly evolving technologies, changing customer tastes, and sweeping regulatory changes. Flexible product development has been most fully realized in the Internet environment because of the turbulence found there, but the foundations for it exist in a wide range of industries where the need for responsiveness is paramount. In these industries, companies that have begun to adopt more flexible product-development approaches are setting new competitive standards (Iansiti and MacCormack, 1997).

According to Iansiti and MacCormack (1997) many of the companies that they have studied have adopted a coherent set of mechanisms that allow product developers to generate and respond to new information about what customers want and about how technology has evolved over the course of a project. These mechanisms not only enable a continuous flow of information about

customer needs and new technologies but also reduce both the cost and the time it takes to integrate that information into the evolving product design. They allow designers continually to sense customer needs, to test alternative technical solutions, and to integrate the acquired knowledge into a coherent product design. This flexible process continues iteratively throughout the development process.

The traditional development processes that many companies use are highly structured. A future product is designed, developed, transferred to production, and rolled out to the market in clearly articulated, sequential phases. When technology, product features, and competitive conditions are predictable or evolve slowly, a traditional development process works well. However, in turbulent business environments, a sequential approach to product development is more than inefficient; it risks not only creating an obsolete product-one that fails to address customer needs but also to make use of the latest technologies.

When new competitors and technologies are likely to appear overnight, when standards and regulations are in flux, and when a company's entire customer base can easily switch to other suppliers, businesses don't need a development process that resists change-they need one that embraces it. Product development flexibility is rooted in the ability to manage jointly the evolution of a product and its application context. The goal here is to capture a rich understanding of customer needs and alternative technical solutions as a project progresses, then to integrate that knowledge into the evolving product design. The faster a project can integrate that information, the faster that project can respond to changes in the product's environment. Therefore, by accepting the need for and reducing the cost of changes, companies are able to respond to new information that arises during the course of a product's development (Iansiti and MacCormack, 1997).

The value of flexible product development, however, is only as good as the quality of the process it uses to generate information about the interaction between technical choices and market requirements. Unlike traditional development projects, which rely on periodic bursts of input on users' needs, projects in turbulent business environments require continual feedback. To acquire and use this information, the development process must be able to sense customer needs, to test alternative technical solutions, and to integrate the knowledge gained of both markets and technologies into a coherent product.

## **Risk**

In today's competitive marketplace, product innovation is ever more appreciated as a key component of sustainable growth for most firms. A problem, however, is that new product development (NPD) is risky due to alarming failure rates and the large amounts of venture capital required (Cooper, Edgett, and Kleinschmidt, 2004).

Innovation in banking is a wonderful thing, but unbridled new product development, with no risk filter, can drive the bank into troubles. Risk is an inherent part of new product development where new product failures routinely outnumber success. Indeed, new product difficulties are prevalent across all industries and sectors. These failures are caused by a variety of factors. Despite these risks Banks must engage in the new product process if they wish to endure and prosper. Only through the adoption of systematic framework for managing new product activities can executives minimize associated risks and increase their chance of developing new goods and services that achieve success in the marketplace (Booz, Allen and Hamilton ).

"With technology, we can launch things a lot faster," said Snyder (Elizabeth Snyder, senior vice-president and chief compliance officer at the Oak Brook, 111., community bank.) "But this means that we have to do a lot more due diligence up front, and develop more understanding of

the risks the new products will bring to the institution. Then, we have to figure out how to mitigate those risks."

NPD is a high-risk venture because most new products fail. A highly innovative product takes more time to develop and consumes more resources. In contrast, a moderately innovative product costs less and can be introduced in the market in much shorter time giving the firms a distinct cost advantage. That is, the moderately innovative products may not have the apparent risks of more innovative products.

### **Risks Involved in a New Product Launch**

There are a number of interconnected risks involved in a new product launch. Accordingly, it is essential for banks to identify those risks and modify or structure the product in such a way as to mitigate the risks in the best possible manner. The primary risks that arise in the development and introduction of new products or services include: (Albright, 2005)

- ✓ Strategic risk: The risk to earnings or capital arising from adverse business decisions or improper implementation of those decisions.
- ✓ Reputation risk: The risk to earnings or capital arising from negative public opinion.
- ✓ Credit risk: The risk to earnings or capital arising from an obligor's failure to meet the terms of any contract with the bank or otherwise fail to perform as agreed.
- ✓ Transaction risk: The risk to earnings or capital arising from problems with service or product delivery.
- ✓ Compliance risk: The risk to earnings or capital arising from violations of laws, rules, or regulations, or from nonconformance with internal policies and procedures or ethical standards.
- ✓ Other potential risks: Increased liquidity, interest rate, price or foreign currency translation risk.

Regulators recommend that banks take a proactive approach and involve all relevant bank departments in the process up front, such as risk management, compliance, audit, IT, finance and operations. This is critical because the involvement of these departments helps ensure that risks are fully understood and risk management strategies are fully vetted (Albright, 2005).

There is a common belief that “process” restrains innovation. However this perception can be overcome if the process is well-managed and aligned to the strategy of the company. If a risk management process is implemented properly, the benefits from taking the time to identify and mitigate risk far outweigh the downside of significant financial and/or reputation risk caused by the introduction of a poorly conceived product or service. This is particularly relevant for the banking and consumer finance industry where reputation and compliance risks are substantial (Albright, 2005)

## **Customers**

Customer satisfaction, recently, has become one of the most effective instruments especially for service firms to increase their market performance via customer loyalty (Jones & Sasser, 1995; Oliver, 1999). Customer satisfaction, in general terms, is defined as the concept of the ratio between the expectations before-purchase and after-purchase (Parasuraman et al., 1998; Westbrook & Oliver, 1991; Eggert & Ulaga, 2002). According to this definition, if the performance of the products and services are below customer’s expectations, dissatisfaction occurs (Parasuraman et al., 1998; Woodruff, 1997). Benefits derived by banks from customer satisfaction include loyalty, increase sales and profit and speaking well about the bank product and services to others.

When creating and designing a new product or service it is important to consider the use of the product (what does the product do), the level of usability of the product (how does it work, can it

be used comfortably) and the meaning that the product conveys. Successful products are those that provide smart and efficient solutions to strong customer needs.

In order to develop smart and efficient solutions to strong customer needs, two different types of information have to be combined: “need information” (what customers need) and “solution information” (how products are built). All products that are new development do not have equal opportunities for customers’ acceptance. Customers look for products that are considered solution to their needs, which means the degree those customers, feel that the new products are consistent with their present needs, values, and practices.

The critical features that influenced customers’ choice of banking products and their adoption were convenience, reliability, security, flexibility, any time anywhere banking, time saving, profitability and ease of use, In addition to the technological advances that can create better products and more competition due to the globalization of markets (Yiadam, 2012).

If bank new product development exceeds the customers’ expectations, the customer will be impressed, and if the service receive or meets customers’ expectations this mean the customers are satisfied. Customer satisfaction is about relationships between the customer and product or service. So, measuring customer satisfaction can provide banks useful information about customer loyalty and retention, and also help the bank to develop effective new product to gain competitive advantage in this heavily customer oriented service market.

Investments in launch activities (i.e., promotion, distribution, branding, and entry timing) positively influence customers’ product advantage perceptions, enhance diffusion through the market, and increase product profitability (Guiltinan, 1999; Hsieh, Tsai, and Wang, 2008; Langerak, Hultink, and Robben, 2004a). When future customer needs are unpredictable and difficult to articulate, firms have the opportunity to create a competitive advantage if they can simulate future consumption experiences better than the competition.

Critical to effective NPD is the ability to simulate the target customers' future consumption experience so the product delivers important and differentiated benefits. Not only does the firm need to better anticipate the customers' entire usage experience, it also needs to develop a product concept that best meets these needs.

How consumers perceive new products and services occurs to be an important subject. A study conducted by Cooper (1997) reported ease of use of innovative product or service as one of the three important characteristics for adoption from the customer's perspective. Improving customer service, increasing market reach and reducing costs are now the basic expectations of innovative products.

The framework for exploring consumer acceptance of new products is drawn from the area of research known as the diffusion of innovations. The diffusion process is concerned with how innovations spread, that is, how they are assimilated within a market (Schiffman & Kanuk, 2009).

