A Qualitative Study of the Role of Change Management in Shaping User Satisfaction with Information Systems in Moroccan Retail Banks

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ABSTRACT

This article analyzes the influence of change management on user satisfaction with information systems in Moroccan retail banks. Based on a literature review and semi-structured interviews conducted with banking personnel, it proposes a conceptual model grounded in a socio-technical approach and inspired by the Information Systems Success Model (ISSM) of DeLone and McLean (2003) to capture the perceived success of banking information systems.

This exploratory qualitative research relies on the analysis of fourteen interviews with branch managers and customer advisors. Data analysis using NVivo identified key variables determining user satisfaction: change management, system quality, service quality, information quality and information system use.

The results indicate that user satisfaction, as a central and perceptual variable, measures the perceived success of the information system and is strongly conditioned by the quality of change management. In particular, effective communication, appropriate training, management commitment, and user involvement are essential levers to ensure the adoption and performance of banking information systems in the context of rapid digital transformation.

Keywords: Change Management, User Satisfaction, Banking Information System, Exploratory Qualitative Study.

INTRODUCTION

Digital transformation has become a major strategic challenge for retail banks, particularly in emerging economies such as Morocco (Ait Ouhammou & Khariss, 2019). In a context of ever-evolving competition, Moroccan banking institutions are making significant investments in information technologies to strengthen operational efficiency, improve customer service quality, and enhance resilience to external shocks. This is part of a broader strategy to modernize distribution channels and optimize the customer experience, notably driven by the Moroccan Association of Information Systems Users (AUSIM) in partnership with the consultancy firm BearingPoint in 2021. However, the success of these initiatives does not rely solely on the technological performance of the adopted tools; it fundamentally depends on the organization's capacity to manage the induced change (Vial, 2019).

Change management thus emerges as a decisive factor in the perceived success of information systems (IS), especially in contexts where individual resistance, internal political dynamics, and organizational constraints may hinder end-user adoption (Jaouad & Ouchekkir, 2023). Traditionally, change management has been viewed as a preparatory activity for technological deployment. Nevertheless, other studies highlight that the

most critical human and organizational challenges arise after implementation (Lientz & Larssen, 2006). In this regard, the post-deployment phase requires active change management, supported by mechanisms for user support, continuous training, field feedback collection, and progressive adaptation of practices (Wang et al., 2018). In other words, change management cannot be reduced to purely technical actions; it must also encompass cultural and behavioral dimensions, aligning user expectations with strategic objectives.

It is within this framework that user satisfaction stands out as a key indicator of IS success. In their IS success model, DeLone and McLean (1992, 2003) emphasized that user satisfaction is one of the main indicators for measuring the overall effectiveness of an IS, alongside system quality, information quality, and individual and organizational impact. Seddon (1997) further reinforced this view by defining satisfaction as a post-usage attitudinal measure reflecting the user's overall perception of their experience.

Against this backdrop, the present study addresses the following research question: *How does post-implementation change management influence user satisfaction with information systems in Moroccan retail banks?* It aims to fill a gap in the literature by adopting a sociotechnical analytical framework that allows for an in-depth exploration of concrete change management practices implemented in these institutions, and their actual impact on IS user satisfaction.

The main objective is to develop a conceptual model that integrates human, technological, and managerial dimensions to better capture the influence of change management on IS user satisfaction. This model is grounded in qualitative analysis derived from fourteen semi-structured interviews conducted with key users, including branch managers and customer advisors, across several Moroccan retail banks.

To this end, the paper first presents the theoretical framework, followed by the empirical framework of the research, and finally discusses the findings that support the design of the proposed conceptual model in the Moroccan banking context.

THEORETICAL RESEARCH FRAMEWORK

Change Management as a Key to Information System Success

According to Comuzzi and Parhizkar (2017), uncontrolled or poorly managed changes during the post-implementation phase of an information system (IS) can lead to low-quality, unstable systems that are difficult to operate and maintain. Such changes may compromise business process performance, resulting in reduced profitability and productivity (Law et al., 2010; Grabski et al., 2011; Ifinedo et al., 2010; Yu, 2005). Jasperson et al. (2005) emphasize that this phase involves transformations affecting both individuals and the organizational contexts in which they operate.

