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MODEL OF INNOVATION ADOPTION IN BANKING SECTOR

In today's competitive markets, innovation is seen as a critical factor in a banks' long-term success. Innovation is an important tool for banks to gain market advantage. In this article the model of financial innovation adoption in banking sector was explained. The organizational variables are linked to the adoption of internet banking by financial institutions. Structural variables are linked to the adoption of internet banking by organizational customers. Individual variables of the main decision-maker must be examined to obtain a positive influence on the probability of success of financial innovation adoption.

Keywords: *innovation; banking sector; innovation adoption; financial model; organizational variables; individual variables; structural variables.*

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МОДЕЛЬ ВНЕДРЕНИЯ ИННОВАЦИЙ В БАНКОВСКОМ СЕКТОРЕ

На сегодняшних конкурентных рынках инновации рассматриваются как решающий фактор долгосрочного успеха банков. Инновации — это важный инструмент банков для получения рыночного преимущества. В данной статье объясняется модель внедрения финансовых инноваций в банковском секторе. Организационные переменные связаны с внедрением интернет-банкинга финансовыми учреждениями. Структурные переменные связаны с внедрением интернет-банкинга клиентами организации. Необходимо изучить индивидуальные характеристики основного лица, принимающего решения, чтобы оказать положительное влияние на вероятность успеха внедрения финансовых инноваций.

Ключевые слова: *инновации; банковский сектор; внедрение инноваций; финансовая модель; организационные переменные; индивидуальные переменные; структурные переменные.*

The concept of innovation is playing an increasingly important role in an increasingly competitive and dynamic banking market. Banks work in an unpredictable business environment. According to Tajeddini, in order to be successful and achieve consistency in performance, banks must not only seek new prospects but also be highly innovative [1, p. 530]. Innovation is critical for both start-ups and existing businesses to have a competitive advantage. Businesses with the ability to innovate are able to respond to market difficulties faster and better than non-innovative businesses [2, p. 350]. According to Beck, the appropriate kind of innovation and investments in new technology and techniques can help banks increase their efficiency, overall performance, and growth [3, p. 32].

In the banking and finance sectors, information technology has prompted new product design and distribution innovations. Technology allows banks to create innovative systems that meet a broad variety of consumer needs, including those that are currently unimaginable. Banking over the internet has emerged as a strategic weapon for increasing production, controlling activities, and lowering costs by automating paper-based and labor-intensive processes, resulting in increased productivity and profitability.

According to Jenkins, the growing financial competitive climate, whether locally or internationally, has prompted small and large banks to seek out new distribution channels from which they can distinguish their goods and services and thereby gain a competitive advantage [4, p. 525]. In this regard, the internet climate has radically altered conventional business orientations and shifted bank operations to the so-called digital bank. Banks can now offer new generations of banking services without having to invest in physical branches thanks to the internet. Banks' operating costs are reduced, banking facilities are improved, and customers are retained as a result of internet banking.

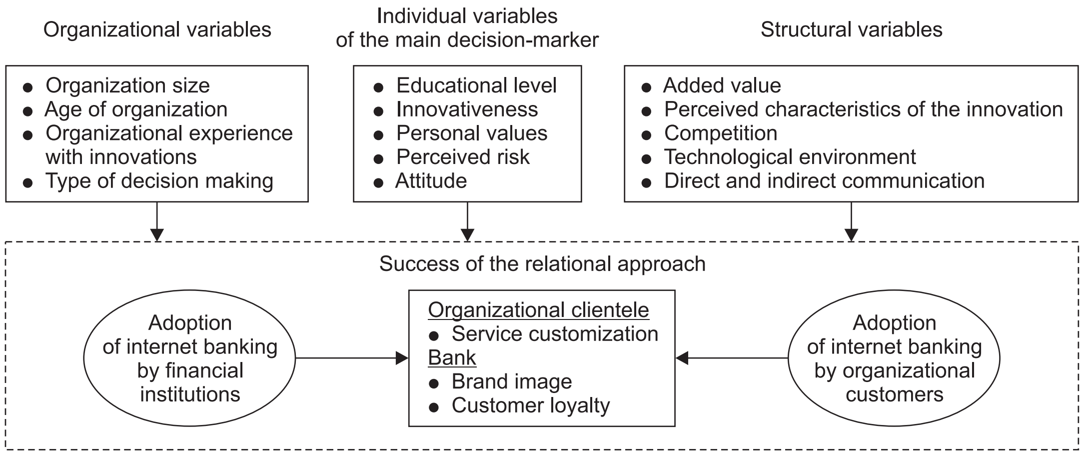
According to Furst et al., internet banking refers to a mechanism that enables customers to conduct business with a bank through the internet, resulting in a noticeable increase in banking services [5, p. 97]. Furthermore, internet banking provides convenience to its users by allowing them to conduct transactions at any time of day and from any location in the world, making it an acceptable gate for banks to meet their customers' ultimate needs competitively. At this point in the development phase, internet banking has a huge impact on the retail bank-customer relationship, but it does not replace other distribution channels. Banks must provide consumers with the most up-to-date financial products and services, presented in a wide range of options, in order to increase customer satisfaction and bank market share. As a result, bank executives adopted a multi-channel approach to move their strategic thinking about competition away from price and toward non-price and high-quality services.