All products that are new do not have equal opportunities for consumer acceptance. Although there are no precise formulas by which marketers can evaluate a new product's likely acceptance, diffusion researchers have identified five characteristics that seem to influence consumer acceptance of new products:

- ✓ Relative advantage
- ✓ Complexity
- ✓ Compatibility
- ✓ Trial ability
- ✓ Observability (Rogers, 2005).

Based on available research, it has been estimated that these five product characteristics account for much of the dynamic nature of the rate or speed of adoption (Chen & Crownston, 1997). The concept of adopters' categories involves a classification scheme that indicates where a consumer



stands in relation to other consumers in terms of time (or when they adopt a new product). Five adopter categories are frequently cited in the diffusion literature (Schiffman & Kanuk, 2009).

Innovators are very eager to try new ideas; accept products if risk is daring; develop more cosmopolite social relationships and easily communicate with other innovators (Schiffman & Kanuk, 2009). The tremendous concern for investigation of the recent developments in the banking sector is closely connected with the notion that most of the new financial products and technological changes are taking place in this industry.

- ✓ Innovators that are risk takers usually belonging to the high social class that have high financial liquidity and access to scientists and research as well as other innovators which makes them the pioneers in innovation.
- ✓ Early adopters are those with the second fastest speed in adopting innovations they have similar characteristics to innovators, usually have advanced education and are more discrete in the adoption of innovative ideas than innovators.
- ✓ Early majority belong to an average social class and tend to adopt innovations at a later stage than the previous two.
- ✓ Late majority belong to a below average social class, possess low financial liquidity and are skeptical regarding innovation.
- ✓ Laggards are those who are last in adopting innovations and are labeled as traditional they belong to the lowest social class and have very low financial liquidity.

## 2.15 Driving Product Development with Customer Needs

Current research in product development techniques firmly embraces the notion of focusing the process on the customer, from business strategy development to prototype testing and needs analysis. The customer provides a point of balance in the development of new products, simultaneously validating market and design decisions, while empowering the satisfaction of unique customer needs – thus differentiating new products from their competitors.

Companies must actively seek out and understand what their “customers” really want in the broadest sense of that word. Professor Glen Urban of the MIT Sloan School of Management supports this concept saying, “As customer power grows, innovative companies are moving beyond traditional push marketing and customer relationship management to become full proponents of the customer agenda.”

The works of professors Glen Urban, Abbie Griffin and John Hauser of the MIT Sloan School of Management and University of Illinois, advocate the use of techniques like *Voice of the Customer* to infuse customer needs into the product development cycle, leveraging their input to guide the direction of product development. Further supporting the use of a broad, customer-centric approach is the success that techniques like “lead-user” analysis have had at identifying new product opportunity at companies. Additionally, techniques such as Quality Function Deployment (QFD) make specific use of customer needs as an input to product development tools such as the House of Quality.

Focusing the product development process directly on both the needs defined by the customer and the broader needs of stakeholders can give an organization an advantage in the marketplace by producing clearly differentiated and successful products. Moreover, a persistent feedback cycle, incorporating feedback from customers and stakeholders, allows an organization to more accurately focus resources on initiative that are likely to win in the marketplace. Ultimately,

stakeholder based needs form the basis for product design requirements, upon which advanced concept designs are mapped to produce a next generation product.

## **2.16 Involving the customers in Product Development**

Success in the financial sector will inevitably depend on the ability of the companies to meet the changing needs and behaviors of customers (Rolt 2009). This trend to develop tailored products according to customers' current needs is also a challenge in the industry.

Greater chance of success and much more targeted products with mutual benefits being created and relationships getting stronger were results of the customers involved in the product development. It is essential to mention that there are two risks in giving chances to the customers to evaluate the new product before they are launched (Gorchels, 2005).

- ✓ First, the customer will be disappointed if the quality of the product is poor.
- ✓ Second, other competitors will find out about the product and might end up with better ideas than yours.

However, the customers evaluation is worthy since, the advantages of it overshadow its risks. Therefore, you have to ask your customers about what they would like to see in the new product, or what their views are if you are redeveloping an existing one. This can be done by involving your customers in the product development and giving sufficient explanation about your plans, and by this you can provide a jointly constructive service and strengthen the relationships.

So you have to set up a user group to encourage the customers' feedback, where they will discuss issues which are of mutual concerns like quality, performance, standards, future developments, and customer concerns.

For example, customers can test new products before they are introduced to the market. Their feedback on the product performance is valuable since they can identify the problems in using the new product, even practical improvements might be incorporated.

These feedbacks of the user groups not only provide the real benefits of the product development process, but also show valuable perspective on services and products. The representatives of the group can be from your company or from a cross-section of your customers, these comments in the group help to identify the needs met by the new product development. Beta testing or customer evaluation is also well established in the software industries (Gorchels, 2005).

Product development could collaborate between selected customers and the bank to develop services and products that cater their specific needs. It is essential to understand the markets of the new developed products because it improves the customers' competitive performance. So ask inputs from your customers about your development process after telling them about your product plans, and showing detailed picture of the market where you can align their needs you're your own plans, however, understanding your customers' business strategies is equally important too. In the business strategies there are two key objectives: the way that they aim to succeed and their corporate direction. You assure the future success of your new products by joining their product development objective with yours, and showing them the ways that your products and services help them achieve their strategic business objectives (Gorchels, 2005).

Finally, we can summarize the approaches to customer-focused product development as:

- ✓ Customers want to become market leaders through improvements; your new product programs can help them develop the right level of innovation without investment in their own skills.
- ✓ Where they want to succeed through competitive pricing, you can help them reduce overall costs by developing cost-effective products.

Furthermore, the more your product helps your customers meet their strategic business objective, the more the chances of success are achieved for that product, because the more the customer will depend on your new product so to integrate your product plan with your customers, it is important to understand their markets and business strategies (Gorchels, 2005).

## **2.17 Understanding Customer Experience**

Customer experience comprehends all the aspects of a company's offering as the quality of customer care, advertising, product and service features, ease of use, packaging, and reliability.

Some companies don't give importance to customer experience, some others collect and quantify data, but they don't socialize the results and moreover others measure and distribute but they fail in making someone responsible for using the information (Meyer and Schwager, 2007).

So few companies don't have customer experience at all, mostly all the companies at least try to measure customer satisfaction and have many resulting data, but this doesn't mean it will tell how to achieve the customer satisfaction, which is the result of many customer experiences, and the difference between good and bad ones. This happens when there is no gap between customers' expectations and their following experiences (Meyer and Schwager, 2007).

A company by deconstructing into its component experiences can achieve satisfaction. Most of the customers' experiences will not be a direct consequence of the company's actual offerings, so the company's reexamination of its enterprises and the choices will not be sufficient. Therefore the customers must be probed, because of their full range and straightforward reality of their experiences and expectations.

## **2.18 Achieve Product Excellence through Customer Insights**

As previously discussed product excellence could be achieved by the involvement of the customers themselves in the process of development of the product itself on one hand while taking their needs into consideration on the other in order to shape the needed product from the beginning and not after its launch to ensure its success and avoid the risk of failure. The following points summarize the importance of customer insights in the success of the developing new products:

- ✓ Managing costs is just part of the picture; the ability to respond to customer needs with a new or enhanced product is a key factor to success (Cooper 2009).
- ✓ A qualitative and at the same time a quantitative research: ‘Voice of the Customer’ diminishes risk because it provides powerful insights into the market and the customer need, and it is in the center of product management’s attention (Sinclair 2008).
- ✓ When a company is able to realize the customer needs and creates products to satisfy them that’s when the company’s success builds.
- ✓ The first stage in product development which is called ‘fuzzy front-end’ is when you give importance to the customers’ point of view.
- ✓ Academics and practitioners agree on the fact that the companies that understand the needs of their customers from the beginning of their process ends them in success and the time to the market is reduced, and this is irrespective whether a company follows a formal, which is a well-defined new product development process (e.g., Stage Gate®, Design for Six Sigma) or a less-structured approach.
- ✓ At each step of the new product development process, a company should integrate customers in the process (Gorchels 2005) as this input can help to build a successful new product.

