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Critical success factors for CRM implementation in the Iranian banking sector: A conceptual analysis

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Abstract:
The main aim of this research paper to provide a theoretical framework on critical success factors for CRM implementation in the Iranian banking sector. Iran has one of the largest and most representative Islamic banking systems in the world. The banking system is a changing environment and CRM can be an optimal solution for managing change. Generally, banks are interested in increasing their competitiveness, performance and profitability, but also to minimize their costs by implementing CRM practices.

Keywords: *Islamic banking; banking customer; customer relationship management (CRM); conventional banking; Sharia laws; global economy; sustainable development.*

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1. Introduction

The role of the banking system is essential in the context of the global economy. The banking sector in Iran exhibits various structural vulnerabilities, which may affect the decision-making process on foreign loans and international portfolio investments. Iran is part of the global economy, and a functional banking sector is an essential condition for achieving proper implementation of sustainable development goals. Moayedi and Aminfard (2012) suggested that the financial system in Iran is highly bank-based but relative to international criteria, Iran has an underdeveloped and weak financial system, especially regarding its stock market. The banking system in Iran has experienced significant changes due to political, economic and military tensions. The competitiveness in the Iranian banking sector is also influenced by the unpredictability of global economic conditions. Tash and Abdi (2013) stated that the financial system in Iran is characterized by two main aspects. The first one is that banks have a specific legal structure and the second aspect highlights the fact that non-bank financial institutions focus on trust, companies, foundations and fiduciary services. Perwangsa (2016) argued that specific cultural issues are very important in developing a respective CRM for banks.

After the revolution of Iran in 1979, all banks of Iran were governmental, but in 1997 based on article 144 of the Constitution, some industries had to be transferred to private companies. Therefore, from the currently 28 banks in Iran, eight are governmental, while the rest of those are private. Hence, the environment is very competitive. After transferring governmental banks to private banks, they provide very suitable services. That is why many governmental banks lost their customers. This research helps decision makers of governmental banks to make better decisions regarding their attractiveness for customers.

Winkelmann (2002) defined CRM as a customer-centric business philosophy. Chen and Popovich (2003) defined customer relationship management (CRM) as "an integrated approach to managing relationships by focusing on customer retention and relationship development". Baser (2015) argued that CRM is predominantly useful to commercial banks along with its influences in various other industry sectors. CRM is mainly used to gain a significant competitive advantage. For instance, ubiquitous Customer Relationship Management (uCRM) is an improved and innovative version of CRM characterized by a high personalization of services based on special characteristics, including proactiveness, context awareness, and mobility. CRM is a continually evolving domain. Especially, social media technologies have revolutionized the way businesses and consumers interact (Choudhury and Harrigan, 2014). Moreover, a new form of CRM is social customer relationship management (SCRM) or CRM 2.0 based on relationships between customer relationship management, social media technologies, customer engagement, positive word of mouth and brand loyalty. Kim and Wang (2019) noted that social CRM capability represents a firm's efficiency in integrating and converting social media marketing resources into desired sales revenue and customer-relationship outcomes. However, Trainor (2012) claimed the absence of a precise linkage between the existing body of CRM literature and the extensions provided by the social and technological developments in the recent past.

The remainder of the research paper is organized as follows: In the first section, an introduction, and other relevant aspects of the research topic are included. Section 2 presents a literature review. Finally, we present a conclusion section.

2. Literature review

CRM in the banking sector increases customer value by using some analytical and the traditional models (Ajmal and Ur-Rehman, 2019). CRM is used to improve customer services in the banking industry. CRM can be perceived as a customer-oriented business strategy of the bank. Moreover, banks are very interested in maintaining customer loyalty in the context of increasing competitiveness. Kotler and Armstrong (2010) defined customer relationship management as the overall process of maintaining profitable customer relationships by delivering superior customer value and satisfaction, based on issues such as acquiring, keeping and growing customers. Hansotia (2002) considers that CRM based on its main pillars, i.e. strategy design and organizational readiness, planning and analysis, and execution of customer interactions, is about managing customer interactions and creating memorable customer experiences that exceed expectations. Azzam (2014) suggested that CRM implementation covers stimulatory activities such as service quality, commercial practices and loyalty programs, i.e. bonus, contact, and satisfaction and complaints handling.