Furthermore, the culture of the company and customer acceptance of new technology have a significant impact on the adoption of e-services delivery, and consumer behavior varies by culture. Consequently, banks management should devote much effort to tackle challenges and impediments limiting the expansion of internet banking adoption by customers in different cultures [6].

Technological innovation emphasizes the convergence of finance and technology, as well as the use of emerging technologies to increase financial service quality, lower costs, and reduce risk. The Standard and Chartered Bank of the United Kingdom has opened a Fintech innovation lab in Singapore to investigate how big data, cloud computing, and blockchains can be integrated into conventional financial services to provide customers with creative and detailed business solutions [7, p. 532]. Furthermore, Hertog et al. suggested that companies promoting innovative service models to consumers should seek advice from marketing experts while developing unique marketing strategies [8, p. 494]. Database marketing, according to Singoei and Wang, is an important marketing tool for banks because it improves marketing performance [9, p. 201].

Banks are now competing for customers with their peers as well as institutions outside of the banking industry. Mastering the skills of digital media, content marketing, digital consumer lifecycle management, and marketing operations has become a key factor in a bank's success since big data and advanced analytic tools have become central in digital marketing. Therefore, the development of big data analysis, smart investment management, blockchain applications, new payment methods, and digital marketing enhancement are used as evaluation criteria for technological innovation.

Model of financial innovation adoption in banking sector was developed by author shown on figure. In this model three main variables are illustrated which are organizational variables, individual variables of the main decision-maker and structural variables.



Model of financial innovation adoption in banking sector

S o u r c e: compiled by author.

Those variables are important for successful adoption of financial innovation because they help to measure the success rate of the adoption process. Each variable plays a key role in the determination of the acceptance or rejection of financial innovation. We need variables that make the process of goal setting possible to identify which results in the achievement of the goals, in this case the adoption of financial innovation.

Organizational variables contain four elements: organization size, age of organization, organizational experience with innovations and type of decision making. Organizational variables explain the characteristics and features of the organization we are examining to determine a final result and conclusion.

Organization size is determined by number of employees, market share, capital, branches and reach of the organization. The organization size positively influences the probability of success of financial innovation adoption because customers are impacted by the success of the organization which is represented by the size before adopting any innovation.

Age of organization explains how many years the organization had been functioning, which reflects how much the organization is solid and was able to survive in the harch business and competitive environment. Age of organization positively influences the probability of success of the financial innovation adoption because people in nature tend to trust organizations that are in market for many years. It provide customers with feeling that any new innovation developed by this organization is well managed and enough researches are achieved before launching.

Organizational experience with innovations explains the previous involvement of organizations with innovation and whatever this experience was successful or not. This variable positively influences the probability of success of the financial innovation adoption because it is a prove that this organization is familiar with the process of running and managing innovation for the best of the customer.

Type of decision making explains the process by which organizations selects a particular course of action among several alternatives which best serves own and the costumer benefit.

Success and failure of and organization depends upon the quality of decision making that the executives must take for the continuity of the business. This variable has both negative and positive influence on the success of the financial innovation adoption. Bad decisions in any aspect of the organization that influence customers can lead to mistrust, which will affect negatively on the innovation adoption process. On the contrary, if the clients are aware of the accurate decisions of the organization, the adoption process will be uncomplicated.

Individual variables of the main decision-maker contain five elements: educational level, innovativeness, personal values, perceived risk and attitude.

Educational level explains what degrees and certificates that the customer hold. Educated people are more open to innovation and easy for them to use new applications and software's, therefore this variable will influence the process of adopting innovation positively. Never the less, a small portion of uneducated customers will refuse any new innovation because it will not be easy to apply new application and manage it.

Innovativeness is described as the skill and imagination to create new things, which speaks to the duality of the attribute but just scrapes the surface of the importance of innovativeness to business growth and sustainability. Innovativeness positively influences the probability of success of financial innovation adoption.

Personal values are a permanent belief of a person. The individual develops such beliefs, either in his own native culture or in the culture with which he is associated. If new innovation is developed in a society or culture that accepts adoption, then the process will be positively influenced since the personal values of the customer are used adapt with new innovation. And vice versa, the process of adoption of innovation can be negatively influenced if the personal values reject whatever is new and inner immunity is built to refuse innovations.

Perceived risk explains the spirit cost associated with consumers' purchasing behavior, which indicates a form of future uncertainty, is referred to as perceived risk. Consumers' purchase intentions will be directly affected by this uncertainty. Consumers actively perceive risk because they do not grasp product information, which is known as perceived risk. Consumer perception of risk, as defined above, is an inner experience that cannot be witnessed directly; the dimensions of risk can only be inferred by certain signs. As a result, consumers must decide whether or not to purchase and consume those products. The perceived risk negatively influences the probability of success of financial innovation adoption because most customers are conservative risk takers, which means they try to avoid adopting new innovations since they lack the knowledge and information.