## CHAPTER THREE

### METHODOLOGY

This research was conducted in order to determine the characteristics of successful product development which are the factors that influence customers' choice of banking products and their adoption and have an impact on their satisfaction and loyalty. And to determine whether the customers of Lebanese banks perceive their banks' new product development process to be successfully meeting their expectations and whether this perception contributes to their being satisfied, loyal and advocates of their banks. Another objective of the research was to determine whether there is a difference between the customers of Lebanese "Alpha" banks and the customers of the rest of the banks in terms of perceptions and impact of perceptions.

In order to answer these research questions, I opted to obtain the perception of customers of Lebanese banks. Using multiple regression analysis requires 5 observations for each independent variable. Thus, in our case, where the number of independent variables is 14, a sample of 70 observations was needed.

We were able to gather a total of 140 surveys; surveys were collected mainly from administrative Beirut and Metn regions. Based on a convenient sample, the respondents had bank accounts and were above 18 years old. Selected participants answered a survey questionnaire structured using five-point Likert scale, as it is the most widely used approach to scaling responses in survey research. Data gathered from this research instrument were then computed for interpretation.

Along with primary data, secondary resources were used in the form of published articles and literature books, in order to prove them in the Lebanese culture and to support the survey results.

### **3.1 Survey Instrument**

The survey questionnaire was used as the main data-gathering instrument for this study (See the Appendix). The set of questions represent the features and characteristics of a successful new product offered by banks.

The questions were formed by using ideas extracted from the literature review and formulated to fit the Lebanese banks. The questionnaire was structured using five-point Likertscale, providing five choices for every question or statement. The choices represent the degree of agreement each respondent has on the given question. The following scale was used: Strongly Disagree - Disagree - Neutral – Agree - Strongly Agree.

The participants were chosen from 2 bank categories; Alpha banks (top 10 banks) and the rest of the banks (non-alpha banks). Alpha banks which according to the Central bank of Lebanon control approximately 80% share of the market include Bank Audi, Blom Bank, Byblos Bank, Fransabank, BankMed, Societe Generale De Banque au Liban, Banque Libano-Francaise, Bank of Beirut, Credit Libanaise and BBAC. The rest are the 60 banks that control the remaining 20% share of the market. Accordingly 80% (112 surveys) of my survey was answered by participants dealing with alpha banks and 20% (28 surveys) with participants dealing with non-alpha banks in Lebanon.

The Likert survey was the selected questionnaire type as this enabled the respondents to answer the survey easily. In addition, this research instrument helped in carrying out the quantitative approach effectively with the use of statistics for data interpretation.



In order to test the validity of the questionnaire used for the study, the questionnaire were piloted with 10 people. These respondents as well as their answers were not part of the actual study process and were only used for testing purposes. After the questions were answered, the respondents were asked for any suggestions or any necessary corrections to ensure further improvement and validity of the instrument. The survey questionnaire was revised based on the suggestions of the respondents. Irrelevant questions were excluded and vague or difficult terminologies were further defined into simpler ones in order to ensure comprehension.

### **3.2 Ethical Considerations**

As this study required the participation of human respondents, certain ethical issues were addressed. The consideration of these ethical issues was necessary for the purpose of ensuring the privacy as well as the safety of the participants. Among the significant ethical issues that were considered in the research process include consent and confidentiality.

In order to secure the consent of the selected participants, all important details of the study were relayed, including its aim and purpose. By explaining these important details, the respondents were able to understand the importance of their role in the completion of the research. The confidentiality of the participants was also ensured by not disclosing their names or personal information in the research. Only relevant details that helped in answering the research questions were included.

### 3.3 Research Questionnaire

Based on my literature review and personal observations, I have formulated my research questions as follows.-

- Whether the customers of Lebanese banks perceive their banks' new product development process to be successfully meeting their expectations and whether this perception contributes to their being satisfied, loyal and advocates of their banks.
- Whether there is a difference between the customers of Lebanese "Alpha" banks and the customers of the rest of the banks in terms of perceptions and impact of perceptions.

### 3.4 Hypotheses

**Hypothesis 1.1** – The factors of NPD that impact the customers' choice of banking and their adoption contribute to the customers' being satisfied.

**Hypothesis 1.2** – The factors of NPD that impact the customers' choice of banking and their adoption contribute to the customers' being loyal.

**Hypothesis 1.3** – The factors of NPD that impact the customers' choice of banking and their adoption contribute to the customers' being advocates of their bank.

## **Second set of Hypotheses**

**Hypothesis 2.1** – The factors of NPD that impact the customers' satisfaction is different among the "alpha" and the rest of the banks.

**Hypothesis 2.2** – The factors of NPD that impact the customers' loyalty is different among the "alpha" and the rest of the banks.

**Hypothesis 2.3** – The factors of NPD that impact the customers' being an advocate to their banks is different among the "alpha" and the rest of the banks.

## CHAPTER FOUR

### STATISTICAL ANALYSIS

#### 4.1 RELIABILITY TEST

Reliability analysis allows us to study the properties of measurement scales and the items that make them up. It is used to show the extent to which variables are related to each other, and to prove internal consistency of the scale as a whole.

Reliability analysis was performed on all independent variables overall using the Cronbach's alpha test and then the independent and dependent variables combined.

The Cronbach's alpha is a measure of internal consistency or reliability, it is mostly used when we have multiple Likert questions in a survey and we wish to determine if the scale is reliable. Cronbach's alpha measures the extent to which the items are reliable to each other.

The SPSS output, detailing the Case Processing Summary and the Reliability Statistics for reliability analysis of all the independent variables first followed by independent and dependent variables combined are shown below:

Case Processing Summary			
		N	%
Cases	Valid	140	100.0
	Excluded <sup>a</sup>	0	.0
	Total	140	100.0

Case Processing Summary			
		N	%
Cases	Valid	140	100.0
	Excluded <sup>a</sup>	0	.0
	Total	140	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.861	.864	14

The Cronbach's alpha is equal to 0.861, which indicates a high level of internal consistency for our scale with this specific sample.

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.889	.892	17

The Cronbach's alpha is equal to 0.889, which indicates a high level of internal consistency for our scale with this specific sample.

Finally, reliability analysis was also performed on the dependent variable's 3 measures. The SPSS output is shown below:

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.794	.795	3

The Cronbach's alpha is equal to 0.794, which indicates a high level of internal consistency for our scale with this specific sample.

Inter-Item Correlation Matrix			
	Satisfied Customer	Loyal Customer	Advocate of The Bank
Satisfied Customer	1.000	.607	.624
Loyal Customer	.607	1.000	.659
Advocate of The Bank	.624	.659	1.000

The inter-item correlation matrix above displays the correlation of each item with every other item.

We can see from the table that the dependent variables are well correlated with each other, showing inter-item correlation of 0.607 for loyal customers and satisfied customers, 0.624 for advocate of banks and satisfied customers, and 0.659 for advocate of banks and loyal customers. All of those correlations are significant.

## 4.2 FACTOR ANALYSIS

Factor analysis is a method of data reduction. With factor analysis we can produce a small number of factors from a large number of variables which is capable of explaining the observed variance in the larger number of variables. Factor analysis has as its key objective reducing a

larger set of variables to a smaller set of factors, fewer in number than the original variable set, but capable of accounting for a large portion of the total variability in the items.

The identity of each factor is determined after a review of items that correlate the highest with that factor. Items that correlate the highest with a factor define the meaning of the factor observing what conceptually ties the items together. A successful result is one in which a few factors can explain a large portion of the total variability and those factors can be given a meaningful name using the assortment of items that correlate the highest with it.

As a result factor analysis is used to identify underlying variables that explain the pattern of correlations within a set of observed variables, and to describe the structure of the variables.

All variables involved in the factor analysis are interval and are assumed to be normally distributed.

The result is shown below:

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.868
Bartlett's Test of Sphericity	Approx. Chi-Square	653.802
	Df	91
	Sig.	.000

The KMO measures the sampling adequacy which should be greater than 0.5 for a satisfactory factor analysis to proceed with. The KMO in this case is 0.868 which is greater than 0.5, so it is satisfactory to proceed with the factor analysis.

KMO statistics vary between 0 and 1, where a value close to 1 indicates that factor analysis should yield distinct and reliable factors. Kaiser (1974) recommends accepting values greater than 0.5. Moreover, values between 0.5 and 0.7 are mediocre, values between 0.7 and 0.8 are good, value between 0.8 and 0.9 are great, and values above 0.9 are superb (Hutcheson & Sofroniou, 1999). In our case, the value is 0.868, which is considered great.