Most industries, financial institutions rely on gathering, processing, analyzing, and providing information in order to meet the needs of customers (Ekwonwune et al., 2017). Moreover, business organizations, especially the banking industry, operate in a complex and competitive environment characterized by these changing conditions and highly unpredictable economic climates (Ekwonwune and Dike, 2006). CRM technology has reached a high level of integration of innovative information technologies, such as Internet and E-commerce, multi-media technology, data warehousing, data mining and artificial intelligence (Mehta, 2013). A displeased customer can easily choose another bank for improved customer services. The effects would have significant negative connotations on the sustainable development of the banking system. Yao and Khong (2011) asserted that the implementation of CRM is positively associated with customer satisfaction, and there is high interaction between IT capability and both contact rate management and recovery management in the context of improving customer satisfaction. CRM has a significant role in the marketing strategy development process due to a better understanding of the entire customer base, understanding needs and attitudes of customers, including a more efficient consideration of profitability and the added value that each customer provides for the bank (Laketa et al., 2015).

Certain researchers consider that any business requires CRM to sustain and survive in the long term (Hargreaves et al., 2018). CRM has a major contribution towards improving the performance of organizations based on identifying, acquiring, building, and maintaining the best relationships with their customers (Haghshenas and Ahmadi, 2015). Athanasoulias and Chountalas (2019) highlighted that CRM software system modules and features include the following: a) customer database; b) sales force automation/operational CRM; c) loyalty reward programs; and d) referral management. Sota et al. (2018) conducted a long-term literature survey from 2007 to 2016 and concluded that the loyalty program is the most researched and published area with regard to CRM studies, whereas topics like privacy concerns and social CRM are under-researched areas. Debnath et al. (2016) also performed a complex literature review on CRM for the period 2000-2014 and identified certain headings/keywords such as customer relationship management; marketing; sales, service and support; information systems (IS); information technology (IT).

In other words, banks with good CRM were successful in attracting many customers who opened an account and used their services. In addition, the conditions of service (such as prices or offered interest rates) are often more attractive than those of traditional banks like national banks. A wide range of research studies have disseminated important aspects of traditional banking, such as: Spulbar (2008), Mehdiabadi et al. (2020), Spulbar and Birau (2019a; 2019b; 2019c), Meher et al. (2021). For these reasons, some of these banks lost an increasing number of customers and consequently, the danger of bankruptcy can be felt. The competitive environment in the banking sector emphasizes the role of customers and emphasizes on how banks should attract them. CRM as one of the most important tools is used for understanding customer's needs and transfer them to design and create services or goods. Based on this competitive environment a CRM implementation can help to both private and national banks to become more attractive to customers.

For a successful implementation of CRM, many factors are relevant. Therefore, in the first step, these factors must be identified and afterwards it must be understood which of these factors are most important because a companies cannot allocate rare resources to all of them. The aim of this research is to find and prioritize Critical Successful Factors (CSFs) of a CRM implementation in all private and national Iranian banks. In general, decision making can be considered as one of the most demanding management tasks due to fast changes in business, an increasing competition, and typically incomplete information that is relevant for the decisions. Therefore, Decision Makers (DMs) should use advanced techniques that help them to survive in this environment. One of the most important and popular techniques are fuzzy numbers introduced by Zadeh (1965). Hesitant fuzzy numbers are a fuzzy technique included in various decision-making techniques. The main questions of this research are what CRM factors are relevant for the banking sector. In addition, it is useful to rank these banks according to these CSFs it order to find out about their performance.

