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The 360-degree customer view and customer success in the public sector: a suggested technical solution for banks

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Abstract

In such a customer-centric world with data becoming more valuable, knowing the specifics of the customer base makes a huge impact. Hence, considering a real 360-degree view of customers enables organizations – whether private or public – to turn a flood of data into precise insights which may eventually boost customer engagement, loyalty, and success. Banks, as well, should think about adopting a more customer-centric stance. Consequently, cultivating the supposedly mythical 360-degree perspective in banks is one approach to successfully make that transformation, in order to remain competitive and achieve customer success (CS).

Purpose: The current research aims to investigate how far public sector organizations can apply the 360-degree view and utilize customer information and insights in tailoring service delivery and managing CS, particularly within the banking experience.

Methodology: The study is correlational in nature. Its design is both descriptive in the theoretical part and quantitative in the applied one. So, it provides a short overview of relevant literature, in addition to conducting a survey for the application in real practice, and developing a preliminary electronic model fit for public banks.

Findings: The research concluded that CS usually relies on relationships, and the 360-degree perspective is the basis for inspiring a long-lasting organizational relationship with customers. Also, it found that to apply a 360-degree customer view model in public banks, a practical IT solution should be adopted. One suggested all-in-one technical solution is a 360^o-CSM system that can integrate with other systems of the bank, aiming to track customer interactions, create customer profiles, and offer personalized experience.

Originality: The paper adds to the accumulated results in the area of concern, along with providing a technical solution applicable for public banks. Actually, it can assist academics, practitioners, and public executives, especially in the Egyptian banking sector, to comprehend and obtain a comprehensive – theoretical and practical – overview of how to manage CS through adopting a 360-degree perspective. The study can also help draw implications for further research opportunities in this domain.

Keywords: Customer Relationship Management (CRM), Citizen-Centric Government, Digitalization, Data Analytics, Personalized Experience, Electronic Model, Banking Sector in Egypt.

1. Introduction

Nowadays, the megatrend of digitalization opens up new opportunities for businesses and drives modifications in well-established business models. Lately, brands are learning that customers choose, recommend, and stick with a company based not on flashy advertising or cutting-edge product features, but rather on the engagement they have and the value they gain through it. Delivering this type of loyalty-inspiring experience does not happen by chance. It results from adopting – intentionally and passionately – Customer Success Management (CSM) as a central tenet. The top brands have devoted followers because they permeate their entire organizations with such philosophy, ensuring that the experience of each client is predictable, measurable, and perpetually aligned with his/her perception of value (Open View, 2023: p.3). In this context, CS has evolved from a buzzword to the contemporary permutation in customer management practice, hence it merits meticulous academic research and analysis (Hilton *et al.*, 2020). Yet, many companies are not clear about what CS definitely means.

Therefore, customer experience is a fiercely competitive battleground in today’s business world, and brands that want to stand out in this crowded market need to put customers at the core of their operations. In the big data era, firms should find a way to extract understanding from customers’ data, in order to meet their extremely high expectations; is that they expect firms to be as dedicated to their success as they are, if not more. Indeed, accomplishing this goal requires a single actionable 360-degree customer view—one that starts with acquisition and extends from effective onboarding to pertinent continuous engagement (Informatica, 2021: p.1). Actually, the idea of a 360-degree view is not new, whereas with modern big data technologies which tackle the challenge of managing enormous amounts of data from multiple channels at high acceleration, this is finally possible for many companies to perform successful customer cross-channel targeting and customization (Splice Machine, 2014: p.2).

Otherwise, the financial industry is witnessing nowadays a global transformation driven by the disruptive impact of digital technology, the turn in customer behavior, and the shifts in industry structure. This transformation has the potential to lead the industry towards a customer-centric financial market infrastructure, compelling banks to adopt a more customer-centric perspective (Puschmann, 2013). Undoubtedly, trust lies at the heart of the digital customer journey. Confidence in banks and the security of financial institutions is the secret to a pleasant client experience, while banks need to strike a balance between security and convenience. Moreover, banks cannot make wise judgments in a variety of areas without acquiring and processing adequate device, application, transaction, and customer data in real time. In fact, moving towards genuine data-driven banking may require adopting a 360-degree customer view, and modifying internal operations since the siloed activities will need to share data. Ultimately, the objective is to collect data using security tech stack, then apply data analysis to transform raw customer

data into knowledge that can be utilized to both safeguard clients and improve their financial experience, and thus uphold their whole success (Grange, 2021).

On the other side, countless so-called customer-focused initiatives have been introduced across different public services, whether they are provided locally or centrally. Ministers and public officials have emphasized the necessity of applying the best practices culled from government, commercial, and nonprofit sectors, in order to remain unwaveringly customer-focused (Woodcock *et al.*, 2008: p.16). In this regard, authorities will be better able to comprehend customer wants, shape and offer services, predict service demand, and evaluate the efficiency of service delivery with the improved use of customer data. According to Woodcock *et al.* (2008: p.25); a few prominent state-owned enterprises carry out fairly complex analysis for understanding their customers. Further, exchanging customer data with other departments, analyzing various customer groups, and incorporating this information into service design and operation management, are often restricted in governments.

In this respect, the present paper has produced a plenty of interesting observations and proposed a detailed IT model/ electronic system suits public organizations, specifically banks, based on adopting the idea of a 360-degree view to gather and make use of various customer data. Due to this perspective, banks can work together more closely and establish a trustworthy relationship with their customers, helping them to reach overall success. Hopefully, this study could be a starting point for a range of future theoretical and empirical research testing the applicability of these concepts in the public sector, as well as being a modest step towards elaborating future inclusive work aims at assessing the Egyptian government endeavors (technical and organizational reforms) to enhance the effectiveness and efficiency of its financial institutions, despite the recent – local and international – economic challenges facing the banking industry in Egypt.

2. Research problem and conceptual framework

In the business environment of today, enterprises are rushing towards digital transformation. Various digital channels must be integrated to guarantee a personalized customer experience, allowing him/her to proceed smoothly via a customized journey. Actually, the demand to offer a new customer experience has reached crisis mode, in spite of the fact that transformation efforts have been on IT managers' goal list for a while. Likewise, the need for digital transformation has become more pressing as a result of the Covid-19 outbreak, which forced brands to switch overnight from in-person to contactless sales and services. At that time, providing digitally-tailored customer experiences replaced all other business practices (Kao, 2022).

In fact, the wealth of data provided by numerous digital platforms offers organizations both benefits and challenges. Not surprisingly, the questions for developing strong customer relationships are seldom simple to answer, because most companies struggle with insufficient, erratic, duplicated, and scattered customer data maintained across different departments, lines of business, or geographical regions. So, it is practically impossible to establish a single customer view without automation and intelligence to give a reliable integrated customer profile (Informatica, 2021: pp.1-2). In this context, the 360-degree customer view is designed to offer the information and analytics required to bolster the way companies interact with their customers on a daily basis, and leverage data to make better decisions about products and promotions (IBM Software..., 2013: p.2). Nevertheless, *Forrester Research* reported that only 38% of marketers have a 360-degree perspective of how customers deal with content across digital touch points. The rest of these businesses suffer from disparate IT systems that lock up all their data from diverse

sources in silos, making it difficult to create a cohesive Unified Customer Profile (UCP) needed to analyze and react to customer behavior instantaneously (Splice Machine, 2014: p.4).

Indeed, understanding the technology and its implications is a central aspect of any technology-related reform. In general, the major difficulty in applying a 360-degree view is still the lack of knowledge and techniques on how to develop and implement it properly. This problem seems to be more severe in public sectors, putting into consideration the cognitive limits within the unique culture of these organizations, which makes the applicability in governments a little bit questionable. Therefore, much of this debate in literature is associated with business (Fahim, 2018: p.120). Moreover, the 360-degree customer view research needs to rely more on integrated managerial and technical stance to provide a solid integral theoretical foundation for projects. This theoretical basis needs also to depend upon a considerable number of interpretive case studies to illuminate areas of practice. So that, the researchers here believe this is an attractive meaningful area that entails more attention and study.

Notably, banks and other financial institutions always possess in-depth knowledge of their clients compared to many other industries. The matter here lies in the truth that this knowledge is often not shared across the whole organization. Even while regulatory considerations may constrain the extensive sharing of customer data, there is still much that could be undertaken to lift customer information up and out of silos to start developing a broader centralized enterprise-level perception of customers (Johnston and Sohail, 2011: p.1). From there, they can create a strategic approach for building the relationship with their clients. Otherwise, the challenge that many institutions still cope with is the ability to first decide the information kinds that would be most beneficial, combine this variety of information efficiently, analyze it, and put it into effect through highly-personalized communication and consequently-best offers (Oracle, 2020: p.2).

In this respect, a survey conducted by Woodcock *et al.* (2008: pp.24-25) showed that there is an obvious widespread awareness of customer insight themes in the public sector, which indicates that a customer-oriented culture is taking root there. The majority of public managers understand, at least conceptually, the necessity of customer management for better service delivery, and thence start to push their organizations to become more customer-oriented, however they are not usually participating in doing this. Most of them are still worried that this might raise expenses, as they are not yet in step with their private sector counterparts who believe that strong customer management and enhanced efficiency can go hand in hand (e.g. higher participation, better targeting of resources, reduced cost of failure). As a result, governments still seldom develop and implement customer management strategies.

Furthermore, several recent trends suggest that a new era is just getting started call it CS. As a management approach, CS is relevant to extensive success in the goal of cultivating long-lasting customer relationship. Effective CS requires adjustments to the way the entire organization listens, comprehends, and serves its customers. Whilst a CS strategy must be conducted universally and at a very high level, its tactical application frequently occurs on a much smaller scale (Open View, 2023: p.5). Globally, CSM and the associated role of CS managers are in high demand. CSM drives fundamental requirements which are demanded in response to shifts in digitization, customer behavior, emerging competitors, and contemporary business models. While this topic has primarily been explored by IT and SaaS companies, more established industries have increasingly recognized its added value and started to form CSM departments (Seidenstricker *et al.*, 2021: p.28).

Probably, one of the biggest obstacles to building CS teams is that a lot of firms have not yet acknowledged that CSM is an entirely distinct discipline. It is a function with almost different metrics and goals than sales, service, and support. Since CS is a growing function, many do not properly realize it

(Ghosh, 2021). For that reason, businesses are still having troubles in implementing this new approach, despite its positive contributions. Otherwise, there have been only preliminary initiatives to define and delimit CSM, even if there is a need for a systematic review of the existing body of literature in relevant research fields. Besides, there has not been much activity in the area of quantitative research (Seidenstricker *et al.*, 2021: p.28), particularly in the public domain.

Against all the previously-mentioned backdrops, the current study comes to shed light on those substantial notions and their requirements, in a serious attempt to fill the present literature gaps, by providing the basis for a – theoretical and technical – framework that can maximize the capacity of employing modern digital technology in governments to achieve the success of their citizen-customers. Consequently, this work creates a foundation for future deep research into the 360-degree perception and CSM, by studying the extent to which public sectors have focused on utilizing customer insights in tailoring service delivery and maintaining CS, through applying a thorough 360-degree perspective of the customers’ various touch points, with specific reference to the Egyptian banking experience. Herein, the research intends to answer a basic question, which is:

“How does the 360-degree customer view contribute to achieving customer success in public institutions, especially banks?”

Therefore, the paper examines its two broad variables as illustrated in figure (1) below:

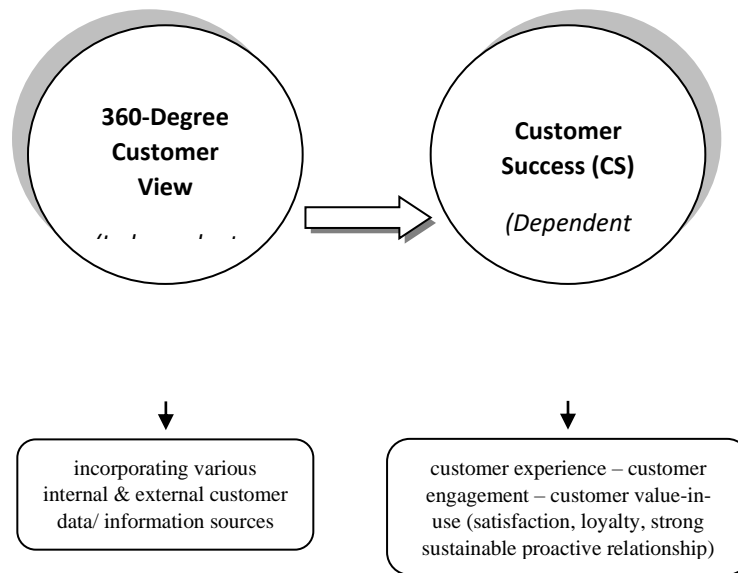


Figure (1)

Research conceptual model

Source: Prepared by the researchers.