Bartlett's Test of Sphericity lets us know if there is a relationship between variables. If there is no relationship, then there is no point in proceeding with the factor analysis. Bartlett's Test of Sphericity tests the null hypothesis that the correlation matrix is an identity matrix. An identity matrix is matrix in which all of the diagonal elements are 1 and all off diagonal elements are 0. You want to reject this null hypothesis. This test is used to show that there is at least 1 statistically significant correlation within the correlation matrix.

Bartlett's Test of Sphericity should be significant. Which mean a value of Sig. less than 0.05. We can see from the table above that the Bartlett's test of sphericity is 0.000, which is less than 0.05, so it satisfies this condition and it is significant. Thus, the significance level is small enough to reject the null hypothesis. This means that the correlation matrix is not an identity matrix, and that there is at least 1 statistically significant correlation within the correlation matrix.

From the above satisfactory test results, we can pass on to performing the factor analysis.

### **Number of Factors to Extract**

The latent root criterion is used to reduce the variables, by extracting factors with eigenvalues greater than 1.



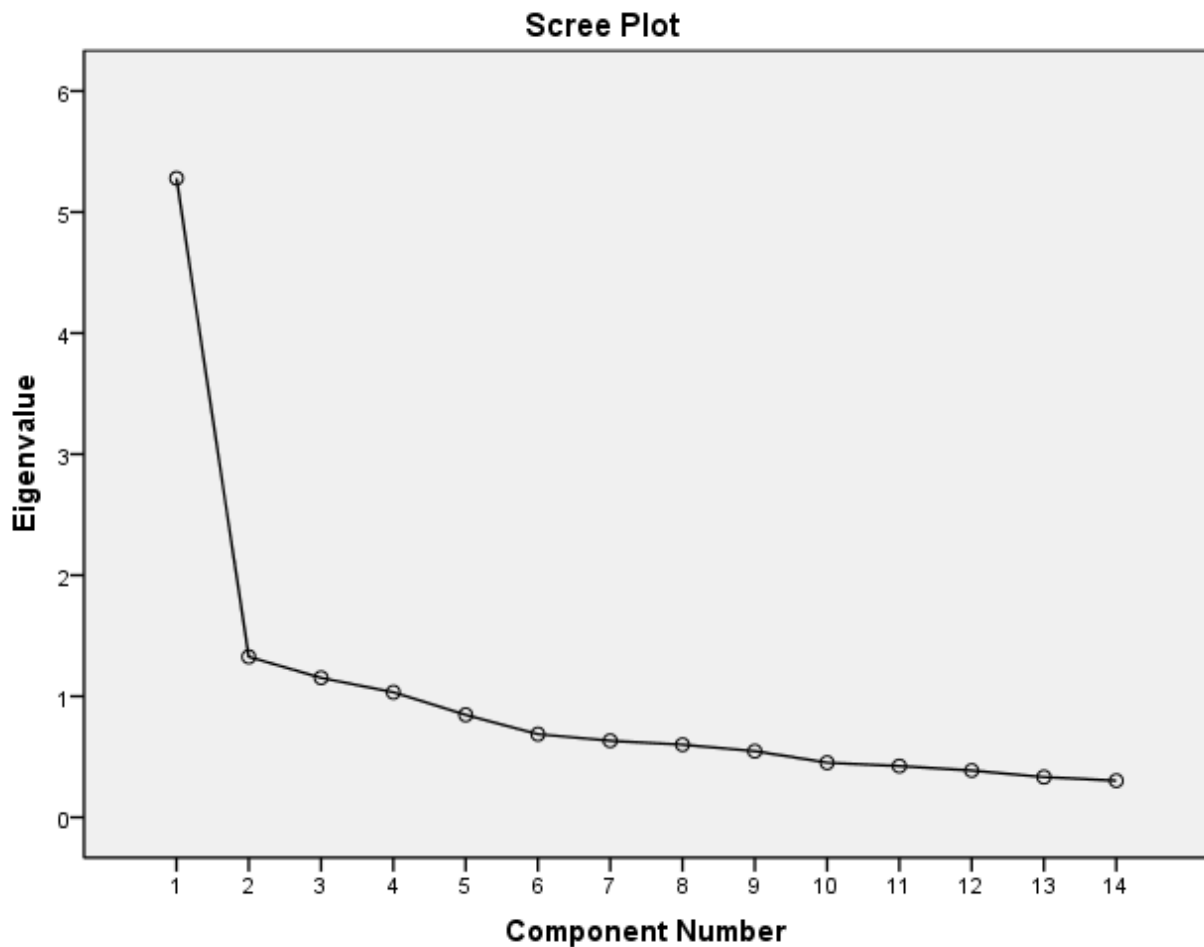
The “Total Variance Explained” table shows all the factors extractable from the analysis along with their eigenvalues, the percent of variance attributable to each factor, i.e. how much percent of the total variance each of the factors explains, and the cumulative variance of the factor and the previous factors.

From the table below we can see all the factors extractable from the analysis; in this case the factor analysis generated 4 factors having eigenvalues greater than 1. These 4 factors are capable of explaining 62.80% of the total variance.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.279	37.710	37.710	5.279	37.710	37.710	3.232	23.086	23.086
2	1.326	9.472	47.182	1.326	9.472	47.182	2.791	19.936	43.022
3	1.152	8.231	55.414	1.152	8.231	55.414	1.445	10.325	53.347
4	1.033	7.382	62.795	1.033	7.382	62.795	1.323	9.449	62.795
5	.847	6.047	68.842						
6	.687	4.907	73.750						
7	.632	4.517	78.267						
8	.600	4.287	82.554						
9	.546	3.903	86.457						
10	.452	3.226	89.682						
11	.423	3.024	92.706						
12	.386	2.760	95.466						
13	.332	2.374	97.841						
14	.302	2.159	100.000						

Extraction Method: Principal Component Analysis.



The Scree Plot is a graph of the eigenvalues against all the factors. It shows us graphically the factors extracted. We notice how the curve flattens after factor 1, meaning that each successive factor is accounting for much smaller amounts of the total variance.

### **Rotated Component Matrix**

We will use the “Rotated Component Matrix” to interpret the factors. The table is extracted using the Principle Component Analysis method, rotated by the Varimax method with Kaiser Normalization. Factors loading less than 0.5 are omitted, and the variables are sorted by the highest to the lowest loading.

**Rotated Component Matrix<sup>a</sup>**

	Component			
	1	2	3	4
Convenience	<b>.651</b>	.192	.243	.029
Reliability	.415	.368	<b>.458</b>	.046
Security	.123	-.032	<b>.875</b>	-.006
Flexibility	<b>.530</b>	.442	.152	-.200
Wide Choices	.130	<b>.601</b>	.521	.151
Low Product Prices	<b>.531</b>	-.055	.202	.502
Reduce Transaction Cost	.054	.155	-.023	<b>.909</b>
Meet Present Needs	<b>.778</b>	.040	.121	.158
Meet Changing Needs	<b>.612</b>	.230	.074	.186
Provide Smart And Efficient Solutions to Strong Needs	<b>.656</b>	.423	.035	.160
Innovative Yet easy To Use	.221	<b>.687</b>	.179	.247
Speedy Arrival To the Market	.376	<b>.717</b>	.088	-.080
Friendly Technology	.131	<b>.823</b>	-.114	.061
Anytime Anywhere Banking Facilities	<b>.648</b>	.368	-.008	-.150

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Based on the Literature, the 8 factors can be summarized as follows:

#### Factor 1: Bank's New Products reflecting convenience.

- The New products of my bank meet my expectations about convenience
- The New products of my bank meet my expectations about flexibility
- The New products offered by my bank are available by low prices
- The New products of my bank meet my present needs.
- The New products of my bank meet my changing needs

- The New products of my bank provide smart and efficient solutions to my strong needs
- The New products of my bank offer anytime anywhere banking facilities.

Factor 2: Bank's new products reflecting use of Technology.

- The New products offered by my bank are available in wide choices
- The New products offered by my bank are innovative yet easy to use.
- The New products offered by my bank have a speedy arrival to the market
- The New products offered by my bank are of friendly technology.