Effective change management helps overcome potential resistance (Al-Mashari, 2003). Mezghani and Mezghani (2007) specify that, in the context of IS usage, it relies on appropriate training, quality communication, end-user involvement, and the establishment of a dedicated change management team. Hughes et al. (2017) consider change management as one of the major determinants of IS success. Conversely, insufficient user involvement, inadequate communication about change processes, or an excessive focus on technical aspects may lead to failure (Gauld, 2007).

In our study, the main change management levers will be identified based on qualitative results and the scientific literature.

User Satisfaction as a Dimension of Information System Success

The concept of user satisfaction was first defined by Cyert and March (1963) as a proxy measure of IS success. Their work laid the foundation for subsequent research on user satisfaction. Myers (1995) argues that IS success is related to the positive perception of stakeholders and other observers and can be measured in terms

of end-user satisfaction. It is the most extensively tested measure in relation to IS effectiveness (He and King, 2008). However, DeLone and McLean (2003) regard it as one among several dimensions.

Most research based on distinct conceptual frameworks in psychology, sociology, and cognitive and behavioral sciences concludes that satisfaction is a multidimensional construct (Besbes, 2011). Several studies show that satisfaction results from two parallel processes: one cognitive and the other affective (N'goala, 2000; Boyer and Nefzi, 2008). The relative importance of each process depends on the sector studied (Evrard, 1989).

Satisfaction is a psychological concept that has been subject to considerable debate regarding its antecedents and consequences. Definitions of satisfaction have varied widely, lacking consensus both conceptually and methodologically (Peterson and Wilson, 1992).

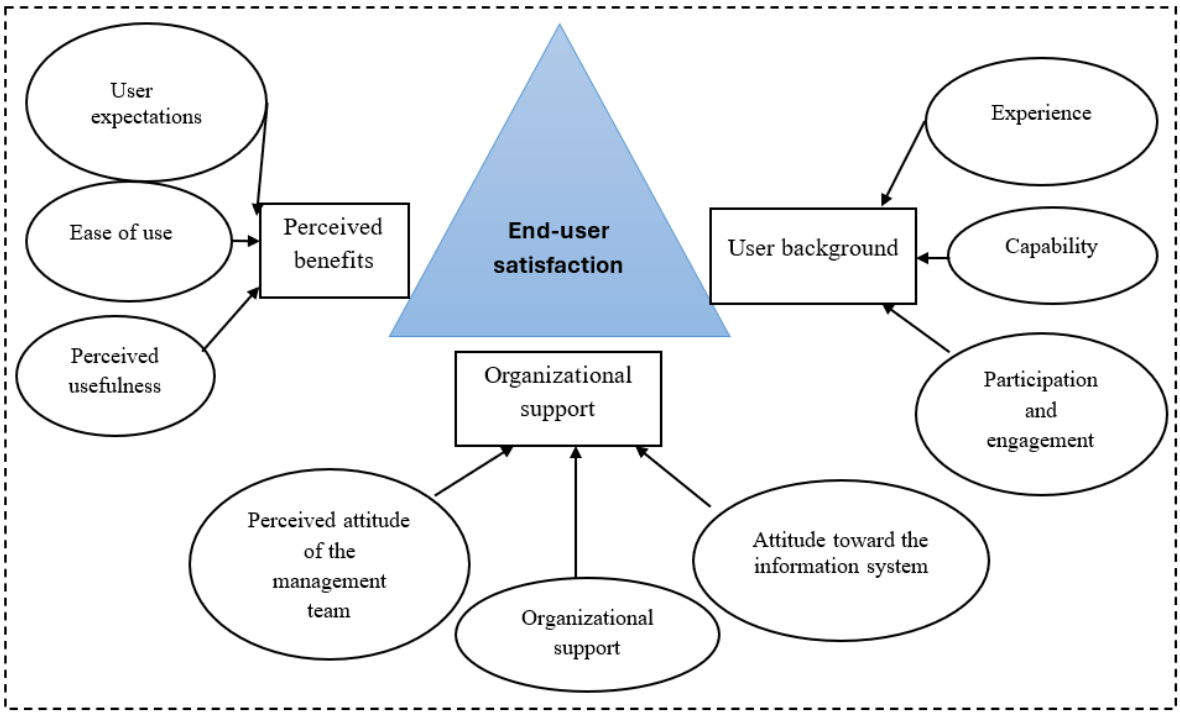
Among the definitions in the literature, authors (Baroudi and Orlikowski, 1988) have noted that user satisfaction is considered as "attitudes toward the system," "feelings about IT," "acceptance of IT," or "appreciation of IT." It is also conceived as an emotional state related to unmet expectations from the usage experience (Nefzi, 2007).