3. Literature review: concepts and relationships

3.1 Getting a 360-degree customer view in the age of big data:

Massive quantities of data have been continuously generated lately, and the kind of data produced has exceeded the capacity of currently available data storage techniques. This is due to the digitization of most procedures, the appearance of various social network platforms, the spread of multiple types of sensors, the growing popularity of portable digital and wearable technology, and before all the rise in the Internet usage. There is no denying that the Internet has altered how businesses and governments function, in addition to changes in education and people lifestyle throughout the world (Bhadani and Jothimani, 2016). In this context, *IBM* has carried out surveys, examined analysts' findings, spoken with over 300 customers and prospects, and put into practice hundreds of big data solutions. As a result, it has identified five domains in which organizations can leverage big data to their advantage; 1- enhanced 360-degree view of the customer, 2- big data exploration, 3- security/ intelligence extension, 4- operations analysis, and 5- data warehouse augmentation (IBM Software..., 2013: p.1).

Indeed, marketing nowadays is no longer about brands expressing their tales, but rather analyzing customers' personal needs and customizing the selling processes to fit them all. So that, delivering personalized services by using available customer data is quite important (Accenture, 2018: p.2). To reach this, many organizations are already investing in a Unified Customer Profile (UCP), which is basically a crucial digital marketing portal or a sizable integrated database that gathers real-time data across all customer interactions from different touch points (both online and offline) (Splice Machine, 2014: p.2). From a managerial point of view, a brand touch point encompasses pre-purchase, purchase, and post-purchase interactions. It may include the website, e-mail, mobile app, social media, sales, advertising, telemarketing operations, call center, fax, and stores (Karthikeyan and Sivakumar, 2014: p.5). In order to aggregate all customer data, the company needs to employ data connectors to combine assorted data sources into one centralized database/ customer information hub (Resulticks, 2019: p.4). By analyzing and figuring out this data, the company will be able to provide tailored experience to each client through; customer alignment, facilitating predictive analysis, driving customer intelligence and loyalty, as well as lowering costs (Digital Marketing Institute, 2018).

In light of that, the concept of 360-degree view of the customer various touch points has almost become prevailing in CRM circles. It refers to a 360-degree picture of the customer data comprising every interaction from website inquiries, to product purchases, or customer support tickets, and it means that each department inside the company has access to the same draught of truth regarding that customer (Kao, 2022). Actually, a 360-degree perspective is like a crystal ball when you peek inside you can view the past, present, and future of a customer relationship with the brand. Thus, a 360-degree view of customers allows brands to see their past and discover pertinent simple-to-digest information about them. Moreover, it necessitates keeping up with those customers' present interactions. Consequently, businesses can map out future partnerships by knowing the past and present behaviors of their clients (Digital Marketing Institute, 2018). Therefore, a 360-degree view is a holistic approach which considers all existing and meaningful information about the customer to maintain better engagement, high revenue, long-term satisfaction, loyalty, and trust. It combines effective data governance, data access, integration, and analytics in a simple accessible form. All of this can be delivered in an IT solution that takes advantage of the volume, pace, and variety of big data (IBM Software..., 2013: p.2).

What is important to know here is that the 360-degree customer view and personalized experience go together hand in hand. Both are made possible by merging data, applications, and Applications Programming Interface (APIs) (Kao, 2022). In the customer 360-degree perception, numerous operational and transactional data sources are blended to create an on-demand analytical view across different touch

points to better surface the customer experience, and hence providing customer-facing employees and partners with information made available inside everyday line-of-business applications. This can give a thorough customer stance allowing for a better knowledge of how customers perceive products and services, along with building a solitary repository that hinders single view integrations and permits speedier insights (Hitachi, 2019: p.1). Herein, integration issues must be handled first to connect data, applications, and APIs. Increasing the velocity of integrations while minimizing IT resources is essential, and the shortest route ahead is to incorporate with Integration Platform as a Service (IPaaS) solutions, which can guarantee simplicity of use, pre-built integrations, and customizable templates. Knowing that enterprise-class IPaaS systems enable businesses to manage their own integrations without the need for expert assistance, and they can deliver the high availability, disaster recovery, security, and other necessary requirements (Kao, 2022).

In a point of fact, the primary goal of the 360-degree view of customers in the past was to gather all transactions into a corporate data store/ warehouse, so that the customer could be identified and a unified picture of all his/her activities and experiences could be obtained. However, a real 360-degree vision entails gaining deeper insights into the preferences and intent of customers, in order to affect them to achieve desired results (Innominds, 2023). Ultimately, a productive 360-degree customer perspective is one that accumulates over time using data and pushed into across departments to give a holistic view of customers. So, insights would not be accurate or pertinent without high-quality (organized and clean) data. Additionally, by establishing consistency in the entry and management of data, cross-departmental communication will be easier (Digital Marketing Institute, 2018).

Undoubtedly, the path to a 360-degree customer view varies for each enterprise. It involves more than just distinguishing familiar from unfamiliar audiences, or identifying customers across touch points using various identification algorithms which serve as a matching engine. The knowledge each organization possesses about its clients varies in both precision and intricacy, thus it is critical to map out a customer data strategy that suits the organizational existing capabilities and be in line with long-term business objectives. The target customer profile qualities, the sorts of required user journey, and the expected realistic business outcomes should be all defined initially by companies. Companies should also appraise and incorporate existing data sources and introduce new ones, in order to come up with a workable plan. This underscores how crucial it is to have a Customer Data Platform (CDP), that should be able to navigate the volume and granularity of data today, and more importantly correlate all pertinent customer data to consistent individual profiles (Resulticks, 2019: pp.3,6).

Nowadays, firms can select economical and more affordable solutions using commodity hardware instead of siloing the necessary information in pricy data warehouses and other “Big Iron” equipment. Businesses can reduce expenses by investing in databases that scale out on numerous smaller servers rather than scale up on bigger and more costly servers (Splice Machine, 2014: p.7). In sum, the built over time 360-degree customer view could be the source of refined segmentation, extensive campaign reports, useful marketing analytics, and attribution insights that reveal the touch points and the value of contacts at the individual level (Resulticks, 2019: p.6).

3.2 Customer Success (CS) – a new management discipline in governments:

The debate on public performance has had profound impact on public reforms in the late decades. Since the 1970s, a number of renovations have been embraced by governments; most of them aiming to

lessen the size and expenses of bureaucracies, to uphold accountability and transparency, to support efficiency and democracy, and to provide citizens greater access to public services and better quality of life (Fahim, 2018: p.126).

Due to the government's citizen-centric philosophy, putting people at the heart of service design and delivery entails making sure that everyone can easily access services, and that citizens experience responsiveness and attentiveness to their unique needs. As a result, ensuring a user-focus vision will guarantee that user experience receives more consideration as a valuable measure of service performance. Actually, the public sector is under twin pressures; to cut expenses and to provide better customer service. Many believe that automation will allow for the provision of better services at cheaper rates. So, technology has the potential to be extremely beneficial for both enterprises and their customers, but it must be implemented as a part of an overall organizational change. Customer Relation Management (CRM) is one area where technology has gone too far. According to the *Harvard Business Review*; CRM usually aligns corporate operations with customer plans to foster satisfaction and loyalty, and to maximize profit growth over time. Indeed, the private sector is no longer solely using CRM. In order to raise the standards of customer service offered by the public sector, citizen relationship management is investigating the potential of CRM to deliver better citizen-centric public services. Therefore, countries are attempting now to promote the citizen-centric approach through their initiatives towards transformational government via utilizing modern technologies (Beevers, 2006: pp.6,16).

Notably, the practice of Customer Success Management (CSM) which is considered an evolution of CRM, has skyrocketed recently. *LinkedIn* has ranked "CS manager" as the sixth most promising work position for 2019 (Pattabiraman, 2019). Besides, CSM seminars, conferences, digital tools, technology platforms, books, and business press publications have all been launched by marketing professionals. Despite the current upsurge of CSM, academic research has just started struggling to define it and formulate a research strategy. Given that CSM has not received much academic concern, a suspicious researcher is forced to ponder whether CSM is just the newest management fad or a useful breakthrough in customer management practice generally (Hilton *et al.*, 2020).

In this respect, CSM is described as "the process of incorporating customer objectives and results into the company's vision, strategy, culture, and daily operations to make customers' needs more visible". The ability to gain a thorough grasp of what customers are trying to accomplish through this insight permits organizations to consistently realize the full value of their products across the duration of a customer's lifetime. In fact, CS alters the customer-company relationship from being just transactional to become intensely cooperative and collaborative. CS is about collaborating with customers on their journey to achieve their goals by facilitating their achievement and proactively removing roadblocks. CS is frequently misunderstood as a re-branding of customer service, however they are not equivalent. The latter is a reactive approach which concentrates on addressing issues in order to preserve customer satisfaction, whereas CS is a proactive strategy and a cross-functional operating philosophy for recognizing and promoting the customers' intended outcomes (Open View, 2023: pp.3,4).

Furthermore, to define CS it is necessary to understand what customer success entails, so that the definition of each customer and the approach of each firm in achieving it will vary. Service Source (2023: p.8) has defined CS as "the proactive process to guarantee that customers are getting the desired outcomes with a product or service by; ensuring effective onboarding and initial adoption, tracking customer health to drive quick interventions, conducting intelligent campaigns to encourage adoption and advocacy, in addition to handling annual renewals as an endeavor not an event". According to Lincoln Murphy; CS at its most fundamental level begins as an aim/ purpose, rather than a department or a set of procedures,

what he calls “lower-case CS”. Hence, CS is a mindset before it is a department of people. It employs an analytical approach to keep current users, and it leans on strong communication skills to build enduring relationships with customers. In other words, CS is a human-run system whose sole objective is to assist customers in getting the most out of products (Process.st, 2016: pp.5-7).

Operationally, Porter and Heppelmann (2015); Hochstein *et al.* (2020) respectively considered CSM in charge of overseeing customer experience and making sure that clients benefit most from the product. Also, they defined it as "the proactive (versus reactive) relational interaction with customers to ensure the value inherent in product offerings is recognized by them". So, they assign CSM with combining customer experience and engagement towards proactively optimizing customers' value-in-use by taking into account their financial, operational, social, and strategic value. Organizationally, CSM often arrives in the form of a new functional unit that brings together marketing, sales, and support activities. Across all CSM structural methods, the purpose is interoperability of various resources towards meeting the customer's goal (Hilton *et al.*, 2020).

Absolutely, the history of CS is merely modest, as it has its roots in CRM. Prior to 1990s, marketing was primarily concerned with customer transactions, but in the early 1990s and 2000s, the focus shifted to relationship marketing. The principal objective of this new perspective was to build strong relations with customers and maintain their satisfaction and loyalty. At the turn of the century, academicians and managers realized that one should go beyond simple customers' satisfaction to win over their loyalty. The groundwork for customer involvement was thus laid. In this philosophy, customers no longer receive value in a passive way, instead they actively contribute to its creation. Central to this contemporary view which can be regarded as the foundation of CSM, is the quality of interactions and boosting customer value-in-use, particularly throughout the post-sale phase (Pansari and Kumar, 2017). Consequently, CSM can be considered as the following stage of customer engagement that promises a higher customer-centricity of businesses (Seidenstricker *et al.*, 2021: p.25).