The scarcity of research studies concerning CRM is still a major issue within the context of developing countries (Kebede et al., 2018). The contribution of this paper is creating a hybrid model of SWARA and EAMR techniques with considering the Delphi method for the identification of customized factors and subsequently prioritizing the banks based on the found CSFs of CRM in a fuzzy environment. The combination of SWARA, EAMR, Delphi method and fuzzy hesitant numbers is a novel technique that is used in this paper for helping Iranian banks in implementing CRM. By searching in both Persian and other databases of journals, we did not find any evidence of a previously published paper about this subject for Iranian banks.

The literature on CRM implementations in the banking sector is insufficiently developed. Sharma and Goyal (2011) exhibit that CRM systems are implemented by banks in order to gain a competitive edge over their competitors because they are much more customer-oriented due to fierce global competition. Nazari et al. (2016) investigated the impact of key factors of knowledge management success on improving CRM based on a case study for financial and credit institutions in Iran, and empirical results confirmed the positive relationship of certain essential factors of knowledge management success, i.e. reward allocation, human resource management and management support, with CRM. Tarek (2016) analyzed the impact of CRM on Islamic banks and suggested that developing customers profiles had the highest impact on Islamic Bank's customer-based profit performance. Karahan and Kuzu (2014) argued that customers of each bank constitute one of the most important assets that a banking

institution should preserve and continuously expand. Building personal and social linkages has been transformed into an essential marketing process.

As pioneering approaches in the field of CRM, Webster (1978) suggested that marketing for corporate clients, as one element of CRM, could be characterized by the complexity of products and purchase processes. Weick and Roberts (1993) stated that the system is important for the organization and that customer relationship is an asset and a driver of choice in the process-oriented information processing and implementation. Glazier (1991) argued that CRM applications facilitate organizational learning about the customer by enabling the analysis of purchase behavior across transactions through different channels and customer touch points. Cvijović et al. (2017) pointed out that CRM plays an essential role in the development and survival of the traditional banking sector, but it also affects the Internet and mobile banking. Kebede et al. (2018) investigated the impact of CRM practices on commercial banks in Ethiopia and argued that the primary goal of CRM is to build and maintain a base of committed customers who are profitable for the bank, as well as to generate sustainable changes in bank's performance. Moreover, Rasoulinezhad (2011) highlighted that one of the most important success factors of financial institutions in Iran is the effective and efficient application and development of information and knowledge systems in the areas of operations, management, accounting and marketing.

Srivastava (2012) defined CRM as a management approach which intendeds to create, develop and enhance relationships with carefully targeted customers in order to maximize customer value, corporate profitability and thus shareholders' value. Nevertheless, Vazifehdust et al. (2012) emphasized that although generic critical success factors exist for CRM, each organizational environment and culture is unique and leads to specific critical success factors. Almotairi (2009) suggested that success factors for CRM implementation lie in the scope of managing, integrating, and controlling CRM components. Riyad (2007) argued that CRM critical success factors should be implemented holistically rather than piecemeal to achieve the full potential of the CRM considering the importance of customer services in the successful implementation of CRM programs within banks. According to Stevanović et al. (2017), a successful implementation of CRM in the banking sector requires not only the separation of the high financial investment but also the willingness and motivation of employees in the bank. Gayathry (2016) pointed out that a successful implementation of CRM practices requires a prudent framework based on designing customer-focused strategies, proper implementation of technology and tools, empowerment of employees and enhancing the knowledge levels of customers.

Chalmeta (2006) highlighted that a significant number of CRM implementations fail mainly due to the inadequacy of the existing methodologies used to approach a CRM project since they do not satisfactorily integrate and complement the strategic and technological aspects of CRM. However, CRM fragmentation and inefficiency are inherent disadvantages that lead to unsatisfactory implementation in the banking sector. Gupta and Shukla (2002) consider that one of the major challenges experienced during implementing CRM in the banking sector is resistance to change. In spite of the banking sector efforts to provide more advanced software in order to personalize offers to specific customers, there is an increased need for a real commitment to long-term CRM principles to make the difference between more advanced selling tactics and a relationship building (Sarel and Marmorstein, 2007). Badpa and Bakhshayesh (2015) investigated factors influencing CRM in the banking