Attitude explains the cognitive process. Six beliefs were discovered to have an impact on adoption: compatibility, increased value, perceived advantages, adaptive experiences, perceived difficulty, and suppliers' commitment. Individual external environmental factors had no discernible impact on the development of a behavioral intention to adopt. The attitude positively influences the probability of success of financial innovation adoption because customers nowadays in financial services are open for new innovations and accepts whatever is new in order to perform transactions easily.

Structural variables contain five elements: added value, perceived characteristics of the innovation, competition, technological environment, direct and indirect communication.

Added value is something which makes a service more appealing to customers. It is an improvement or addition to something that makes it worth more. Customers when dealing with financial organizational search for two things. First, the financial benefit which is represented in increasing their profits. Second, the tools and applications they use to make their transactions easier to perform. The added value positively influences the probability of success of financial innovation adoption because any innovation developed by financial organizations is for the benefit of the clients.

Perceived characteristics of the innovation consists of relative advantage, compatibility, ease of use, results demonstrability, image, visibility and trialability. Perceived characteristics of the innovation can positively influence the probability of success of financial innovation adoption because innovations developed by financial organization goes under a lot of research and development process to better service customers.

Competition is the activity or condition of striving to gain or win customers by defeating or establishing superiority over others. It is the effort done by organizations with the same line of business to gain customer's advantage. Competition positively influences the probability of success of financial innovation adoption because it is one the most variable to gain market advantage. Competition between organizations is always for the benefit of the clients because firms compete between each other to provide the best service and innovations for their customers.

Technological environment explains whether if the over all atmosphere in a specific area accept innovation and able to use it. Technological environment can positively and negatively influence the probability of success of financial innovation adoption because some societies and culture in the developed countries are well familiar with innovation and they accept it since they don't have any other choice. On the contrary, in the undeveloped countries it is hard for financial organization to convince customers to adopt innovation.

Direct and indirect communication explains the means of communication between the financial organization and its customers. Direct communication is represented by the human interaction, for example phone calls, direct emails and visit to the organization to inquire more information about the innovation. Indirect communication is represented by the organization's website and other ways that doesn't require human interaction. Direct and indirect communication can positively influence the probability of success of financial innovation adoption because financial organization spends a lot of money in order to communication with their customers to gain advantage in market.

The success of the relational approach depends on influence of those variables and can be viewed as external condition of operating of two elements: organizational clientele (include service customization) and banks (which contain brand image and customer loyalty).

Service customization is any service that's tailored to the needs of individual customers. It is the customization of services through personal interaction between a financial organization and its customers. The goal is to help customers better identify what they want. Bank's customers are always asked about how can they be served in better ways, and if they got new ideas regarding the new innovation that is developed. The service customization positively influences the probability of success of financial innovation adoption because customers are involved in the process and they suggest their thoughts and ideas.

Brand image: customers' current perceptions of a brand are referred to as brand image. It can be characterized as a unique set of associations that target buyers have in their heads. It expresses the current meaning of the brand. It's a set of beliefs about a particular brand. Over time, this image evolves. Customers build an impression of a brand based on their interactions and experiences with it. These encounters can take many different forms and aren't always related to the purchase or usage of goods and services. The brand image positively influences the probability of success of financial innovation adoption because customers dealing with a financial organization over time, built thoughts that innovations developed have an extraordinary brand image.

Customer loyalty is defined as a continuing emotional bond between a financial institution and its customers, manifested by a customer's willingness to engage with and purchase from this institution above its competitors. Loyalty is a result of a customer's excellent experience with a company, and it helps to build trust. The customer loyalty positively influences the probability of success of financial innovation adoption because the loyalty can lead to trust. Therefore, customers will be able to adopt innovation comfortably knowing that this innovation is for their own interest and benefit.

The three variables and elements are connected through the success of the relational approach and to the successful adoption of internet banking by both financial institutions and organizational customers. Each element of the variables after being studied and implemented can play an essential role in the success of the adoption process.

For example, regarding the adoption of internet banking by financial institutions, type of decision making can determine whether the institution will adopt internet banking or reject. Same as in the case of the organizational customers, personal value and benefit for the customers can play an important role in the adoption process of internet banking. Therefore, we can conclude that there is a positive relation between the elements of the variables and the success of the adoption.

Proposed model of financial innovation adoption in banking sector helps both the financial organization and the customers. Financial organization will have a broader image on what type of customers should they target and what kind of innovation should they develop to be adopted from a wide range and not a specific segment of clients. Financial organization can benefit from this model to study the variables in order to have a positively influences on the probability of success of financial innovation adoption. Customers on the other hand can better choose whether to adopt new innovation or reject it. Based on the proposed model they can determine if the innovation suits them and even compare with the financial organization competitors.

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