Definitely, CS has a remarkable impact in reducing churn and lifting up-sell and cross-sell, and thus expanding the lifetime and shareholder value (Gainsight, 2023: p.2). By finding chances to provide more value to customers, companies will gain more value in return. Indeed, the transformation will involve a long journey during which companies can establish new capabilities and reevaluate their conventional procedures over the course of several years; all with the sake of understanding client demands, issuing products that allow them attain their goals, and generating high customer value. If not, clients will repay companies with greater sales, more referrals, and stronger loyalty, negating the true benefit of CS philosophy. Even while it sounds basic, few companies have mastered this win-win transaction. Therefore, enterprises must undertake several critical tasks in order for the new CS approach to take root (Atkins *et al.*, 2018: pp.8,9):

- Creating clear metrics and accountability for CS teams at all phases of the journey.
- Identifying the desired results and showing how they are connected to value.
- Putting in place procedures that encourage cross-functional communication and training amongst various organizational teams. Most strategically, CS may serve as the quarterback uniting the firm's numerous teams behind the needs of the customers.
- Giving a leader authority to oversee the entire customer experience.
- Ensuring an organizational culture places a strong emphasis on providing customers with value.

Similar to how there are numerous types of sales, for instance, there are multiple CS variations. The value of the customer is often aligned with these strategies. While some companies only practice one kind

of CS, others have many customer segments and tailor their high, low, or no touch CS strategies to each one. Moreover, just like marketing teams usually have automation software, CS teams as well often need platforms to automate their operations. In this context, organizations should take into account the requirements of CSM technology, including functionality, usability, integration, analytics, data science, security, experience, and extensibility. In general, CSM platforms ought to perform three core tasks which are (Gainsight, 2023: pp.2,5):

1. Assess: The health of the customer can be evaluated by CSM platforms based on a number of characteristics, such as product usage, bill payments, support activity, marketing interactions, community interactions, survey feedback...etc.
2. Analyze: CSM technologies can then study these data points to identify trends and patterns among the firm's clientele.
3. Act: To maximize the likelihood of renewal, up-selling, and success, CSM solutions leverage workflow and automation to provide the appropriate action at the appropriate time to the appropriate customer.

In short, it is obvious that the bottom line of any organization – whether private or public – is much connected with the success of its customers, and success in the modern business world relies mainly on customer relationships. A CSM platform focuses on the entire relationship, from pre to post sales. It offers a visual representation of customer relationship hierarchy for ensuring delightful experiences to uphold customer lifetime value. With intelligent CS software, firms can track customer interactions and behaviors, provide a 360-degree view of the customer, automate workflows, and scale CS process. So, investing in an all-in-one solution like a CSM platform will guarantee a lot of benefits, such as improving loyalty and retention, detecting risk in time, creating surveys and analyzing feedback, targeting the right customers, offering seamless onboarding experience, as well as monitoring and controlling account health (Bhadoria, 2021).

On the other hand, the request to be citizen-centric has become widely-accepted in governments in the recent years, despite the protracted debates about public customers identities and the right channels to access them. In fact, if governments deliver services that citizens do not perceive as pertinent to them or they have trouble obtaining, their reputation may be compromised. In that sense, everyone will benefit—socially, economically, and politically, if public administrators take a methodical approach to comprehending the needs and behaviors of their clients. Thereby, Stone *et al.* argued that an extensive explanation of customer management is required in the public sector. However, the difficulty here lies in figuring out what kind of customer experience is needed by different types of customers in various contexts, and which customer management models are most effective at assisting public organizations in reaching their goals. Actually, the tenets of customer management can be implemented across all public sectors, even though each one may need to establish its own unique model depending on factors including; the degree of customer interaction, kinds of services given, extent of engagement, and nature of operations. Further investigation into how a particular public organization works with customers to satisfy their needs must be conducted, in order to choose the best model for that entity. For the successful adoption of customer management also, strong leadership and increased engagement are needed (Woodcock *et al.*, 2008: pp.16,28).

Eventually, establishing a CS function in state-owned enterprises might be challenging, but when done correctly it would be fruitful. Here are some scenarios as to why CS fails specifically in the public sector, along with possible measures that could be taken there (Ghosh, 2021):

- Not monitoring customer health score: The 360-degree view is used to create a complete accurate portrait of each customer. Every encounter is considered from product usage, touch points tracked, financial status, high-level risk rating, segment level health, to the performance of customer support system.
- Failed customer relationships: If CSM software exists, all customer communications would be centralized in one location.
- Ineffective onboarding: To achieve a successful onboarding, it would be shrewd to introduce the main characteristics of products first.
- Inaccurate handoff from sales to CS: It is more important than ever to coordinate the efforts of sales and CS teams to guarantee that customers receive all they were promised during the sales process.
- Clinging on to a reactive approach to CS: Changing from a reactive to a proactive approach is no longer a matter of choice, instead it is an urgent necessity.
- Not segmenting customers: Growth can only happen when CS is precisely identified, which makes scalability difficult if customers are not segmented.
- Lack of clearly defined outcomes/ Key Performance Indicators (KPIs): CSM must be careful to keep track of these KPIs and customers' intended goals.

3.3 Applying the 360-degree view to achieve customer success in the banking experience:

Targeting customers is a continual effort, as humans change their preferences and behaviors all the time. So, a brand web content and mobile application should be equally as dynamic as its customers (Splice Machine, 2014: p.6). Thence, what brands really need is a 360-degree view of their customer base built on the abundance of data available from all appropriate sources and channels (Resulticks, 2019: p.2). With the context provided by this data, the company can employ modern technology to decide on how to interact with clients in a personal proactive fashion. As a result, the customer 360-degree solution will give the company a competitive edge over rivals, as it functions like a modular framework with goals, measurements, and action plans established for each phase of the customer journey. In that way, the 360-degree vision can help both clients and businesses succeed (Totango, 2020). Nowadays, public sectors appear to be rapidly adopting a customer-oriented philosophy. None the less, it is anticipated in somehow that they would not take too much long to catch up with the finest business sector practices (Woodcock *et al.*, 2008: p.25), particularly what has been mentioned here regarding the 360-degree and CS solutions.

Otherwise, digitalization now is profoundly and structurally transforming banks and different financial institutions from a variety of viewpoints, such as marketing, sales, customer service, product development, credit, operations, and even risk management. This digital journey is being driven by three core mechanisms; applications (mainly mobile), data and analytics, and Internet of Things (IoT) connected devices, as Artificial Intelligence (AI) remains top priority item for banks. In a recent survey by Gartner; 47% of banks stated that the primary purpose of becoming digital is to foster customer relationships and user experiences (Innominds, 2023). Nevertheless, the problem of finding a balance between security and user experience seems critical in financial services. In the past, financial institutions would either compromise user experience for security, or the other way around. While in today's environment, customers seek both an encrypted banking session and a satisfying user experience. This cannot be accomplished using traditional data analysis and security methods. Taking a 360-degree

customer view makes it easier to spot transactional abnormalities and decide whether to ask for step-up authentication. Then with the assistance of its decision engine, the fraud protection system leverages a machine learning model to rate the risk associated with each transaction to handle it appropriately. By utilizing the mobile channel to its fullest extent as well, financial institutions can better detect and fight fraud attacks in immediate response and improve user experience at the same time (Grange, 2021).

Indeed, financial institutions and banks have long strived to obtain the desired 360-degree view of their customers. For many years, this goal was confined to getting an in-depth comprehension of the client's business relationship with the bank. Today, the objective extends to acquire a complete grasp of each customer as an individual. Banks that master this aim and react on this intelligence in a timely, thoughtful, and respectful manner will have a leg up in optimizing customer relationships and profitability (Oracle, 2020: p.2). In this regard, touch points are the locations where the bank and customers interact together. As a part of a use scenario, the customer might utilize multiple touch points (Clatworthy, 2011). For example, a bank's touch points may encompass its employees, buildings, e-banking services, physical print-outs, ads, ATMs, debit and credit cards, call centers...etc. An array of all experiences from various touch points forms the reputation of service provider (Karthikeyan and Sivakumar, 2014: p.1). Ideally, a 360-degree customer profile should give an extensive overview of the person. Demographic, transactional, behavioral, psychographic, product, CRM, emotional, and social data are all required in this situation. Through the application of AI and machine learning solutions, the bank should be able to use a sufficiently complete portfolio to derive implicit insights that will let it engage with the customer more deeply and personally, and to capitalize on new opportunities more efficiently and cost-effectively (Resulticks, 2019: p.5).

In this respect, Geng (2016) conducted a research on the critical challenges encountered by banks in the omni-channel digital banking realm, applying the transaction cost theory, substitution and complementarity theory, and consumer informedness theory. The objective was to gain insights into customer behavior and organizational performance within this digital banking landscape. The research was revolved around how financial institutions can leverage data analytics tools and management science modeling to better comprehend customer behavior and to make more informed channel management decisions. The author developed three essays that delved into topics, like branch network analysis, omni-channel customer banking behavior, credit card partnerships, and Bitcoin penetration. Whereas, the study utilized sponsored data obtained from banks in both the United States of America and Singapore.

On the other hand, a further study harnessing an inclusive approach to Service-Oriented Architectures (SOA) designed a customer-oriented service architecture model tailored especially for banks. It analyzed the potential influence of future banking sales and distribution. The results indicated that while banks are restructuring their existing architectures, they are not expected to become fully customer-oriented by the next years. However, these advancements overlooked fundamental improvements in service architectures, such as the centralization of processes in customer-facing services or the integration of value-added services from external providers (Puschmann, 2013).

In sum, the systems and operational procedures take place throughout the majority of banks are currently producing more data than ever before. This data must be well-deployed at least not by following the same conventional approaches. After years of making significant expenditures in business intelligence, it is reasonable for many banks to question whether there is a distinction between genuine business analytics and the capabilities they have acquired as a result of their business intelligence investments. If business intelligence is about hindsight, analytics is about foresight—predicting and improving to generate more valuable future results. In *Deloitte* experience, an analytics approach should

focus on four key areas; 1- customer acquisition, 2- service, 3- relationship development, and 4- customer retention. Undoubtedly, through using the knowledge obtained by analytics, banks might improve the capacity to integrate lead delivery across multiple distribution channels, enabling it to identify which customers to attract, how to best serve them, and which relationship model ensures that the bank can retain its customers over the long term. These are the vital outcomes banks should aim for today, as competitors are already using customer analytics to their advantage (Johnston and Sohail, 2011: pp.1-5).

Hence, we can say that employing the 360-degree view to retain and satisfy customers and to achieve CS overall is an essential quest for banks, specifically public ones. For that reason, the present study is keen to have the lead in developing a practical customer-oriented electronic model/ IT solution for CSM, aims at managing service delivery and customer relations and success in the Egyptian public banks, in particular, through adopting a broad 360-degree customer vision and applying advanced data analytics and modeling techniques.

In Egypt, there are nearly about ten public/ national banks, however the role of Public Development Banks (PDBs) is played mainly by three government-owned commercial banks, namely National Bank of Egypt, Banque Misr, and Banque du Caire. The substantial roles of these banks are maintaining financial stability, promoting Small and Medium-sized Enterprises (SMEs), and enhancing financial inclusion. This allows for the characterization of the public commercial banks as PDBs. Indeed, the pandemic of Covid-19 has accelerated the full adoption of digitalization in the Egyptian banking sector. It is necessary in this context to have regulatory frameworks that will protect banks and customers from various cyber threats. Yet, several technical reforms are required to maximize their effectiveness in coping with current megatrends and further crises. Thus, the future of public banks in Egypt will be different, as they need to equip themselves with all requirements of the new era of big data, which includes a fast-paced flexible technological infrastructure and sufficient staff training on the recent financial instruments (Fouad and Zaki, 2023), in order to improve the entire customer banking experience.

4. Applied study: a proposed electronic model for public banks

Of course, this paper is explanatory-applicable in nature. It is conducted by using the qualitative and quantitative perspectives together. For theoretical intents, it adopted the descriptive analytical methodology to identify the main concepts and to explore the causal relationship between variables. Additionally, the study employed a survey to investigate the correlations in real practice, depending on the IT solution suggested here for implementing the 360-degree customer view in Egyptian public banks.