sector of Iran and concluded that project management of CRM and IT are the most affecting factors and effective leadership and top management commitment and support are the most affected factors. Al-Hudhaif (2011) suggested that CSFs for CRM implementation in the banking sector include the following main categories: strategic aspects (top management support, organizational culture, developing a clear CRM strategy, clear project vision and scope, and benchmarking), tactical aspects (employees acceptance, CRM software selection, integration with other systems and training in CRM efforts), and operational aspects (a realistic CRM implementation schedule, enterprise performance metrics for CRM, personalization, customer orientation, and data mining). Haery and Farahmand (2013) have empirically analyzed the impact of critical success factors of customers experience in Iranian banks and concluded that behavioral aspects hold the highest priority among all the other factors while cognitive aspects have the second priority.

Malarvizhi et al. (2018) suggested as a peculiarity that bank customers quantify their levels of satisfaction considering ongoing experiences with the bank's employees or a series of encounters. Kasasbeh et al., (2017) have empirically investigated relevant issues on competitive advantages in the banking sector by revealing its importance in risk hedging and with respect to absorbing economic shocks. They consider the fact that banks have a significant impact on national economic growth and development, as well as on human capital growth based on the increase of operating revenues, deposit and credit facilities, and the investment portfolio funding process. Amponsah and Hansen-Addy (2016) investigated the implication of critical success factors for banking projects in Ghana. They identified the following new CSFs based on the empirical analysis: improper feasibility studies, inadequately defined tasks, ineffective monitoring and control, improper definition of specifications, lack of user involvement, ineffective project management techniques, unrealistic requirements, lack of effective project management plans, delays in release of payment of funds, lack of commitment to projects, top management support, bureaucratic procurement processes, improper team selection, inexperienced project managers, inadequate basis for projects, cost of tendering, labor unrest, demand on project resources by politicians. Ika et al. (2012) led an empirical research study on the impact of critical success factors for World Bank projects and concluded that the most prominent CSFs for project supervisors are design and monitoring.

Larsson and Viitaoja (2017) examined the level of consumer satisfaction of major Swedish banks in how they experienced the digitalization process and its impact on customer relations using a series of semi-structured in-depth interviews with managers representing different banks. Rootman et al. (2007) investigated the impact of bank employees on bank CRM using a structured questionnaire with items that related to bank CRM in terms of attitude and knowledgeability. Labus and Stone (2010) used "lightly" semi-structured interviews based on several broad, open fieldwork questions and a set of coding procedures to analyze the meaning of interviewees' experience (memos, open and selective coding, but also an theoretical coding). Schmitt (2010) conducted a research study and concluded that referred customers have a higher contribution margin, a higher retention rate and are more valuable (at least 16%) than non-referred customers with similar demographics.

Tudor et al. (2011) suggested that data mining techniques and optimization (Business Intelligence systems) can be integrated to build accurate customer profiles mainly because CRM implies a multidimensional approach based on three essential

pillars, such as the hierarchy of products (brand, class, category, product), the hierarchy of periods (years, quarters, months, dates), and the customer hierarchy (regions, areas class customers). Chiang and Lin (2000) suggested that data mining is a key element in CRM implementation by identifying customer behavior patterns from customer usage data and predicting which customers are likely to respond to cross-sell and up-sell campaigns, which is fundamental for the business success. Zhao and Zhao (2012) mentioned that each data mining technique could perform one of the following types of data modelling or even more: association, classification, clustering, forecasting, regression, sequence discovery, and visualization. Customer intelligence data mining models may be the most powerful and simplest technique for generating knowledge from CRM data (Sasikala et al., 2016).