Factor 3: Bank's new products reflecting dependability

- The New products offered by my bank meet my expectations about reliability
- The New products offered by my bank meet my expectations about security

Factor 4: Bank's new products reflecting adoption of low transaction cost

- The New products offered by my bank reduce transaction cost providing more value for my money.

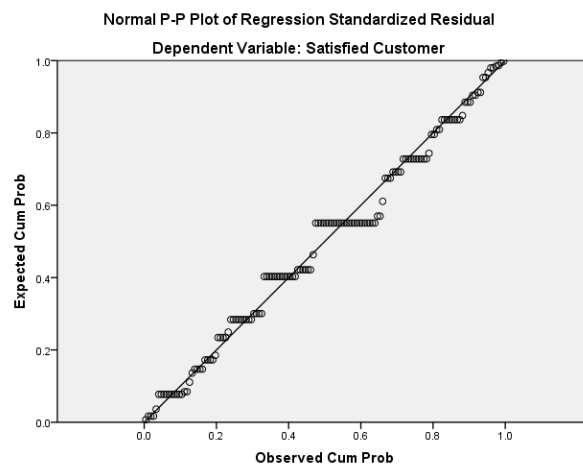
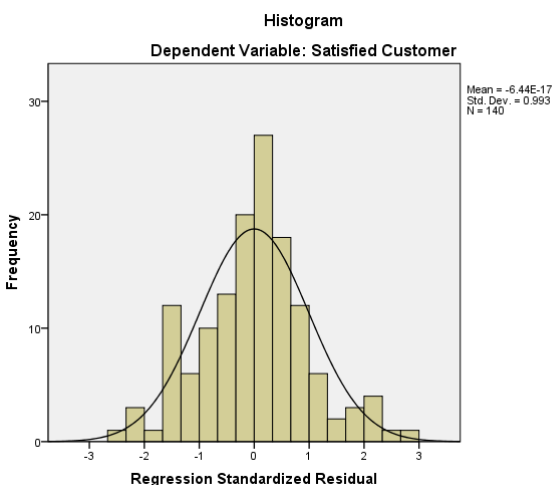
### 4.3 Regression Analysis

Following the satisfactory results of the reliability and factor analysis, we will use multiple regression with stepwise method. The focus of stepwise regression would be the question of what the best combination of independent (predictor) variables would be to predict the dependent (predicted) variable.

This method should ensure that we end up with the smallest possible set of predictor variables included in our model. One advantage of the stepwise method is that it should always result in the most parsimonious method.

First , Multiple regression (stepwise method) was performed with all independent variables that measure the features and characteristics of a successful New Products offered by banks on the dependent variable (Customer Satisfaction).

We can check the distribution visually by looking at the histogram of standardized residual, where a bell-shaped is observed, and the normal P-P Plot below shows that the points are close to the diagonal line. Hence we can validate the assumption of a normal distribution of the dependent variable.



**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Meet Changing Needs	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	Friendly Technology	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

a. Dependent Variable: Satisfied Customer

The Above table shows that out of the 14 independent variables, only two variables significantly contributed to the regression model explaining the features and characteristics of a successful New Products offered by banks that contribute to the customers' being satisfied; which are meeting changing needs of customers and having friendly technology.

**Model Summary<sup>c</sup>**

	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.599 <sup>a</sup>	.359	.354	.67528	.359	77.226	1	138	.000	1.900
2	.648 <sup>b</sup>	.420	.412	.64456	.061	14.467	1	137	.000	

a. Predictors: (Constant), Meet Changing Needs

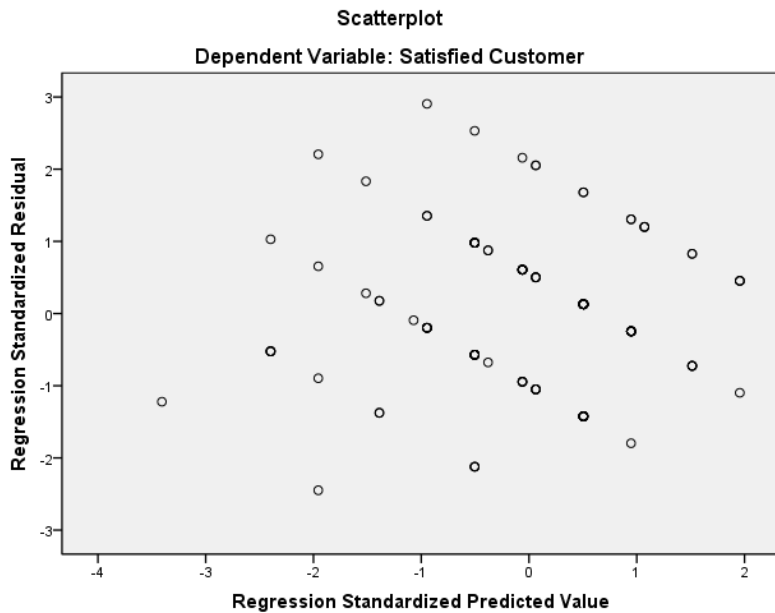
b. Predictors: (Constant), Meet Changing Needs, Friendly Technology

c. Dependent Variable: Satisfied Customer

The Model Summary Table above shows the value of  $R^2$  which refers to the fraction of variance explained by the model. It captures the percentage of deviation from the mean in the dependent variable that could be explained by the independent variable.

With the step-wise regression method, the independent variable with the greatest contribution to the regression model is added first, additional independent variables are added as long as they improve the model significantly. It is possible that independent variables are removed, if their predictive power decreases after adding other variables to the model. When no additional independent variable can make a significant improvement, the analysis stops. And in case the independent variables decrease the significance of the model, they are removed.

In this case, regression model 2 includes the best subset of independent variables, having as predictors “meeting changing needs” and “having friendly technology”. This model explains 42% of the variation in customer satisfaction.



The scatterplot above shows the heteroscedasticity is not present in the data.

**ANOVA<sup>c</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	35.215	1	35.215	77.226	.000 <sup>a</sup>
	Residual	62.928	138	.456		
	Total	98.143	139			
2	Regression	41.225	2	20.613	49.614	.000 <sup>b</sup>
	Residual	56.918	137	.415		
	Total	98.143	139			

a. Predictors: (Constant), Meet Changing Needs

b. Predictors: (Constant), Meet Changing Needs, Friendly Technology

c. Dependent Variable: Satisfied Customer

The ANOVA table shows the goodness of fit of the model, i.e. how significantly the regression model predicts the outcome variable.



The Sig. column indicates the statistical significance of the regression model that was applied. Having  $P < 0.05$  indicates that the regression model applied is significantly good enough in predicting the outcome variable.

The probability (p) of the F-stat (49.614) for the regression of the second model is 0.000, which concludes that the second model reliably predicts the dependent variable. In other words the two independent variables “meeting changing needs” and “having friendly technology” can be used to reliably predict the dependent variable “Customer Satisfaction”

Coefficients <sup>a</sup>							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Non-alpha			Lower Bound	Upper Bound
1 (Constant)	1.430	.258		5.540	.000	.920	1.941
Meet Changing Needs	.623	.071	.599	8.788	.000	.483	.764
2 (Constant)	.757	.303		2.494	.014	.157	1.357
Meet Changing Needs	.549	.070	.528	7.801	.000	.410	.689
Friendly Technology	.241	.063	.257	3.803	.000	.116	.366

a. Dependent Variable: Satisfied Customer

The coefficients table above provides us with information on the independent variable, in order to be able to predict the dependent variable from it.

The coefficient for the independent variable shows how much an increase of one in its value will change the dependent variable, holding all others constant.

The first column shows the predictor variables. The first variable (constant=0.757) is the predicted value of customer satisfaction when all other variables are zero.

From the table above, we see that the relationship between meeting changing needs and satisfied customers is positive (0.549) so is the relationship between friendly technology and satisfied customers (0.241).

The t-values and significance of the independent variables (7.801 & 0.000; 3.803 & 0.000) confirm that the relationship is statistically significant, and that there is a positive linear relationship between the two independent variables and the dependent variable.