4.1 Implementation business model canvas:

The 360-degree customer view represented in figure (2) is a comprehensive approach that allows businesses to gain a complete understanding of their customers' needs, preferences, behaviors, and interactions across multiple channels. It enables firms to deliver personalized and relevant experiences to their customers, leading to increased satisfaction, loyalty, and revenue. In the public sector, this approach can be applied to enhance CS in various areas, including banking.

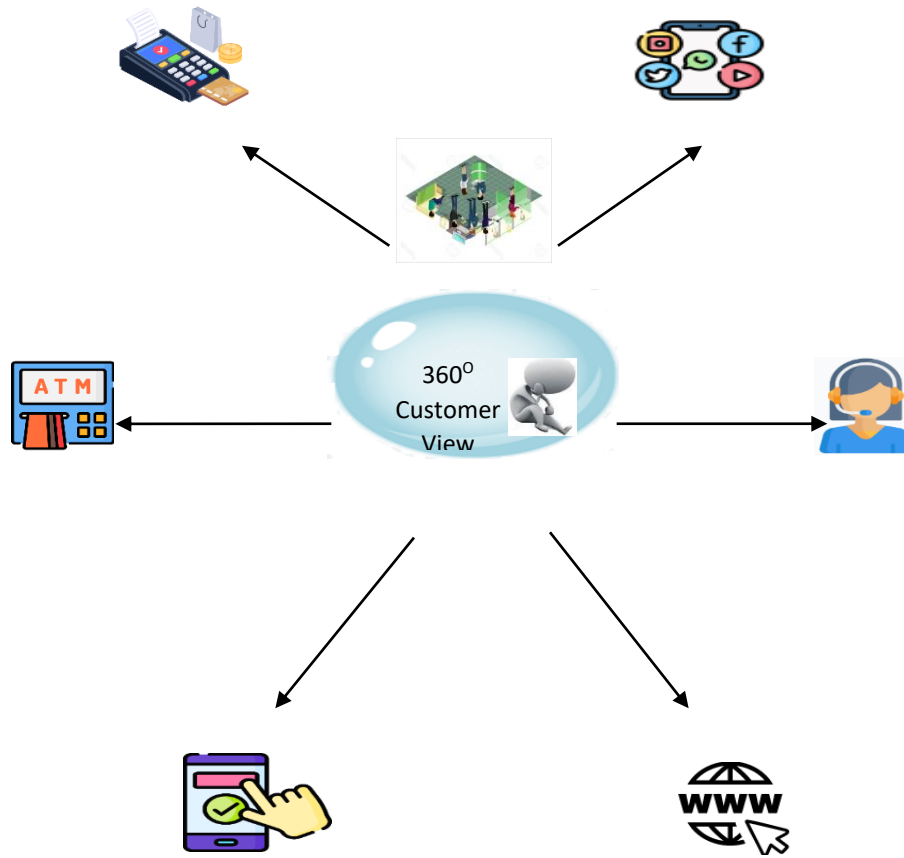


Figure (2)

360-degree customer view

Source: Prepared by the researchers.

The following business model canvas presents the key components necessary to successfully implement a 360-degree customer view through CSM platforms in public banks, as shown in figure (3) below. By determining the various customer segments, value propositions, channels, relationships, revenue streams, key resources, activities, partners, and cost structure, a bank can create an integrated strategy for providing a holistic view for each customer data and behavior. This can lead at last to improved customer satisfaction, retention, loyalty, and success, as well as revenue growth, better risk management, and fraud detection.

| | | | | |
|--|--|---|--|--|
| <p><u>Key Partners</u></p> <ul style="list-style-type: none"> • Third-party data providers • Fintech companies for technology solutions and integration • Payment processors and credit bureaus • Regulatory bodies for compliance and data privacy • Government entities and central bank | <p><u>Key Activities</u></p> <ul style="list-style-type: none"> • Data collection and management • Data analysis and interpretation • Customer segmentation and profiling • Marketing and communication strategies • Product and service optimization • Risk management and fraud detection | <p><u>Objectives</u></p> <ul style="list-style-type: none"> • 360-degree view of the customer data and behavior • Improved customer satisfaction, retention, and success • Enhanced cross-selling and up-selling opportunities • Personalized marketing and communication campaigns • Optimized product and service offerings • Better risk management and fraud detection | <p><u>CRM/CSM</u></p> <ul style="list-style-type: none"> • Personalized customer service and experience • Sustainable relationship and continuous communication and engagement • Tailored financial advice and guidance • Customized product and service offerings • Timely resolution of issues and complaints • Regular feedback collection and analysis • Maximized customer value-in-use | <p><u>Customers</u></p> <ul style="list-style-type: none"> • Existing customers • Potential customers • High-value customers • Low-value customers • Business customers • Public parties |
| <p><u>Cost Structure</u></p> <ul style="list-style-type: none"> • Investment in technology and infrastructure • Data acquisition and management costs • Public officials/ employees' salaries and benefits • Marketing and advertising expenses • Compliance and regulatory fees | <p><u>Key Resources</u></p> <ul style="list-style-type: none"> • IT infrastructure and security measures • CSM system • Customer data and analytics tools • Skilled data analysts and customer service representatives • Marketing and communication teams | | <p><u>Channels</u></p> <ul style="list-style-type: none"> • Online banking/ website • Mobile app • Social media channels • In-branch interactions/ ATMs-cards • Customer service hotline • Direct mail/ e-mail • Marketing campaigns | <p><u>Revenue</u></p> <ul style="list-style-type: none"> • Service fees for premium account holders • Increased revenues from cross-selling and up-selling opportunities • Improved customer retention, loyalty, and lifetime value (success) • Reduced risk of fraud and non-payment |

Figure (3)

***Business model canvas for implementing the 360-degree customer view
through CSM platforms in public banks***

Source: Prepared by the researchers.

4.2 Suggested technical solutions:

The proposed electronic model here clarified in figure (4) consists of 10 phases. Each stage in this IT model builds on the previous one, in order to create an integrated solution for delivering personalized and relevant experiences to customers, enhancing their satisfaction, engagement, and success, along with increasing revenues for banks in the public sector.

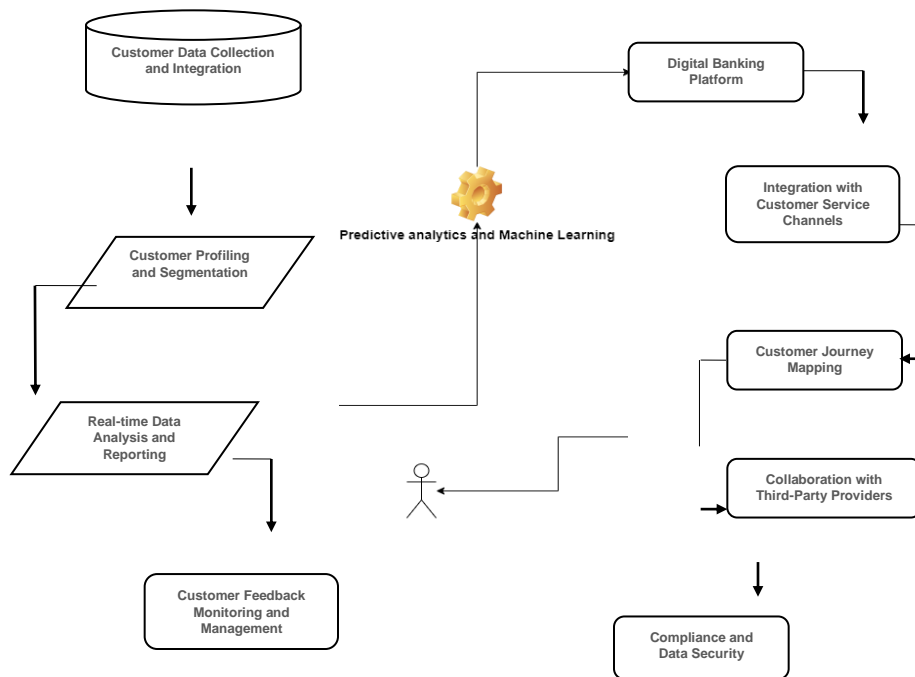


Figure (4)

Proposed electronic model/ technical solutions for public banks

Source: Prepared by the researchers.

1) Customer Data Collection and Integration: The first step in the suggested IT solution is to collect customer data from various sources, such as transactional data, demographic data, social media, and customer feedback. This data should be integrated into one centralized customer database that can be linked and moderated by the CSM system and accessed by other systems of the bank.

2) Customer Profiling and Segmentation: Once customer data is collected and integrated, it should be used to create customer profiles that include demographics, transaction history, and other relevant information. These profiles can then be used to segment customers into different groups based on their behavior and preferences.

3) Real-time Data Analysis and Reporting: The suggested IT solution should be able to analyze customer data in real-time and generate reports that provide insights into customer behavior and preferences. These insights can be used to develop personalized recommendations and offers.

4) Customer Feedback Monitoring and Management: To achieve CS, banks should monitor customer feedback and complaints. Thus, the IT solution should allow tracking customer feedback and providing a unified platform for managing customer complaints.

5) Predictive Analytics and Machine Learning: The IT solution should provide advanced analytics and machine learning capabilities that enable the bank to predict customer behavior and recommend personalized products and services. This can be used to create targeted marketing campaigns and develop customer segmentation strategies.

6) Digital Banking Platform: This means to implement a digital banking platform that provides customers with a seamless and personalized experience across multiple channels, including web, mobile, and social media. This platform should offer self-service capabilities, such as online account opening and loan applications, along with real-time alerts and notifications.

7) Integration with Customer Service Channels: The IT solution should also integrate the different customer service channels, such as call centers, e-mail, and chat with the centralized customer database. This will guarantee that customer service representatives whoever they are can access the most up-to-date customer information, enabling them to provide personalized assistance and resolve issues more efficiently.

8) Customer Journey Mapping: The IT solution should enable the bank to map out the customer journey to identify pain points and opportunities for improvement. This can be done by tracking customer interactions across all channels, including social media, e-mail, mobile, and analyzing the data to identify trends and patterns.

9) Collaboration with Third-Party Providers: Banks should collaborate with third-party providers such as fintech companies, to access innovative technologies and solutions that can enhance customer experience. This may include allowing new payment methods, offering personalized investment advice, and providing access to digital lending platforms.

10) Compliance and Data Security: Finally, banks must comply with regulations and data security standards when applying the 360-degree customer view technical solutions. This involves implementing secure data storage and encryption, providing customers with transparent data privacy policies, and adhering to regulations like GDPR and CCPA.

In conclusion, the adoption of a 360-degree customer view model by using the recommended IT solution – most probably through CSM systems and departments – can help banks in the public sector to boost the success of their customers. By leveraging customer data and insights, public banks can deliver personalized and relevant experience, enhance customer engagement, retention, loyalty, and also increase revenue.

4.3 Empirical data analysis and discussion:

A structured questionnaire was designed and formulated on the basis of the previous suggested electronic model, and it was applied in this research. It includes 18 items/ questions, other than demographic and professional data, and consists of two major sections; the 360-degree customer view (independent variable= 8 items), and customer success (CS) (dependent variable= 10 items) (see research appendix 1). The required primary data here was collected via a 5-point Likert scale, as it is clarified later.

The questionnaire was prepared using Google-Forms in both Arabic and English versions, and it was distributed online to a sample of executives and employees in the Egyptian public/ national banks through friends, acquaintances, and specialized groups related to the banking sector on social networking sites/ platforms. As seen in the following table (1), a total number of (98) responses were gathered. Knowing that data collection and analysis processes took approximately three months (November – December 2023 & January 2024). At first, a pilot study was conducted on (10) people to judge the clarity of the questionnaire, and then amendments were done.

Table (1)

Collected data information/ details

| Data Info |
|--|
| Data table properties |
| Name: Analysis |
| Size: 98 rows, 24 columns |
| Features: 2 variables/ indicators |
| Group (A) for the first indicator, measuring the 360-degree view, which is assessed by questions 1 to 8 |
| Group (B) for the second indicator, measuring the customer success, which is assessed by questions 9 to 18 |

For the sake of evaluating the reliability of measures and stability of the questionnaire, Cronbach's Alpha was calculated for each variable, and it was noticed that all coefficients exceeded 0.90. So, there is evidence that the two indicators in this research seem to be valid, consistent, and stable. On the other hand, Orange Data Mining 3.34 was the prime tool for compiling and processing data in the quantitative section of the study. Moreover, various analytics tools were utilized for data analysis here, which include descriptive analysis of the main characteristics of respondents and research questions (Mean, Standard Deviation, & Direction), along with Pearson correlation to measure the strength and direction of relationships (see research appendix 2).