3. Conclusions

In contrast to most other previous research studies, this research study is based on a multidisciplinary approach. The authors have used extensive expertise based on knowledge of economics, finance, sociology, novel computational modeling, data-analysis, and applied mathematics. For instance, a one-sided theoretical approach provides an incomplete framework having an insignificant contribution to existing literature. On the other hand, a very technical study using innovative and advanced methods would be quite difficult to understand by banking managers even in the context of an average level of academic knowledge. Consequently, we have tried to keep a balance between the leading research pillars as mentioned above. The Islamic banking environment in Iran has witnessed significant developments in the last decade, although is still a relatively young industry. Currently, the banking sector transformation is focused on increasing profitability, effectiveness and competitiveness, especially in the context of a dynamic global economy. CRM practices are very useful in understanding customer behavior. However, most empirical studies revealed that the implementation of CRM in the banking sector was achieved on a limited scale. Islamic values represent a great challenge in the context of CRM implementation in the banking sector for both practitioners and academicians.

Critical Success Factors (CSF) affecting the implementation of CRM are also influenced by cultural aspects. However, Islamic values encourage profit maximizing behavior but also the maximization of social welfare. In comparison with interest-based conventional banking systems, the interest-free banking system in Iran follows fundamental Islamic principles based on Sharia laws and Quran's holy principles. An Islamic banking system provides a different perspective for its customers. Islamic banking requires product development strategies according to Shariah Governance Framework. Business profitability, cost leadership and competitive advantage are essential issues with regard to conventional banking, but the approach is different in the context of the Iranian banking system. Islamic banking requires product development strategies according to the Shariah governance framework. The implementation process of CRM in a competitive banking system is an effective tool to increase both profitability and customer satisfaction. Since Iranian banks both in private and national sections understand the importance of implementing CRM in their banks, they are looking forward to finding them and successfully implementation of that. This is a very important aspect regarding Islamic banking.

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Appendix
Table 1: Critical Success Factors in the Banking industry based on literature review

References	Factors	Country	Research Method
Kagwaini John Irungu (2014)	customer service, cost of products/services, product packaging, location of the bank, size of the bank, range of products/services, employees, corporate social responsibility, information communication technology, leadership/top management support	Kenya	A survey design based on structured questionnaires
Pemeringkat Efek Indonesia (PEFINDO) credit rating agency (2019)	market position, infrastructure and quality of service, diversification, management & human resources, capitalization, assets quality, profitability, liquidity and financial flexibility	Indonesia	PEFINDO own rating criteria & methodology (no details)
Simona Rus, Marian Mocan, Ben-Oni Ardelean, Larisa Ivascu, Lucian–Ionel Cioca (2016)	administrative factors (efficiency of information system, administrative structure and processes, strategic approach, software and techniques, organizational culture, transparency, bank reputation and good image, quality, size of the bank, ability of computerization), technical factors (risk management, liquidity management, security, functional safety, production innovation, trust to information system, CRM or customer relationship management, bank safety, soundness of bank system, speed of	Romania	Literature review used for elaborating in-depth questionnaire (for experts) questionnaire