By looking at the B column under the Unstandardized Coefficients, we can present the regression equation as:

Customer Satisfaction = 0.757 + (0.549 x meeting changing needs) + (0.241 x having friendly technology)

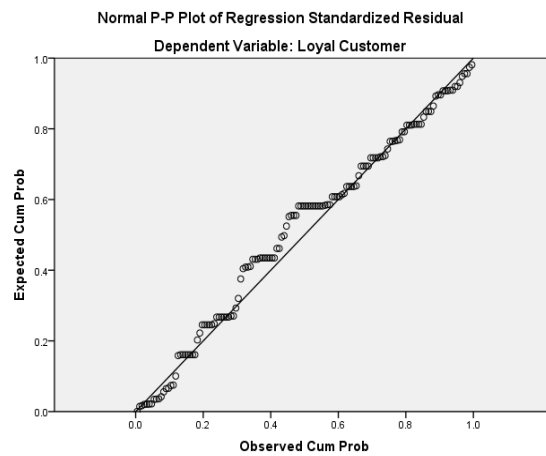
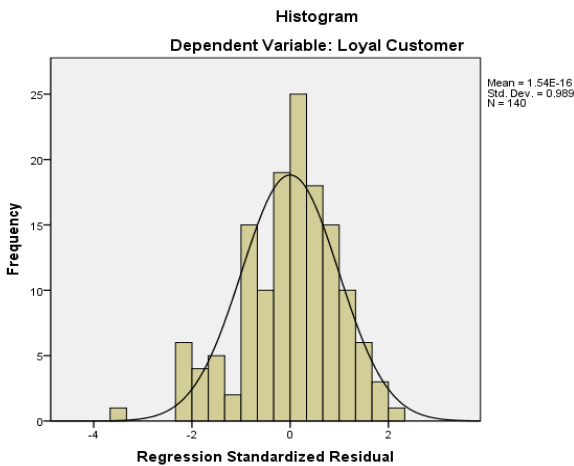
The equation shows us the amount of increase in customer satisfaction that would be predicted by a 1 unit increase in the independent variables, holding all else constant.

Second , Multiple regression (stepwise method) was performed with all independent variables that measure the features and characteristics of a successful New Products offered by banks on the dependent variable (Customer Loyalty).

We can check the distribution visually by looking at the histogram of standardized residual, where a bell-shaped is observed, and the normal P-P Plot below shows that the points are close to the diagonal line. Hence we can validate the assumption of a normal distribution of the dependent variable.

The histogram and the P-P plot below show that the independent variables are normally distributed.

The Histogram shows a bell-shaped curve and the normal plot of the residuals shows the points close to the diagonal line.



**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Anytime Anywhere		. Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	Banking Facilities		. Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
3	Convenience		. Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
	Meet Present Needs		. Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Anytime Anywhere Banking Facilities		Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	Convenience		Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
3	Meet Present Needs		Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

a. Dependent Variable: Loyal Customer

The above table shows that out of the 14 independent variables, only three variables significantly contributed to the regression model explaining the features and characteristics of a successful New Products offered by banks that contribute to the customers' being loyal which are; anytime anywhere banking facilities, convenience and meeting present needs of customers.

**Model Summary<sup>d</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.505 <sup>a</sup>	.255	.250	.90806	.255	47.334	1	138	.000	
2	.586 <sup>b</sup>	.343	.334	.85583	.088	18.360	1	137	.000	
3	.616 <sup>c</sup>	.379	.366	.83518	.036	7.856	1	136	.006	1.881

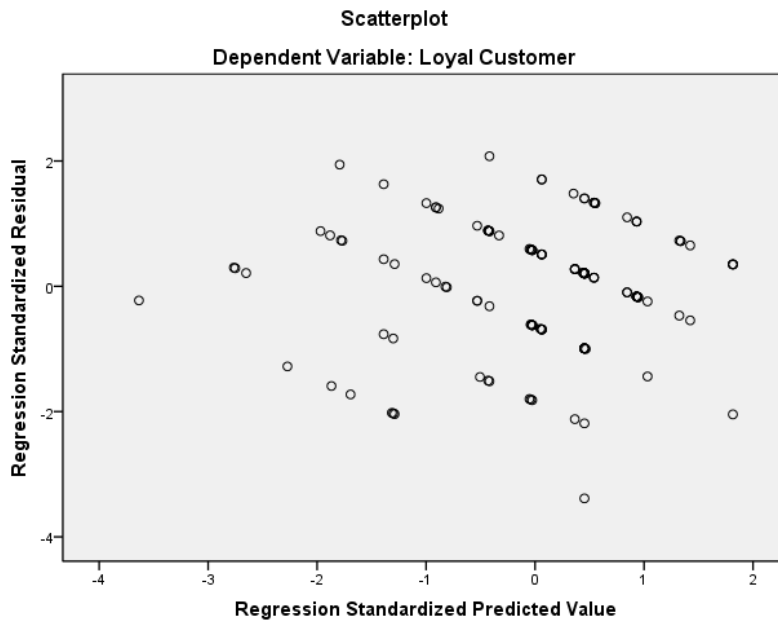
a. Predictors: (Constant), Anytime Anywhere Banking Facilities

b. Predictors: (Constant), Anytime Anywhere Banking Facilities, Convenience

c. Predictors: (Constant), Anytime Anywhere Banking Facilities, Convenience, Meet Present Needs

d. Dependent Variable: Loyal Customer

In this case, The model summary shows R square is 0.379, which means that 37.9% of the variance in the customer loyalty is explained by the predictors “anytime anywhere banking facilities”, “convenience” and “meeting present needs of customers.”



The scatterplot above shows the heteroscedasticity is not present in the data.

**ANOVA<sup>d</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	39.030	1	39.030	47.334	.000 <sup>a</sup>
	Residual	113.791	138	.825		
	Total	152.821	139			
2	Regression	52.477	2	26.239	35.824	.000 <sup>b</sup>
	Residual	100.344	137	.732		
	Total	152.821	139			
3	Regression	57.957	3	19.319	27.697	.000 <sup>c</sup>
	Residual	94.864	136	.698		
	Total	152.821	139			

a. Predictors: (Constant), Anytime Anywhere Banking Facilities

b. Predictors: (Constant), Anytime Anywhere Banking Facilities, Convenience

c. Predictors: (Constant), Anytime Anywhere Banking Facilities, Convenience, Meet Present Needs

d. Dependent Variable: Loyal Customer

The ANOVA table shows the goodness of fit of the model, i.e. how significantly the regression model predicts the outcome variable.

The ANOVA table shows  $P < 0.05$  indicating that the regression model applied is significantly good enough in predicting the outcome variable.

The predictors for this model, as mentioned above, are anytime anywhere banking facilities, Convenience and meeting present needs of customer.

The probability (p) of the F-stat (27.697) for the regression of the model is 0.000, which concludes that the third model reliably predicts the dependent variable. In other words the three independent variables “anytime anywhere banking facilities” “Convenience” and “meeting present needs of customer” can be used to reliably predict the dependent variable “Customer Loyalty”.

Coefficients <sup>a</sup>								
		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Non-alpha			Lower Bound	Upper Bound
1	(Constant)	1.705	.277		6.156	.000	1.157	2.252
	Anytime Anywhere Banking Facilities	.497	.072	.505	6.880	.000	.354	.640
2	(Constant)	.654	.358		1.825	.070	-.055	1.362
	Anytime Anywhere Banking Facilities	.379	.073	.385	5.159	.000	.234	.524
	Convenience	.399	.093	.320	4.285	.000	.215	.584
3	(Constant)	.309	.371		.833	.406	-.424	1.042
	Anytime Anywhere Banking Facilities	.309	.076	.315	4.083	.000	.160	.459
	Convenience	.318	.096	.254	3.324	.001	.129	.506
	Meet Present Needs	.253	.090	.220	2.803	.006	.074	.431

a. Dependent Variable: Loyal Customer

The first column shows the predictor variables. The first variable (constant=0.309) is the predicted value of customer loyalty when all other variables are zero.

From the table above, we see that the relationship between having anytime anywhere banking facilities and loyal customer is positive (0.309), the relationship between convenience and loyal customers (0.318) so is the relationship between meeting present needs and loyalty (0.253)

The t-values and significance of the independent variables (4.083 & 0.000; 3.324 & 0.001; 2.803 & 0.006) confirm that the relationship is statistically significant, and that there is a positive linear relationship between the three independent variables and the dependent variable.