In this regard, the next tables (2), (3), (4), (5), (6) and figures (5), (6), (7), (8), (9) provide some descriptive statistics of the sample; is that they demonstrate the demographic and professional distribution of participants. As observed, the sample has a balanced number of males and females, indicating that results are representative of the whole population. Also, it is evident that the participation rate among age groups over 35 years is the highest, which means that the responses are likely to be more accurate in their representation. Besides, it is clear that participants are graduates of commerce faculties and some of them are holding Master's or PhD degrees. This suggests that results are conceivable to come from a sample with high academic qualifications. Moreover, it is noticed that the highest number of participants in terms of job level falls within the supervisory categories, indicating that responses are grounded in practical

executive experience. As well as, it is obvious that the majority of the sample have spent more than 10 years working at their banks, which ensures higher credibility of the answers in general.

Table (2)

Gender distribution of participants

| Gender | Number | Percentage |
|--------|--------|------------|
| Male | 56 | 57.14% |
| Female | 42 | 42.86% |

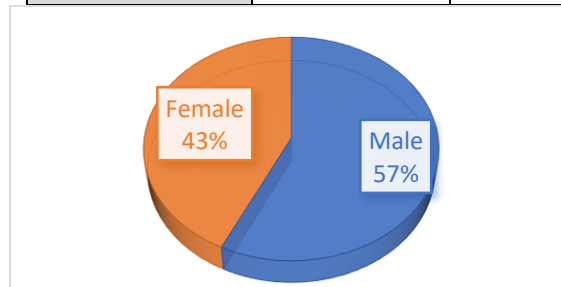


Figure (5)

Gender distribution of the sample

Table (3)

Age distribution of participants

| Age Group | Number | Percentage |
|---------------------------|--------|------------|
| Less than 35 years old | 14 | 14.29% |
| Between 35 & 50 years old | 56 | 57.14% |
| More than 50 years old | 28 | 28.57% |

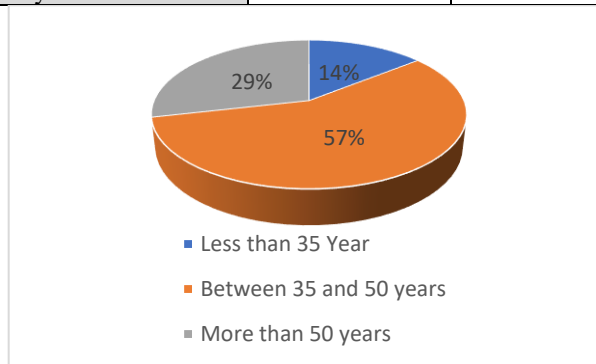


Figure (6)

Age distribution of the sample

Table (4)

Educational level distribution of participants

| Educational Level | Number | Percentage |
|---------------------------------------|--------|------------|
| Holds a Bachelor's degree in commerce | 70 | 71.43% |
| Holds another Bachelor's degree | 0 | 0 |
| Holds a Master's degree or PhD | 28 | 28.57% |

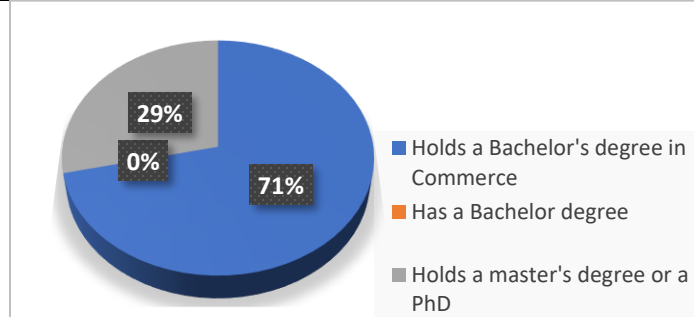


Figure (7)

Educational level distribution of the sample

Table (5)

Job title distribution of participants

| Job Title | Number | Percentage |
|------------------------------|--------|------------|
| Member of board of directors | 0 | 0 |
| Branch manager | 25 | 25.51% |
| Head of sector | 1 | 1.02% |
| Head of department | 34 | 34.69% |
| Employee | 38 | 38.78% |

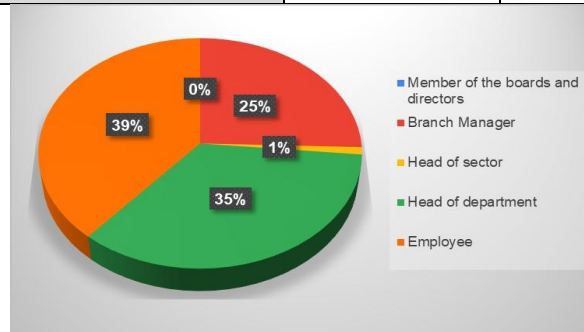


Figure (8)

Job title distribution of the sample

Table (6)

Work duration distribution of participants

| Work Duration | Number | Percentage |
|-----------------------|--------|------------|
| Less than 10 years | 14 | 14.29% |
| Between 10 & 25 years | 54 | 55.1% |

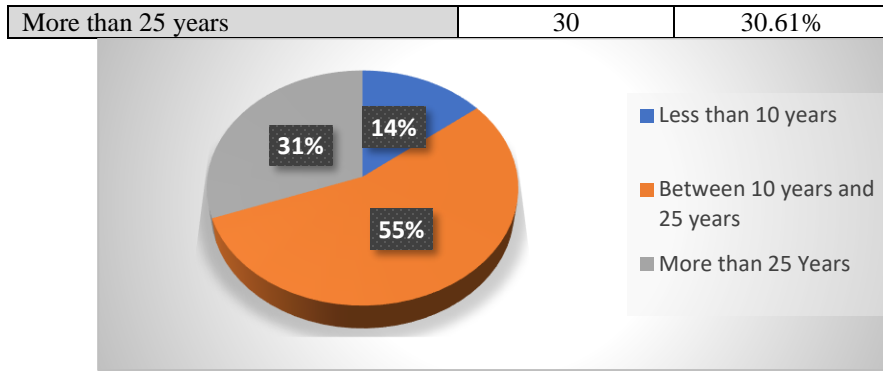


Figure (9)

Work duration distribution of the sample

Whilst table (7) and figure (10) below clarify the answers of the core question; does your bank have a CSM department? As observed, there are few responses stated that this functional unit is already found/ established in their banks.

Table (7)

CSM department existence (distribution of participants)

| CSM Department | Number | Percentage |
|----------------------|--------|------------|
| Yes, there is | 14 | 14.29% |
| Sorry, I do not know | 0 | 0 |
| No, there is not | 84 | 85.71% |

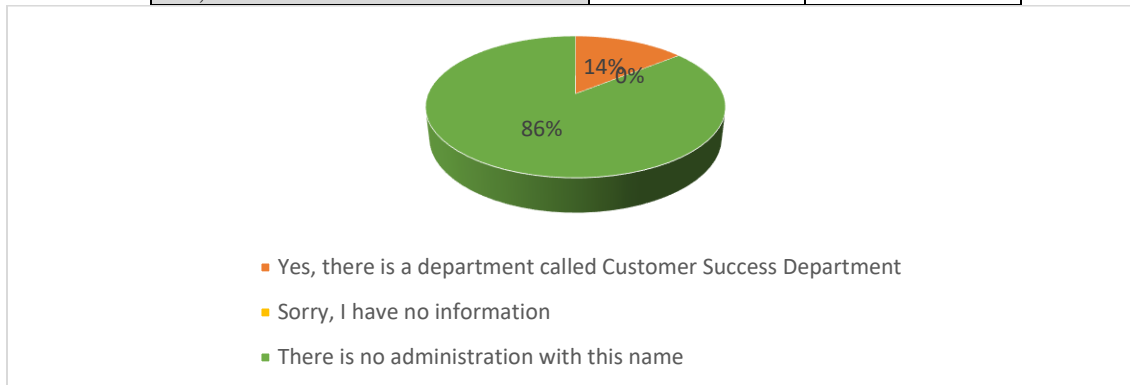


Figure (10)

CSM department existence (distribution of the sample)

As mentioned previously, the researchers applied a questionnaire with two groups of questions to measure the two main variables in this study; Group A (Q1 to Q8) measuring the 360-degree customer view indicator, Group B (Q9 to Q18) measuring the indicator of CS. The following table no. (8) shows

the average/ mean and standard deviation of the research variables based on the two major groups (aggregation of questions), with an average for Group A established at 4.12 and for Group B at 4.26.

Table (8)

Average/ mean & standard deviation of the research variables (based on groups)

| Groups Results | 360-Degree View (Group A) | Customer Success (CS) (Group B) |
|--------------------|------------------------------|------------------------------------|
| Average/ Mean | 4.126276 | 4.267347 |
| Standard Deviation | 0.467189 | 0.658924 |

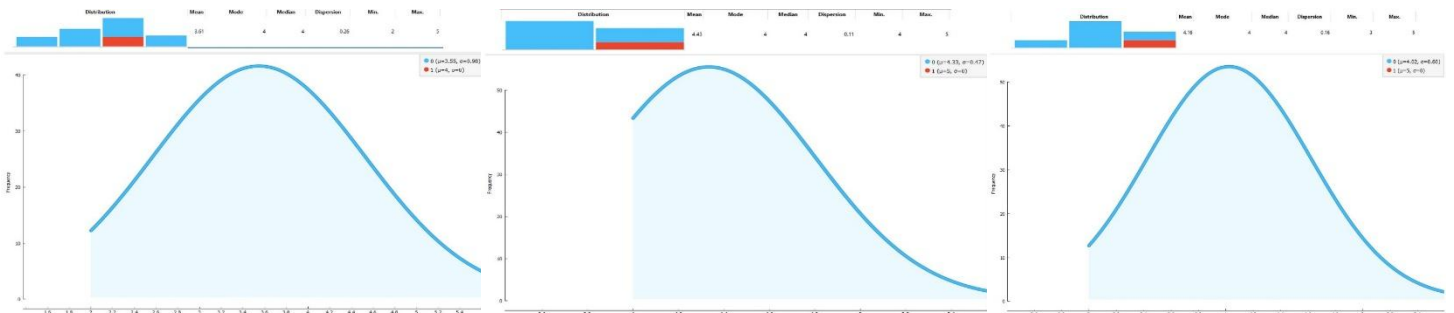
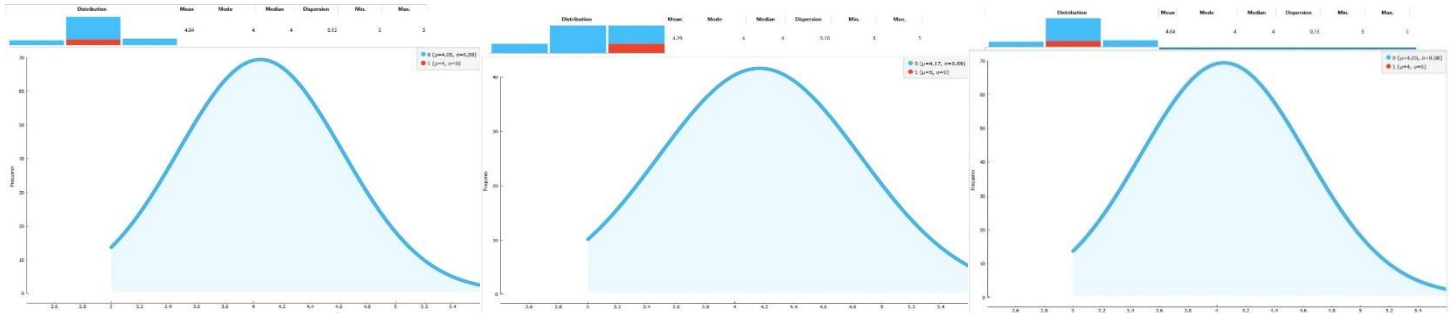
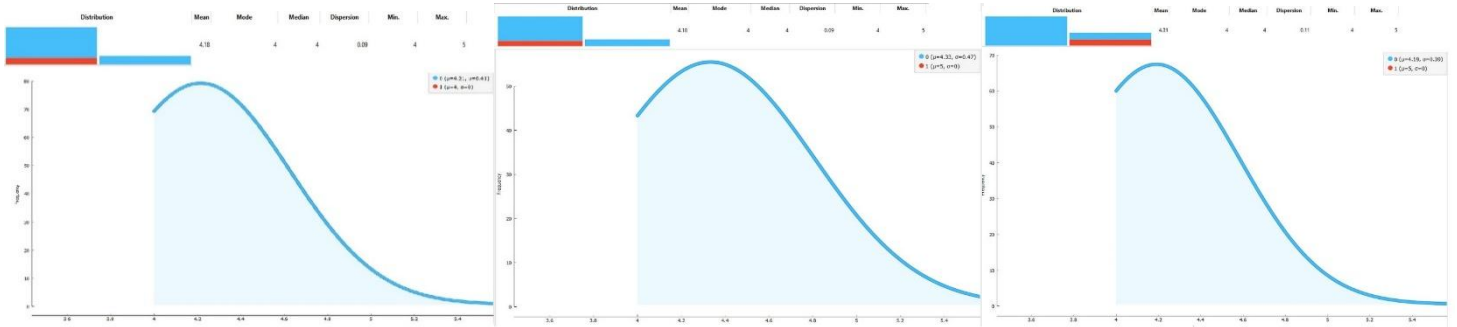
In this respect, table (9) below presents some descriptive statistics of the research questions across the whole sample. Also, figure (11) illustrates the questions distribution in the empirical study. Based on this, it is obvious that the values of the mean for most of the questions are around 4 and 5 (in Likert scale), which reflects that respondents generally agreed or strongly agreed to the existence of those practices in their banks (highly-presence). Whereas, in some few questions the values of the mean are around 3 and 4, which indicates that participants sometimes tended to be neutral or agreed to what they were asked about. All of this points that there is always a need for improvement over time, especially concerning setting and measuring target outcomes for customers along their journey (journey mapping) (Q7).