Researchers have proposed various conceptualizations of satisfaction, making its evaluation dependent on end-users' perceptions; thus, it is inherently subjective. Several authors (Louati, 2008; Hadoussa, 2009; Kositanurit et al., 2011) confirmed this assumption, indicating that end-users are best positioned to express their expectations when evaluating the IS.

Moreover, satisfaction is regarded as an essential criterion for measuring IS success or failure. Doll et al. (2004) and Calisir (2004) consider it a crucial element in evaluating IS success.

Similarly, the literature identifies three important user satisfaction measurement instruments developed by Bailey and Pearson (1983), Ives et al. (1983), and Doll and Torkzadeh (1988). These instruments are typically used in questionnaires to assess satisfaction. Other researchers have suggested alternative models and factors, notably Mahmood et al. (2000), who proposed variables influencing user satisfaction (see Figure 1). These researchers conducted a meta-analysis of forty-five empirical studies between 1986 and 1998 related to user satisfaction, presenting a theoretical model comprising three fundamental factors, each composed of three variables.

Figure 1: Variables Influencing User Satisfaction (Mahmood et al., 2000)



In our study, satisfaction is retained as a central variable. It represents a perceptual and subjective measure of information system success. It is also essential, in a banking context, to adopt a dual conception of satisfaction.

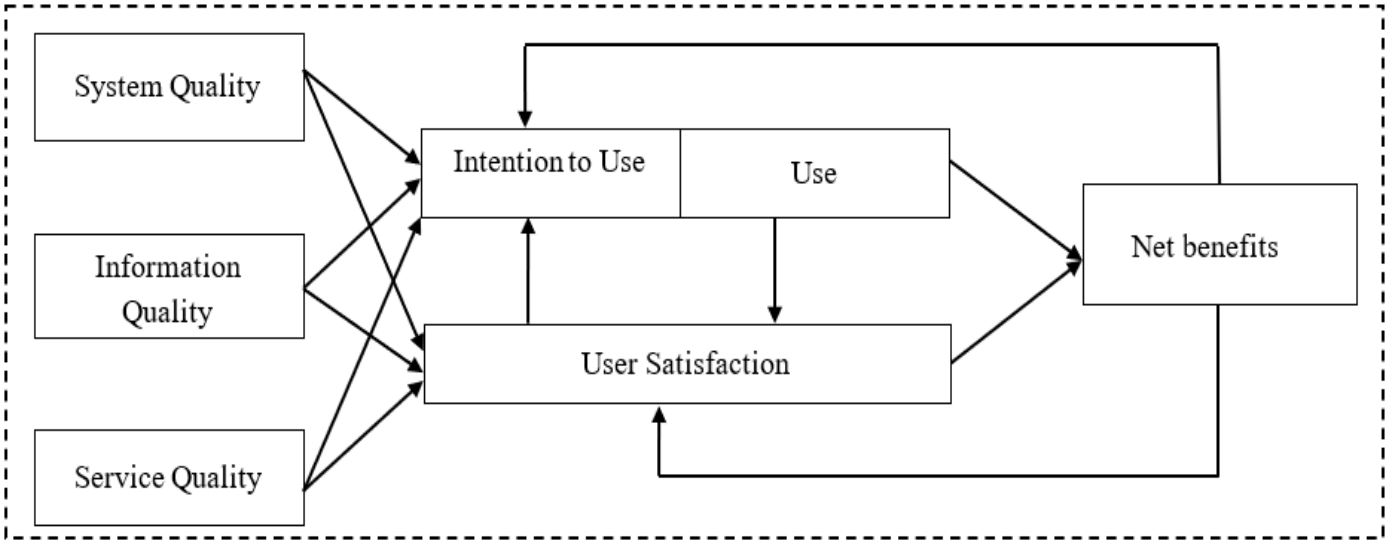
Conceptual Framework

Within this research, satisfaction is considered a central variable, perceptually and subjectively measuring the success of the information system. In a banking context, it is relevant to adopt a dual conception of satisfaction (cognitive and affective).