By looking at the B column under the Unstandardized Coefficients, we can present the regression equation as:

$$\text{Customer Loyalty} = 0.309 + (0.309 \times \text{anytime anywhere banking facilities}) + (0.318 \times \text{product convenience}) + (0.253 \times \text{meeting customer present needs})$$

The equation shows us the amount of increase in customer loyalty that would be predicted by a 1 unit increase in the independent variables, holding all else constant.

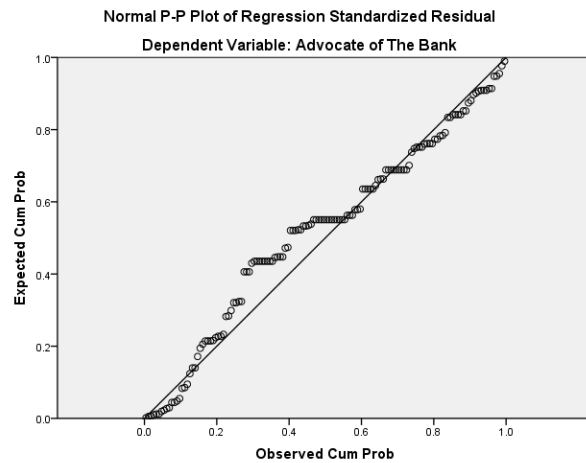
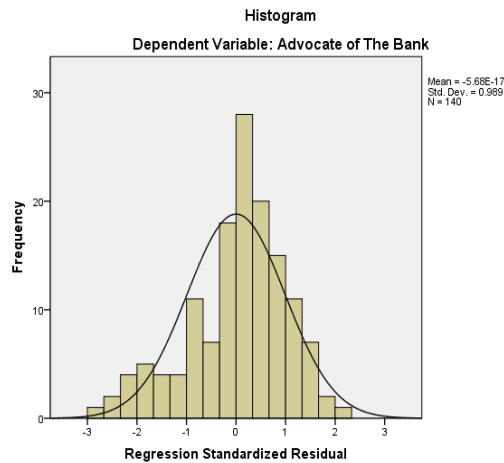
Third, Multiple regression (stepwise method) was performed with all independent variables that measure the features and characteristics of a successful New Products offered by banks on the dependent variable (Being advocate of your bank).

We can check the distribution visually by looking at the histogram of standardized residual, where a bell-shaped is observed, and the normal P-P Plot below shows that the points are close to the diagonal line. Hence we can validate the assumption of a normal distribution of the dependent variable.

The histogram and the P-P plot below show that the independent variables are normally distributed.

The Histogram shows a bell-shaped curve and the normal plot of the residuals shows the points close to the diagonal line.





**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Meet Changing Needs		. Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	Innovative Yet easy To Use		. Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
3	Anytime Anywhere Banking Facilities		. Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

a. Dependent Variable: Advocate of The Bank

The Above table shows that out of the 14 independent variables, only three variables significantly contributed to the regression model explaining the features and characteristics of a successful New Products offered by banks that contribute to the customers' being advocates of their banks, which are; meeting changing needs, Innovative yet easy to use and anytime anywhere banking facilities.

Model Summary <sup>d</sup>										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.524 <sup>a</sup>	.275	.269	.91953	.275	52.277	1	138	.000	1.718
2	.611 <sup>b</sup>	.374	.365	.85753	.099	21.675	1	137	.000	
3	.648 <sup>c</sup>	.420	.408	.82808	.047	10.918	1	136	.001	

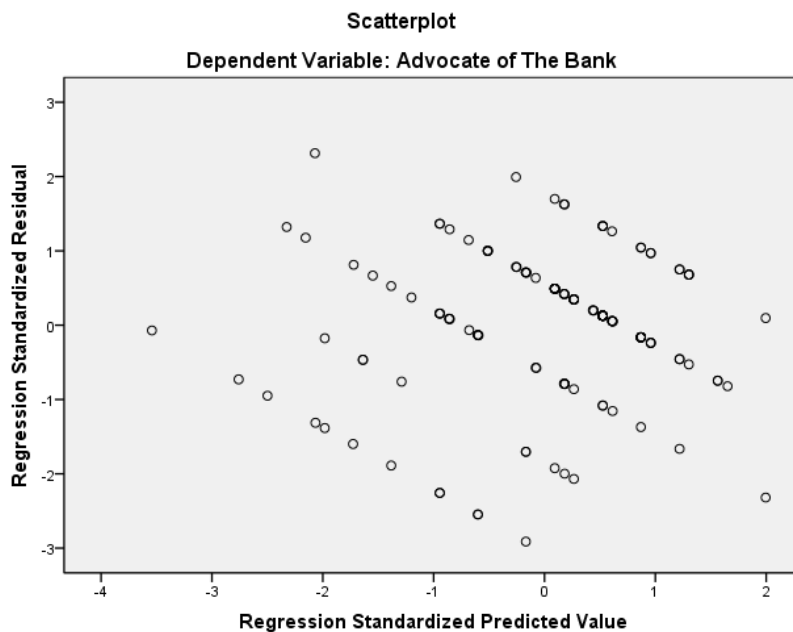
a. Predictors: (Constant), Meet Changing Needs

b. Predictors: (Constant), Meet Changing Needs, Innovative Yet easy To Use

c. Predictors: (Constant), Meet Changing Needs, Innovative Yet easy To Use, Anytime Anywhere Banking Facilities

d. Dependent Variable: Advocate of The Bank

In this case, The model summary shows R square is 0.420, which means that 42% of the variance in the customers being advocates to their banks is explained by the predictors “meeting changing needs”, “Innovative yet easy to use” and “anytime anywhere banking facilities”.



The scatterplot above shows the heteroscedasticity is not present in the data.

ANOVA <sup>d</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	44.202	1	44.202	52.277	.000 <sup>a</sup>
	Residual	116.684	138	.846		
	Total	160.886	139			
2	Regression	60.141	2	30.070	40.892	.000 <sup>b</sup>
	Residual	100.745	137	.735		
	Total	160.886	139			
3	Regression	67.628	3	22.543	32.874	.000 <sup>c</sup>
	Residual	93.258	136	.686		
	Total	160.886	139			

a. Predictors: (Constant), Meet Changing Needs

b. Predictors: (Constant), Meet Changing Needs, Innovative Yet easy To Use

c. Predictors: (Constant), Meet Changing Needs, Innovative Yet easy To Use, Anytime Anywhere Banking Facilities

d. Dependent Variable: Advocate of The Bank

The ANOVA table shows the goodness of fit of the model, i.e. how significantly the regression model predicts the outcome variable. The ANOVA table shows  $P < 0.05$  indicating that the regression model applied is significantly good enough in predicting the outcome variable.

The predictors for this model, as mentioned above, are meeting changing needs, innovative yet easy to use and anytime anywhere banking facilities.

The probability (p) of the F-stat (32.874) for the regression of the model is 0.000, which concludes that the third model reliably predicts the dependent variable. In other words the three independent variables “meeting changing needs”, “Innovative yet easy to use” and “anytime anywhere banking facilities” can be used to reliably predict the dependent variable “Customers being advocates of their banks”.

Coefficients <sup>a</sup>								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Non-alpha			Lower Bound	Upper Bound
1	(Constant)	1.050	.352		2.986	.003	.355	1.745
	Meet Changing Needs	.698	.097	.524	7.230	.000	.507	.889
2	(Constant)	.133	.382		.349	.728	-.623	.890
	Meet Changing Needs	.545	.096	.409	5.688	.000	.356	.735
	Innovative Yet easy To Use	.388	.083	.335	4.656	.000	.223	.553
3	(Constant)	-.207	.383		-.540	.590	-.965	.551
	Meet Changing Needs	.484	.094	.363	5.120	.000	.297	.670
	Innovative Yet easy To Use	.302	.085	.260	3.565	.001	.134	.469
	Anytime Anywhere Banking Facilities	.240	.073	.238	3.304	.001	.096	.384

a. Dependent Variable: Advocate of The Bank

The first column shows the predictor variables. The first variable (constant = -0.207) is the predicted value of customers being advocates to their banks when all other variables are zero.

From the table above, we see that the relationship between meeting changing customer needs and customers being advocates to their banks is positive (0.484), the relationship between innovative products yet easy to use and customers being advocates to their banks is (0.302) and finally the relationship between anytime anywhere banking facilities and customers being advocates to their banks is (0.240).