Table (9)

Questionnaire results across the sample

| Variable | Q # | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Average/ Mean | Standard Deviation | Percentage | Direction |
|---------------------------------------|-----|----------------|-------|---------|----------|-------------------|---------------|--------------------|------------|----------------|
| 360-Degree Customer View (Group A) | 1 | 18 | 80 | 0 | 0 | 0 | 4.18 | 0.38 | 83.67 | Agree |
| | 2 | 42 | 56 | 0 | 0 | 0 | 4.42 | 0.49 | 88.57 | Strongly agree |
| | 3 | 30 | 68 | 0 | 0 | 0 | 4.30 | 0.46 | 86.12 | Strongly agree |
| | 4 | 16 | 66 | 8 | 8 | 0 | 3.91 | 0.75 | 78.37 | Agree |
| | 5 | 42 | 42 | 14 | 0 | 0 | 4.28 | 0.70 | 85.71 | Strongly agree |
| | 6 | 16 | 67 | 8 | 7 | 0 | 3.93 | 0.72 | 78.78 | Agree |
| | 7 | 16 | 41 | 19 | 22 | 0 | 3.52 | 1.01 | 79.41 | Agree |
| | 8 | 42 | 56 | 0 | 0 | 0 | 4.43 | 0.49 | 88.57 | Strongly agree |
| Customer Success (CS) (Group B) | 9 | 30 | 54 | 14 | 0 | 0 | 4.16 | 0.65 | 83.27 | Strongly agree |
| | 10 | 44 | 54 | 0 | 0 | 0 | 4.44 | 0.50 | 88.98 | Strongly agree |
| | 11 | 46 | 36 | 0 | 16 | 0 | 4.14 | 1.05 | 82.86 | Strongly agree |
| | 12 | 56 | 36 | 0 | 6 | 0 | 4.44 | 0.78 | 88.98 | Strongly agree |
| | 13 | 56 | 25 | 14 | 3 | 0 | 4.36 | 0.84 | 87.35 | Strongly agree |

| Variable | Q # | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Average/ Mean | Standard Deviation | Percentage | Direction |
|----------|-----|----------------|-------|---------|----------|-------------------|---------------|--------------------|------------|----------------|
| | 14 | 56 | 8 | 28 | 6 | 0 | 4.16 | 1.04 | 83.27 | Strongly agree |
| | 15 | 44 | 26 | 28 | 0 | 0 | 4.16 | 0.84 | 83.27 | Strongly agree |
| | 16 | 44 | 26 | 28 | 0 | 0 | 4.16 | 0.84 | 83.27 | Strongly agree |
| | 17 | 30 | 48 | 20 | 0 | 0 | 4.10 | 0.71 | 82.04 | Agree |
| | 18 | 70 | 8 | 20 | 0 | 0 | 4.51 | 0.81 | 90.20 | Strongly agree |



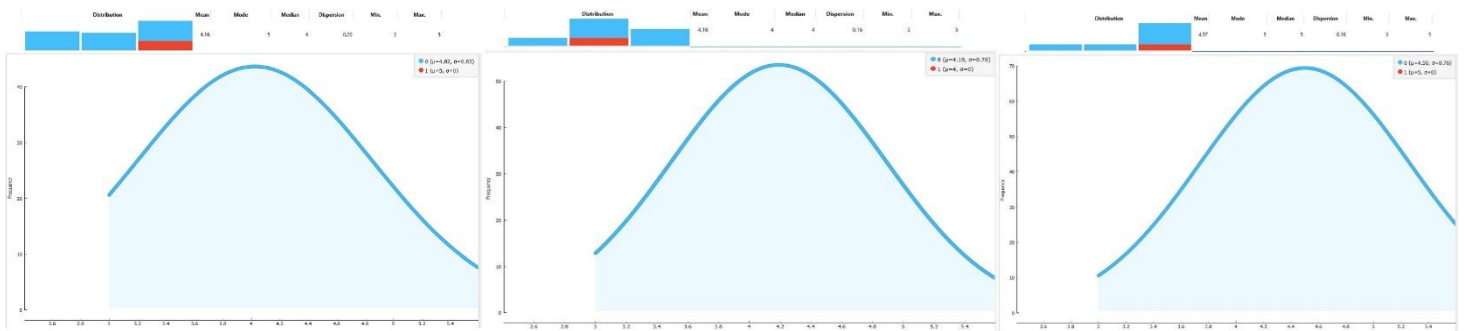
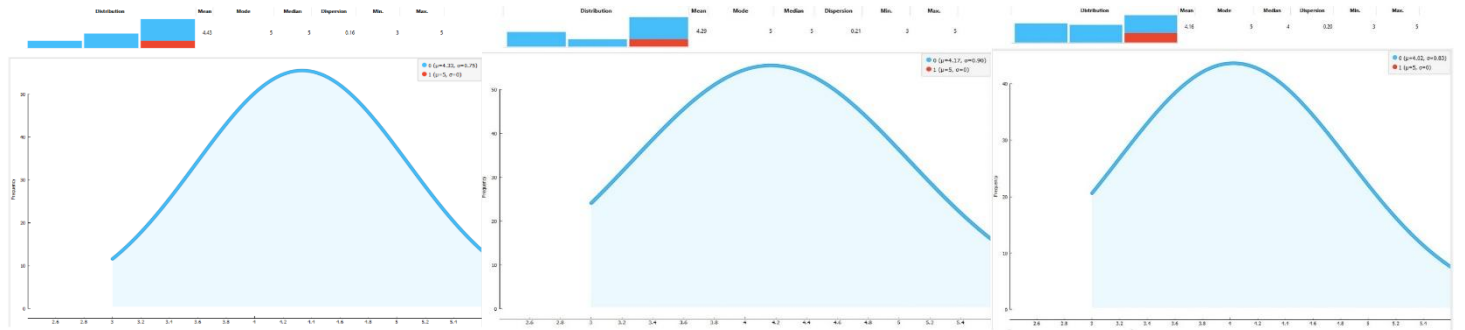
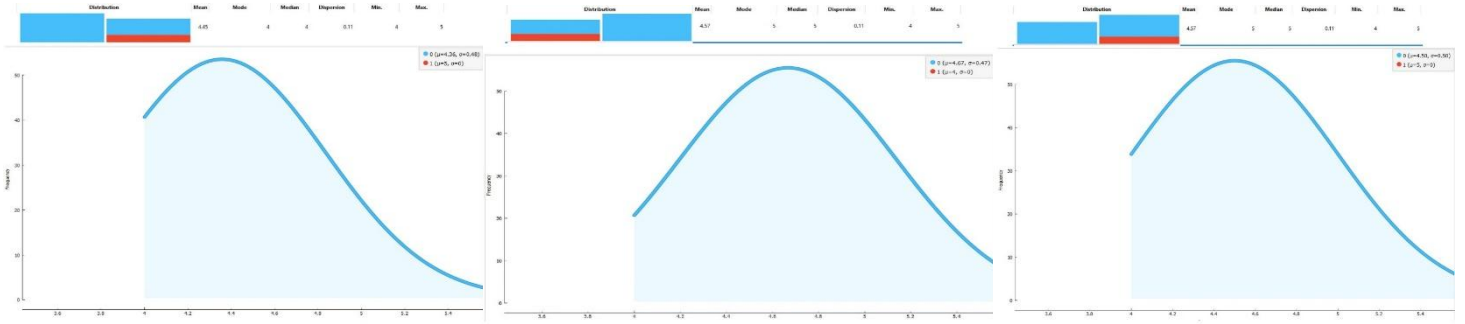


Figure (11)

Questions distribution across the sample

By calculating Pearson correlation coefficient, it is evident from table (10) that there is a significant (p-value is less than 0.05) direct positive relationship at significance level $\alpha= 0.05$ (with confidence level 95%) between the two variables here represented in groups. However, this correlation is moderate to strong (r is almost near 0.7), likely due to the limited adoption of the concept of CSM as a well-established unit in the Egyptian public banks, which should be responsible for employing an advanced electronic system integrated with other systems of the bank, in order to provide a comprehensive 360-degree vision for all customer interactions resulting in a personalized seamless and secure customer experience in general.

Table (10)

Correlation between the research variables (based on groups)

| | 360-Degree View (Group A) | Customer Success (CS) (Group B) |
|------------------------------------|------------------------------|------------------------------------|
| 360-Degree View (Group A) | 1 | |
| Customer Success (CS) (Group B) | 0.640193 | 1 |

Furthermore, the following table no. (11) displays the correlations between different questions in the empirical study as follows.