	business handling), <u>regulatory factors</u> (monitoring mechanisms and management, conformity with Romanian law, compatibility with economy's sectors, government deregulation policy, number of bank branches, procedures and internal regulations, the level of taxes), <u>human resources factors</u> (top management, education and training, specialist human resources, staff professional knowledge, communication, availability)		(for customers), observation of public information and experimentation by direct business contact (visits)
Parvez Khan, Rajesh Chouksey (2012)	continuous innovation, guidance about facilities, a good business plan, ability to sense & respond quickly, reliable assurance, behavior with the customer, attention towards customer	India	Stratified Sample Random Sampling with adequate input of convenience sampling for primary data and literature review for secondary data
Tser-yieth Chen (1999)	bank operation management ability, developing bank trademarks ability, bank marketing ability, financial market management ability	Taiwan	Cross-sectional Survey based on questionnaires
Mahmood Hussain Shah and Feroz A. Siddiqui (2006)	understanding customers, organizational flexibility, availability of resources, systems security, established a brand name, having multiple integrated channels, e-channel specific marketing, systems integration, systematic change management, support from top management, and good customer services	UK	Literature review
Zaky A.H. Mohamed and Soliman M. Moustafa (2017)	HR practices, leadership, IT, strategy	Egypt	Survey by using self-administrated questionnaire
Nour M. Yaghoubi, Reza Siavashi and Roohollah Bahmaei (2016)	technical- structural factors, financial factors, cultural-cognitive factors, managerial factors (macro and micro), legal - lawful factors and qualitative -security factors of the system	Iran	
Maryam Sohrabi, Julie Yew Mei Yee and Robert Jeyakumar Nathan (2013)	security, privacy, trust, cost and charges, adoption	Malaysia	Survey questionnaire for primary data and literature review for secondary data
Ebiringa Oforegbunam Thaddeus (2012)	development of standard methods for quantifying customer satisfaction, simplification of service process to reduce service time, formal top management policy on customer satisfaction, continuous human capital training and development, commitment to reduction in cost of service charged customers, promotion of the philosophy of teamwork among staff, clear communication of rules, regulations and directives on standards, customer involvement in product design and development, establishment of operational guidelines, existence of mechanism for feedback from customers, continuous monitoring and evaluation of customer satisfaction level, existence of effective system of staff motivation	Nigeria	Survey questionnaire like Objective Evaluation Questionnaire (OEQ) for primary data and methods of quantitative multivariate analysis such as factor analysis
Thuy Van Nguyen and Cuong Hung Pham (2016)	IT infrastructure, data quality, the effectiveness of customer relationship, banking culture, top management commitment, implementation consultants, the project team of the bank	Vietnam	Literature review, in particular Alter (2002) model
Seyed Reza Seyed Javadin, Reza Raei, Mohammad Javad Iravani and Mohammad Safari (2015)	<u>administrative factors</u> (top management, efficiency of Islamic banking system, administrative structure and processes, strategic approach and thinking, central bank policies), <u>technical factors</u> (education and training, software and techniques, transparency of Islamic banking concepts and definitions, specialist human resources, risk management, liquidity management, and customers awareness of Islamic banking) and <u>regulatory factors</u> (transparency of rules and regulations, trust to Islamic banking system, monitoring mechanisms and management)	Iran	Mixed fundamental-applied research using survey research based on interviews, literature review and research background, conceptual model
Naeem Muzafar and Karim Ullah (2017)	personal relationships, communication process, shared vision, diversity management, collaboration leadership, governance structure, the relevance of the people, atmosphere for collaboration, organizational capacity	Pakistan	Literature review and qualitative interviews
Edlira Margilaj	leadership, organizational culture, information technology, organizational	Albania	Survey

and Kreshnik Bello (2015)	structure, organizational strategy, measuring system, human resource management		questionnaires (by mail) and semi-structured interviews based on literature review
Rizwan Danish, Affaf Asghar and Sumera Asghar (2014)	leadership, culture and system (information technology)	Pakistan	Convenience sampling technique (for questionnaires) for collecting data, regression analysis, correlation and descriptive analysis
Sulaiman Al-Hudhaif (2011)	top management support, developing a clear CRM strategy, and CRM software selection	Saudi Arabia	Literature review using questionnaire by applying Cronbach's Alpha test and Mahalanobis Distance coefficient
Arash Badpa and AbdollahYavaran Bakhshayesh (2015)	top management commitment and support, IT, management of customer contact channels, define and communicate CRM strategy, staff, training programs, change management, customer orientation culture and attitudes, organizational culture, effective leadership, knowledge management, project management of CRM, integration	Iran	A descriptive-survey based on Delphi method and DEMATEL methodology
Hossain Shahid Shohrowardhy (2015)	the core product, human resources and systemization, service delivery, service capability and social responsibility	Bangladesh	Literature review
Zakaria Ahmad Mohammad Azzam (2014)	interaction management, relationship development, customer service, employees' behavior and physical environment	Jordan	Questionnaire elaborated based on literature review