The t-values and significance of the independent variables (5.120 & 0.000; 3.565 & 0.001; 3.304 & 0.001) confirm that the relationship is statistically significant, and that there is a positive linear relationship between the three independent variables and the dependent variable.

By looking at the B column under the Unstandardized Coefficients, we can present the regression equation as:

Customer being advocates to their banks =  $-0.207 + (0.484 \times \text{meeting customer's changing needs}) + (0.302 \times \text{innovative products yet easy to use}) + (0.240 \times \text{anytime anywhere banking facilities})$

The equation shows us the amount of increase in customers being advocates to their banks that would be predicted by a 1 unit increase in the independent variables, holding all else constant.

#### **4.4 INDEPENDENT SAMPLES T-TEST**

The independent-samples t-test is used to test for a difference between two independent groups (in this case alpha and non-alpha banks) on the means of a normally distributed interval dependent variable, and identify whether the difference between the group means is statistically significant.

When comparing groups like this, their variances must be relatively similar for the first t-test to be used. Levene's test checks for this. If the significance for Levene's test is 0.05 or below, the "Equal Variances Not Assumed" test is used; otherwise, the "Equal Variances Assumed" test is used.

When the value for F is large and the P-value is less than .05, this indicates that the variances are heterogeneous which violates a key assumption of the t-test. "Equal Variances Not Assumed" test accounts for heterogeneous variances and provides an accurate result even when the homogeneity assumption has been violated.

As in all statistical tests, the basic criterion for statistical significance is a "2-tailed significance" less than .05.

Independent samples t-test was performed on all the dependent variables, in order to demonstrate whether those factors are different in alpha and non-alpha banks.

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Satisfied Customer	Equal variances assumed	13.573	.000	2.564	138	.011	.44643	.17408	.10221	.79064
	Equal variances not assumed			1.960	32.516	.059	.44643	.22782	-.01734	.91020
Loyal Customer	Equal variances assumed	2.775	.098	.000	138	1.000	.00000	.22235	-.43964	.43964
	Equal variances not assumed			.000	36.467	1.000	.00000	.25136	-.50956	.50956
Advocate of The Bank	Equal variances assumed	2.812	.096	1.339	138	.183	.30357	.22667	-.14462	.75176
	Equal variances not assumed			1.172	36.114	.249	.30357	.25900	-.22165	.82879

From the table above we can see that we do not reject the equality of means for all the variables.

Thus, we can conclude the following:

The 1st dependent variable, satisfied customer, is not different in alpha and non-alpha banks.

(where equal variance hypothesis was reject and the analysis was based on unequal variance)

The 2nd dependent variable, loyal customer, is not different in alpha and non-alpha banks.

The 3rd dependent variable, advocate of the bank, is not different in alpha and non-alpha banks.

## Conclusions and Recommendations

This dissertation consisted of two research steps. First key factors were identified and then the extent to which these factors affect bank customers' satisfaction, loyalty, and advocacy was discussed.

The results of this survey suggest that out of all the independent variables “products that meet customers' changing needs” and “products having friendly technology ” have significant effect on customer satisfaction, therefore I recommend that managers should focus on these factors since according to the statistical results these are the factors that increase customer satisfaction in the Lebanese banks. Moreover, managers should strive to improve also the non-significant factors such as “convenience of products”, “reliability of products”, “security of products”, “flexibility of products”, “products that are available of wide choices”, “low prices of products”, “low transaction fees of products”, “products meeting present needs of customers”, “products providing smart and efficient solutions to customers' strong needs”, “products being innovative yet easy to use”, “products having speedy arrival to the market” and “products offering anytime anywhere banking facilities” because according to the literature review these factors do affect customer satisfaction.

Similarly “products offering anytime anywhere banking facilities”, “convenience of products” and “products meeting present needs of the customers” have significant effect on customer loyalty, therefore I recommend that managers should focus on these factors since according to the statistical results these are the factors that increase customer loyalty in the Lebanese banks. Moreover, managers should strive to improve also the non-significant factors such as “reliability



of products”, “security of products”, “flexibility of products”, “products that are available of wide choices”, “low prices of products”, “low transaction fees of products”, “products meeting changing needs of customers”, “products providing smart and efficient solutions to customers’ strong needs”, “products being innovative yet easy to use”, “products having speedy arrival to the market” and “products having friendly technology” because according to the literature review these factors do affect customer loyalty.

In addition, “ products meeting customers’ changing needs”, “products being Innovative yet easy to use” and “ products having anytime anywhere banking facilities” have significant effect on customer advocacy to their banks, hence I recommend that bank managers focus on these significant factors because according to the statistical results those are the factors that would increase customers’ advocacy in the Lebanese banks. Moreover, managers should also strive to improve the non-significant factors such as “convenience of products”, “reliability of products”, “security of products”, “flexibility of products”, “products that are available of wide choices”, “low prices of products”, “low transaction fees of products”, “products meeting present needs of customers”, “products providing smart and efficient solutions to customers’ strong needs”, “products having speedy arrival to the market” and “products having friendly technology” because according to the literature review these factors also affect customer’s advocacy in Lebanese banks.

Finally, In addition to the above-mentioned results, according to the independent sample t-test that was performed on all the dependent variables in order to demonstrate whether those factors are different in alpha and non-alpha banks. The result showed us that the dependent variables

customer satisfaction, customer loyalty and customer advocacy to their banks do not differ in alpha and non-alpha banks.

## **Limitations**

As a limitation to my study I think about the additional information that I could have obtained had I compared the different regions in Lebanon and highlight the specific factors impacting customer's perception in each region.

## APPENDIX

## Survey Questionnaire

Dear Participant,

My name is Liza Tchobanian and I am a graduate student at Haigazian University. As part of the graduate program of fulfilling the requirements of the MBA degree from Haigazian University, I am conducting a survey about Lebanese customers' perception concerning their banks' new products.

I would really appreciate and be grateful if you would take time to fill out the attached questionnaire which will require approximately 10 minutes to complete.

Your frank response will remain confidential and the data from this survey will be reported in the thesis anonymously. To ensure anonymity, you are not required to disclose any personal information.

Your active participation will be an expression of your valuable sense of social responsibility that I definitely need.

The attached questionnaire consists of 19 statements which describe factors that contribute to the success of new products developed by your bank, example of new product could be Internet Banking, Mobile Banking, Smart Cards, Online Banking, New ATM Machines, etc...

Please read through each of the following statements and fill in the check box that signifies your level of agreement with the implementation of these practices in your banks according to the following scale: Strongly Disagree – Disagree – Neutral – Agree – Strongly Agree.

Your accurate and frank responses will contribute to have precise results and help me in defending my thesis project successfully.

Thank you for taking the time to assist me in my educational endeavors.

For any further clarification, you can contact me at [Liza.Tchobanian@hotmail.com](mailto:Liza.Tchobanian@hotmail.com)

Sincerely,

Liza Tchobanian

No.	Listed below are a series of statements that represent the features and characteristics of a successful new product offered by Banks. Please read through each of the following statements and fill in the check box that signifies your level of agreement with the implementation of these practices in your bank.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	The new products of your bank meet your expectations about convenience (easy to reach)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	The new products of your bank meet your expectations about reliability (are dependable)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	The new products of your bank meet your expectations about security (are protected from threats)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	The new products of your bank meet your expectations about flexibility (are adaptable to different uses as your wants change ex; ATM machines that were once used to only withdraw money are now used to deposit cash and checks too).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	The new products offered by your bank are available in wide choices.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	The new products offered by your bank are available by low prices.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	The new products offered by your bank reduce transaction costs providing more value for your money.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	The new products offered by your bank meet your present needs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	The new products offered by your bank meet your changing needs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	The new products offered by your bank provide smart and efficient solutions to your strong needs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	The new products offered by your bank are innovative yet easy to use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	The new products offered by your bank have a speedy arrival to the market.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	The new products offered by your bank are of friendly technology: easy to use and time saving.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	Your bank is offering anytime and anywhere banking facilities for your new products.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	The appreciation of your bank's new products makes you a	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	satisfied customer.					
16	The appreciation of your bank's new products makes you a loyal customer.(you always come back to your bank without questions: you are faithful)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	The appreciation of your bank's new products makes you an advocate of your bank. (you recommend your bank to your friends)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Kindly specify:**

- **The Name of the Bank you deal with mainly:**

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