Table (11)

Correlations between the research questions

| | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 | Q16 | Q17 | Q18 |
|----|------|------|------|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Q1 | 1 | | | | | | | | | | | | | | | | | |
| Q2 | 0.55 | 1 | | | | | | | | | | | | | | | | |
| Q3 | 0.60 | 0.77 | 1 | | | | | | | | | | | | | | | |
| Q4 | 0.54 | 0.09 | 0.54 | 1 | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | |
|-----|------|-------|------|------|-------|------|-------|-------|------|------|------|------|------|------|------|------|------|---|
| Q5 | 0.48 | 0.88 | 0.68 | 0.04 | 1 | | | | | | | | | | | | | |
| Q6 | 0.55 | 0.07 | 0.54 | 0.96 | 0.03 | 1 | | | | | | | | | | | | |
| Q7 | 0.56 | 0.35 | 0.66 | 0.53 | 0.35 | 0.56 | 1 | | | | | | | | | | | |
| Q8 | 0.55 | 1.00 | 0.77 | 0.09 | 0.88 | 0.07 | 0.35 | 1 | | | | | | | | | | |
| Q9 | 0.53 | 0.73 | 0.86 | 0.36 | 0.88 | 0.37 | 0.58 | 0.73 | 1 | | | | | | | | | |
| Q10 | 0.42 | 0.46 | 0.74 | 0.53 | 0.51 | 0.53 | 0.18 | 0.46 | 0.72 | 1 | | | | | | | | |
| Q11 | 0.24 | -0.16 | 0.25 | 0.76 | -0.08 | 0.73 | 0.29 | -0.16 | 0.21 | 0.46 | 1 | | | | | | | |
| Q12 | 0.33 | 0.61 | 0.47 | 0.34 | 0.55 | 0.26 | -0.08 | 0.61 | 0.46 | 0.63 | 0.37 | 1 | | | | | | |
| Q13 | 0.36 | 0.65 | 0.50 | 0.18 | 0.80 | 0.17 | 0.05 | 0.65 | 0.71 | 0.68 | 0.22 | 0.81 | 1 | | | | | |
| Q14 | 0.38 | 0.70 | 0.54 | 0.23 | 0.72 | 0.18 | -0.05 | 0.70 | 0.63 | 0.73 | 0.18 | 0.91 | 0.89 | 1 | | | | |
| Q15 | 0.41 | 0.57 | 0.66 | 0.28 | 0.68 | 0.28 | 0.12 | 0.57 | 0.77 | 0.90 | 0.16 | 0.57 | 0.75 | 0.81 | 1 | | | |
| Q16 | 0.41 | 0.57 | 0.66 | 0.28 | 0.68 | 0.28 | 0.12 | 0.57 | 0.77 | 0.90 | 0.16 | 0.57 | 0.75 | 0.81 | 1.00 | 1 | | |
| Q17 | 0.53 | 0.34 | 0.41 | 0.48 | 0.56 | 0.45 | 0.13 | 0.34 | 0.63 | 0.74 | 0.56 | 0.69 | 0.80 | 0.76 | 0.73 | 0.73 | 1 | |
| Q18 | 0.29 | 0.52 | 0.40 | 0.20 | 0.75 | 0.16 | 0.11 | 0.52 | 0.69 | 0.55 | 0.37 | 0.73 | 0.87 | 0.73 | 0.54 | 0.54 | 0.80 | 1 |

From the correlation table above, it is emphatic that:

1. Most of the questions show moderate to strong positive correlations with each other. For example, Q1 & Q17 have a correlation coefficient of 0.53 indicating a moderate positive relationship between both of them, whilst Q5 & Q9 have a correlation coefficient of 0.88 indicating a strong positive relationship between them.
2. Some questions exhibit weak correlations or even no correlation at all. For instance, Q1 & Q11 have a correlation coefficient of 0.24 suggesting a relatively weak positive relation between them.
3. There are also few cases of inverse correlations between certain questions, such as Q5 & Q11 with a correlation coefficient of -0.08 clarifying a reverse relationship between them.

4.4 Electronic system services:

Based on the previous results, it is significant that the proposed electronic system aiming to serve customers and follow them up in public banks has to consider the next aspects:

A) System features

- The electronic system and online banking services must be designed in a user-friendly and attractive way to improve user experience and to make it more convenient and useful.
- The electronic system should store, organize, and classify all customer personal data gathered from various internal and external sources.
- The system must ensure high levels of security and protection for customer accounts and financial transactions.
- The system should provide 24/7 technical support to solve problems and answer technical questions. This guarantees that customer needs would be met at any time they want, and ensures that the technical problems they might face are going to be resolved in a quick and efficient manner.
- Reports and statistics must be made available to customers through the system, such as account summaries, monthly reports, and the current balance to help them analyze the performance of their accounts and make appropriate decisions.
- Strategic analysis tools should be made available to customers through the system to assist them in analyzing their account activities, estimating revenues and expenses, and making sound investment decisions.
- Forecasting techniques must be made available to customers through the system, such as purchasing patterns, price forecasting, and economic forecasting, in order to facilitate financial planning and improve investment performance.
- Financial advisory services should be offered through the system to customers interested in investment and money management.
- Business banking services must be provided to companies and institutions, such as checking accounts, financing and investment services, along with checks and transfers.
- Additional online banking services could be offered to attract new and existing customers, like loans, insurance, travel, reservation, and many other services to increase customer satisfaction and to enhance the overall banking experience. Also, special offers and discounts could be provided to distinguished customers, such as gifts, discounts on bank fees, and reward points to encourage them to use the bank services more.
- Islamic banking services could be provided to customers who prefer to deal in accordance with Islamic provisions. Islamic banking could include options for Islamic financing, such as profit and loss sharing.
- Ultimately, data mining, machine learning, and AI capacities should be supported by the system to assess combined customer data, and hence tailoring timely customized promotional campaigns.

B) Users/ customers & employees requirements

- Customers should be able to create accounts to log into the system online and access their personal data. These accounts include customer personal information and financial history, and they should be well-protected and secured.
- Customers must be able to fully manage their accounts through the system, including changing their personal information, resetting their passwords, and setting up notifications for important transactions.
- Customers should be able to set up alerts for current and future transactions through the system, including overdraft alerts and low balance alerts.

- Customers must be able to upload documents through the system, such as invoices, financial reports, and other files.
- Customers should be able to make electronic payments through the system, such as money transfers and bill payments.
- Customers must be able to manage their personal budgets and control their spending through the system.
- There should be additional online banking services available to customers through the system, such as deposits, loans, insurance, and financial advisory.
- Customers must have the ability to access their information and perform banking transactions safely and conveniently through a mobile application. Besides, integration with other applications dedicated to electronic payment.
- Customers should have the ability to evaluate the service delivered to them and leave comments and opinions, in addition to discussing financial topics and exchanging experiences through the system.
- On the other hand, employees must have the ability to monitor customers' details, and to issue reports on their financial activity and the level of service delivery.
- Employees should have the access to data analytics tools to analyze customer behavior, in order to improve service quality and to enhance customer experience.
- Training and education must be offered to employees on CRM and how to maintain customer health and success, and to customers on online banking and financial services and how to use them better.
- Eventually, transparent relationships and strong partnership should be built with customers, by providing the necessary information, responding to their needs, and offering appropriate advice and guidance.

Accordingly, figure (12) below demonstrates the proposed electronic model outlining the processes that might be considered during system design. This encompasses the responsibilities of CSM platforms in public banks in employing the 360-degree view and analyzing various customer operations to forecast new services or enhance existing ones, and thence offering a high-customized experience. These processes must be done entirely and confidentially. Thus, it is urgently required the implementation of an expert software system equipped with AI algorithms to fulfill this role.

study, as well as proposing an IT solution applicable for public banks. So that, it can assist academics, practitioners, and public executives, especially in the Egyptian banking sector, also it can help draw implications for future research.

However, the field study here has some limitations. At first, findings are based on information taken from participants, putting into consideration the poor response in spite of using widespread specialized networking platforms. Besides, the questionnaire is limited to public/ national banks in Egypt excluding the private commercial ones. This is in addition to time constraints; is that all results represent the labor market within a period of great transformations and challenges in the Egyptian economy.

In sum, the research has produced plenty of profitable findings and recommendations for further development as discussed below.

5.1 Results and findings explanation:

Big data is considered part of a more expansive trend that has given rise to a new generation of smart customers. This wave is driven by the Internet, cloud computing, mobile devices, and social media. In this context, the current paper claims that the 360-degree view is the basis for creating organizational relationship with customers that is experiential rather than transactional, the secret to long-lasting client connections and positive endorsements. Consequently, the basic results here are represented in the following:

- The 360-degree customer view usually allows brands to obtain a thorough understanding of all customers, by leveraging data from numerous touch points during their journey. The catch is that everyone has a stake in gathering, analyzing, and acting on the data, from marketing to sales to customer service, hence getting a 360-degree customer perspective necessitates all hands on deck. As a result, knowing each customer through a customer-centric business approach will enable the organization to proactively and regularly provide more personalized experience and targeted promotions and campaigns for greater customer satisfaction, loyalty, and success over an extended period of time.
- It is emphatic that CSM marks a break from conventional customer management practices, by proactively emphasizing customer experience and engagement, in order to maximize value-in-use. Therefore, CS is not something a company does for once, or someone is paid to work wonders. Since CS is a process some of it can be automated. It can be rationalized and divided into stages. It can be simply taught to a group of people to run. Additionally, it can be tracked and documented with ease. In this respect, the empirical results provided evidence that most of the 360-degree view and CS practices are already applied in varying degrees in the sample, although in just few cases the formal CSM unit is institutionally existed in the banks to integrate all those activities together, which justifies the quite less-intense correlation between the research two variables in practice. However, the researchers here still believe that the respondents were confused about the name of this department (CRM not CSM).
- To apply a 360-degree view model for achieving CS in public banks, an IT solution should be adopted by which it can collect and integrate customer data from various sources, such as transactional data, demographic data, social media, and customer feedback. The solution should also allow for real-time data analysis and reporting to help public banks gain insights into their customers' behavior and preferences.

- One suggested technical all-in-one solution is a 360°-CSM system (CSM platform or software) that can integrate with other systems of the enterprise, such as core banking and digital channels. This solution can help public banks track customer interactions and transactions, create customer profiles, and provide personalized recommendations and offers. As well as, the CSM system can be used to monitor customer feedback and complaints, enabling public banks to quickly address any issues and improve customer satisfaction and engagement.
- Another solution is to implement a data analytics platform that can provide advanced analytics and machine learning capabilities. This solution can help public banks identify customer patterns and trends, predict customer behavior, and recommend personalized products and services. The platform can also be used to develop customer segmentation strategies and targeted marketing campaigns.
- Finally, a digital banking platform can provide customers with a seamless and personalized experience across multiple channels, including web, mobile, and social media. This platform should offer self-service capabilities, such as online account opening and loan applications, along with real-time alerts and notifications.

5.2 Recommendations and further research:

In light of what has been clarified formerly, the research has made the following useful recommendations:

- For a single actionable 360-degree customer view to take place, companies have to initiate with a trusted customer profile. Data quality is quite critical, so brands need to gather accurate information. Also, they require a system to exchange real-time data and helpful knowledge, and thereby representatives can interact with the appropriate customers at the appropriate moment. In this regard, listening is necessary – both figuratively and literally – to fully comprehend the customer as an individual. The core here is the ability to realize important messages, capture, integrate, then respond to the information in a suitable manner to deliver tailored offers, open new chances to expand relationships, and build stronger customer intimacy. Additionally, the ability to mine customer feedback and online reviews is very important in providing a trove of information that can illuminate direction for later organizational improvements.
- Financial service institutions, with specific reference to the Egyptian public banks, should enhance data quality and quantity, upholding user confidence in their outcomes. This can be made possible through a unified flexible data model that supports all essential applications, and enables the integration of a huge amount of structured and unstructured data from both internal and external sources. It also makes sure that everyone within the bank is using the same terminology, when evaluating profitability and other customer-related factors. Since the data model serves as the foundation for all insights, it is one of the most important steps in any successful financial analytics program. Furthermore, a data model that is commercially available and tailored for the sector can help public banks save a lot of time and money. Herein, it is emphatic for public banks to implement systems that already adhere to all applicable security and privacy standards as well.
- Adopting an efficient CS strategy takes a lot of experience and resources. Moreover, determining the function and objectives of CSM also prepares the ground for successful customer retention and revenue growth potential in public banks. In this context, practical

results recommend that there should be an empowered functional unit/ organizational department responsible for CS in each bank, that brings together marketing, sales, and support activities. This department has to utilize an electronic system/ software employing the 360-degree perspective, in order to detect, assess, and analyze the various customer transactions, and then act accordingly. Additionally, it is critical to ensure that CSM is linked, integrated, and supported by several departments in the bank and that the appropriate metrics are applied to measure success. Furthermore, the empirical analysis recommends giving more attention to providing effective means of communication and engagement with customers, particularly through the digital banking platforms. Also, the importance of collaborating with third-party providers to access innovative technologies and advanced financial instruments that can enhance customer experience and outcomes and maximize value-in-use. This is in addition to the necessity of training employees on how to bolster the delivery of a distinctive user experience, and how to maintain customer health along the whole journey with the bank.

- Concerning future work; it is recommended to apply the suggested IT model in the real practice by implementing expert software systems equipped with AI algorithms and machine learning capacities in public banks. Also, it is recommended to examine and extend the proposed electronic system considering other branches of industry, other than the banking sector. Besides, it would be of high practical relevance to identify which organizational changes should be performed within institutions, especially banks, to enable the successful implementation of the 360-degree customer view and CSM with the basic roles of CS managers.

References

1. Accenture (2018), *Creating a 360° Customer View*, Accenture AG, Zurich.
2. Atkins, Charles, Gupta, Shobhit and Roche, Paul (2018), *Introducing Customer Success 2.0: The New Growth Engine*, McKinsey & Company, High Tech, (January).
3. Beevers, Richard (2006), *Customer Service Excellence in the Public Sector*, Northern Housing Consortium, Webster's Ropery.
4. Bhadani, A. and Jothimani, D. (2016), "Big data: challenges, opportunities and realities", in Singh, M.K. and Kumar, D.G. (Ed.s), *Effective Big Data Management and Opportunities for Implementation*, IGI Global, Pennsylvania, USA, pp.1-24.
5. Bhadoria, Anshi (2021), "Customer relationship management software vs customer success platform", Smart Karrot Blog, 2 September, Updated 21 July 2023, available at: <https://www.smartkarrot.com/resources/blog/crm-vs-customer-success-platform/> (accessed 1 January 2024).
6. Digital Marketing Institute (2018), "The what, why & how of the 360-degree customer view", 26 February, available at: [The What, Why & How of the 360-Degree Customer View | Digital Marketing Institute](#) (accessed 10 April 2023).
7. Fahim, Marwa Gaber Ahmed (2018), "Improving administrative decisions through expert systems: empirical analysis", *Review of Economics and Political Science*, Vol.3, No.3/4, pp.119-138.
8. Fouad, Jasmin and Zaki, Chahir (2023), "Public banks and development in Egypt", 31 January, available at: [Public banks and development in Egypt - Economic Research Forum \(ERF\)](#) (accessed 5 August 2023).

9. Gainsight (2023), "Customer success management: platform buyer's guide", available at: [GAIN 11496 White Paper.indd \(gainsight.com\)](#) (accessed 13 March 2023).
10. Geng, D. (2016), "Data analytics on consumer behavior in omni-channel retail banking, card and payment services", *Pacific Asia Conference on Information Systems*.
11. Ghosh, Payal (2021), "Top 7 reasons why customer success fails?", Customer Success Box Blog, available at: [Top 7 Reasons why Customer Success function fails in an Organization. \(customersuccessbox.com\)](#) (accessed 3 May 2023).
12. Grange, Benoit (2021), "The 360 degree view: how customer data fuels a great banking experience", One Span Blog, 9 September, available at: [The 360 Degree View: How Customer Data Fuels a Great Banking Experience | OneSpan](#) (accessed 18 February 2023).
13. Hilton, Bryson, Hajihashemi, Bitu, Henderson, Conor M. and Palmatier, Robert W. (2020), "Customer success management: the next evolution in customer management practice?", *Industrial Marketing Management*, (October).
14. Hitachi (2019), *Customer 360-Degree View: Blueprint for Big Data Success*, DATASHEET, Hitachi Vantara, USA, (April).
15. IBM Software Solution Brief (2013), *Enhanced 360-Degree View of the Customer: Using Big Data Technologies to Better Understand and Engage Customers*, IBM Corporation, USA, (November).
16. Informatica (2021), *Informatica Customer 360*, Solution Brief, Informatica LLC, USA.
17. Innominds (2023), "Banking analytics, cross-sell/upsell with 360° view of customer", available at: [Customer 360 View | Banking Analytics | Innominds](#) (accessed 25 April 2023).
18. Johnston, Brian and Sohail, Omer (2011), *Finally: Customer Analytics for Banks*, Deloitte Development LLC., Deloitte Touche Tohmatsu Limited, UK.
19. Kao, Richard (2022), "What is customer 360 and why is it important for digital transformation?", Jitterbit Blog, available at: [What is Customer 360 and It's Role in Digital Transformation - Blog \(jitterbit.com\)](#) (accessed 10 February 2023).
20. Karthikeyan, P. and Sivakumar, R. (2014), "360° view of touch points in development of customer relationship management (CRM) practices", *Intercontinental Journal of Marketing Research Review*, Vol.2, No.6, (June), pp.1-7.
21. Mazen, T.S. (2017), "Correlations and weights of Fibrosis-4 (FBI) for liver cirrhosis", *International Journal of Scientific and Engineering Research*.
22. Open View (2023), "Beginners' guide to customer success: starting customer success the right way", available at: <https://cdn2.hubspot.net/hubfs/366266/Downloadable%20Assets%20-%20Migrate/ebook-beginners-customer-success.pdf> (accessed 5 March 2023).
23. Oracle (2020), *The Watchlist, Trending Now: Re-Imagine the 360-Degree View of Your Customer*, Oracle &/or its affiliates, Version 2.0, (October).
24. Process.st (2016), "The complete guide to customer success for SaaS companies", available at: [The-Complete-Guide-to-Customer-Success-for-SaaS-Companies.pdf \(process.st\)](#) (accessed 15 May 2023).
25. Puschmann, T. (2013), "Transformation towards customer-oriented service architectures in the financial industry", *European Conference on Information Systems (ECIS)*.
26. Resulticks (2019), *360_Degree Customer View: A Primer*, The Resulticks Omnichannel Readiness Bootcamp, Resulticks Inc.

27. Seidenstricker, Sven, Melzig, Sebastian, Fischer, Heiko and Krause, Vinzenz (2021), "Customer success management: success factors", *Proceedings of the 14th EPIEM Conference*, pp.24-29.
28. Service Source (2023), "A deep dive on how to measure customer success performance and what reporting matters", available at: [082021-A-Deep-Dive-on-How-to-Measure-Customer-Success-Performance-and-What-Reporting-Matters.pdf](https://www.servicesource.com/082021-A-Deep-Dive-on-How-to-Measure-Customer-Success-Performance-and-What-Reporting-Matters.pdf)(servicesource.com) (accessed 6 July 2023).
29. Splice Machine (2014), *Unified Customer Profile: Getting a 360° Customer View in the Age of Big Data*, White Paper, Splice Machine, Inc., (October).
30. Totango (2020), "What is customer 360 and how does it affect customer success?", available at: [What is Customer 360 and How Does it Affect Customer Success?](https://www.totango.com/what-is-customer-360-and-how-does-it-affect-customer-success/) (totango.com) (accessed 27 January 2023).
31. Woodcock, Neil, Stone, Merlin and Ekinici, Yuksel (2008), "Customer management in public sector organizations", *Journal of Direct Data and Digital Marketing Practice*, Vol.10, No.1, (July), pp.16-28.

Research appendices
Appendix 1: Questionnaire statements

First/ 360-degree customer view (independent variable):

1. The bank routinely collects, stores, and updates the ever changing and expanding cross-channel customer data from the multiple internal and external sources (e.g. premises, ATMs, cards, telephone, SMS, mail, e-mail, website, mobile app, social media, surveys...) on its servers in an organized manner.
2. The bank has one unified, flexible, and secure database incorporates all customer data across different departments (e.g. personally identifiable information, historical and recent transactions (online & offline), preferences (channels, frequency), 3rd party data (demographic, geographic, occupational, social), custom attributes...).
3. The bank electronic systems apply various data modeling/ mining techniques and customer analytics to assess and analyze combined customer data in real-time and look for patterns, trends, and clusters.
4. The bank electronic systems provide advanced AI and machine learning capacities to predict the behavior of different customer segments and tailor timely customized promotional offers and campaigns accordingly.
5. Customer complaints are handled and customer feedback is monitored regularly at the bank.
6. The bank electronic networks integrate all customer service and support channels with the centralized customer database to access the latest full information and predictive analysis in customer profiles.
7. The bank usually sets and measures target outcomes for customers along their journey based on the stored knowledge and information, so that it can improve service delivery over time.
8. The bank always complies with regulations and data security standards and implements transparent data privacy policies to gain the credibility and trust of customers.

Second/ Customer success (dependent variable):

9. The customer experience that the bank wants to deliver has clearly-defined aims and KPIs.
10. The executives and employees in different departments of the bank understand well their role in delivering the desired customer experience.
11. The bank has a mandatory customer service/ customer relationship management training programmer to support the delivery of this experience and maintain customer health.
12. The bank uses a mobile-friendly digital banking platform to provide a personalized seamless and secure customer experience by offering multivariate self-service capabilities (e.g. online account opening, account management, electronic payment...).
13. The bank collaborates with third-party providers to access innovative technologies and advanced services and financial instruments that can enhance customer experience (e.g. integrating new payment methods, offering personalized investment advice, analysis and forecasting services, funding loans and insurance, special discount offers and rewards for individuals and institutions...).

14. The bank allows effective means of communication with its customers (e.g. live chat, e-mail, smart applications...) to answer their inquiries and solve their technical problems efficiently and in time.
15. The bank involves customers extensively in the design of its services (through customer feedback, suggestions, complaints, surveys) to better satisfy their needs and meet their future goals and intended outcomes proactively.
16. The bank often measures customer engagement and the quality of interactions (mastering the use of services and getting the most out of them) rather than just customer satisfaction (meeting expectations for services).
17. The service offerings of the bank provide customers actually with an added value (at affordable cost) that makes them decide to stay with it/ loyal to the bank.
18. The bank constantly benchmarks its performance against competitors (whether public or private), so that it can monitor progress and retain/ attract more customers.

Appendix 2: Analytical methods

First/ Correlation coefficient:

A statistical indicator of how well one variable predicts changes in another variable's value is called a correlation coefficient. When two variables have a positive correlation, their values rise or fall simultaneously. Conversely, when two variables have a negative correlation, one variable's value rises while the other's falls.

Correlation coefficients are expressed as values between +1 and -1. A coefficient of +1 indicates a perfect positive correlation, meaning that a change in the value of one variable will predict a change in the same direction in the second variable. Similarly, a coefficient of -1 indicates a perfect negative correlation, where a change in the value of one variable predicts a change in the opposite direction in the second variable. Lesser degrees of correlation are expressed as non-zero decimals. A coefficient of zero indicates that there is no discernible relationship between the fluctuations of the variables. The calculation of the correlation coefficient involves several stages. The paired data we are working with are represented by (Xi, Yi) for each pair. The results obtained from these computations will be utilized in subsequent stages of the process. The initial step is to compute the mean of the entire first and second coordinate data for Xi and Yi. Next, calculate the standard deviation of the data's first and second coordinates for Xi and Yi. These adjustments aim to enhance clarity and flow in the description of the computation process (Mazen, 2017).

Using the following equation to calculate the correlation coefficient:

$$r = \frac{n(\sum XY) - \sum X \sum Y}{\sqrt{[n \sum X^2 - (\sum X)^2][n \sum Y^2 - (\sum Y)^2]}}$$

Second/ Arithmetic mean of the sample:

It is a measure of central tendency and aims to measure the extent to which values are concentrated to an average value, which represents the general opinion agreed upon by the sample members regarding each question.

Using the following equation to calculate the arithmetic mean of the sample:

$$\mu = \frac{\sum_{i=1}^n (V * R)}{n}$$

Third/ Standard deviation:

The standard deviation is a measure of dispersion aiming to assess the extent of variation in opinions regarding this question.

Using the following equation to calculate the standard deviation:

$$\sigma = \sqrt{\frac{\sum_{i=1}^N (V^2 \times R) - (\mu^2 \times N)}{N - 1}}$$

Fourth/ Sample direction:

It is a mathematical method used to determine the overall trend or direction of each question.

Using the following equation to calculate the sample direction:

$$Direction = \frac{Max V - Min V}{Max V}$$

So $Direction = \frac{5-1}{5} = 0.8$

| | | | | | |
|----------------------|---------|-----------|-----------|-----------|---------|
| Likert Scale Ratings | 5 | 4 | 3 | 2 | 1 |
| Direction Periods | 4.2 – 5 | 3.4 – 4.2 | 2.6 – 3.4 | 1.8 – 2.6 | 1 – 1.8 |

Whereas, the previous equations’ parameters are as follows:

V : Likert scale ratings (5 for strongly agree, 4 for agree, 3 for neutral, 2 for disagree, & 1 for strongly disagree).

R : Repetition of each Likert scale rating.

N : Number of the sample items.

μ : Arithmetic mean of the sample