The Information System Success Model by DeLone and McLean (1992), revised in 2003, serves as the theoretical foundation of our study. The original model comprised six dimensions: system quality, information quality, use, user satisfaction, individual impact, and organizational impact. The 2003 revision introduced service quality and merged individual and organizational impacts into "net benefits," while acknowledging that "intention to use" may replace or complement actual usage measurement depending on the context.

The revised model thus retains six dimensions: system quality, information quality, service quality, use (or intention to use), user satisfaction, and net benefits.

Figure 2 : Information Systems Success Model (ISSM) (DeLone et McLean, 2003)



After a literature review, the theoretical framework of our research is characterized by:

- A study grounded in sociotechnical theory, taking into account interactions between variables of the technical and social subsystems (managerial variables also belong to the social subsystem).
- A multidimensional evaluation based on both causal and processual approaches, enabling an understanding of the path leading to the perceived success of the information system by end users (branch managers and customer advisors), while considering the relationships between variables.
- A focus on the post-implementation evaluation of IS success, recognizing that users can only assess an information system through the services provided by the technology.
- The research retains most variables from the DeLone and McLean (2003) model, except for net benefits, which are excluded from our analysis. Indeed, our objective is not to evaluate the overall impact of the system on organizational performance but to concentrate specifically on end-user satisfaction. Moreover, intention to use is not considered, in line with Michel and Cocula (2014), who argue that it is a redundant variable in environments where system use is mandatory, as is the case in the banking sector. In such a context, system use is not voluntary but a professional requirement.
- The inclusion of the variable *change management* will be confirmed through the results of exploratory qualitative analyses. The relationships between variables will thus be determined by these qualitative analyses.

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METHODOLOGICAL FRAMEWORK FOR QUALITATIVE ANALYSIS

To address our research question, we first conducted a thorough literature review to develop a theoretical framework. This framework provides a theoretical and conceptual background that remains open, as an exploratory qualitative study—based on semi-structured interviews with banking information system users and decision-makers—will contextualize the theoretical framework and generate empirical propositions. The aim of the qualitative study is to understand, describe, and explain the impact of change management on user satisfaction with banking information systems.

Sample and Data Collection

Our study focused on end users. This population was chosen to apprehend the perceived success of the information system through their satisfaction with its use. Accordingly, we interviewed fourteen banking professionals from different banking institutions across various geographical regions. Following the principle of theoretical saturation recommended by Glaser and Strauss (1967), data collection was concluded after fourteen interviews.

The semi-structured interviews lasted on average 40 minutes. They were conducted both formally and informally; the banking professionals were interviewed face-to-face either at their workplace or elsewhere, and also by telephone. All interviews were recorded and transcribed with the consent of the participants.

Table 1: Characteristics of Interviewed Banking Professionals

Interviewee	Position	Bank	Gender
Banker 1	Branch Manager	BP	H
Banker 2	Branch Manager	ABB	F
Banker 3	Branch Manager	BMCE	H
Banker 4	Branch Manager	AWB	H
Banker 5	Branch Manager	CAM	H
Banker 6	Account Officer	BP	H
Banker 7	Account Officer	AWB	H
Banker 8	Account Officer	CAM	H
Banker 9	Account Officer	BMCE	F
Banker 10	Account Officer	CM	H
Banker 11	Account Officer	BMCI	H
Banker 12	Account Officer	CIH	H
Banker 13	Customer Advisor	CM	H
Banker 14	Customer Advisor	SG	H

Source: Authors

In our research, we adopted the principle of triangulation to compare data from different sources to enhance data reliability and thus the results (Reidy and Mercier, 1996). We involved five banking decision-makers (Table 2) with a dual purpose. First, this allows us to rely on qualitative fieldwork to validate or modify initial hypotheses, enabling us to proceed to the quantitative phase with greater confidence and avoiding missing key themes. Second, it involves collecting data from different but complementary sources (other than the target population) to refine our research findings. The different methodologies used compensate for their respective weaknesses, aiming to seek convergence or corroborate results on the studied topic.

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Table 2: Characteristics of Interviewed Decision-Makers

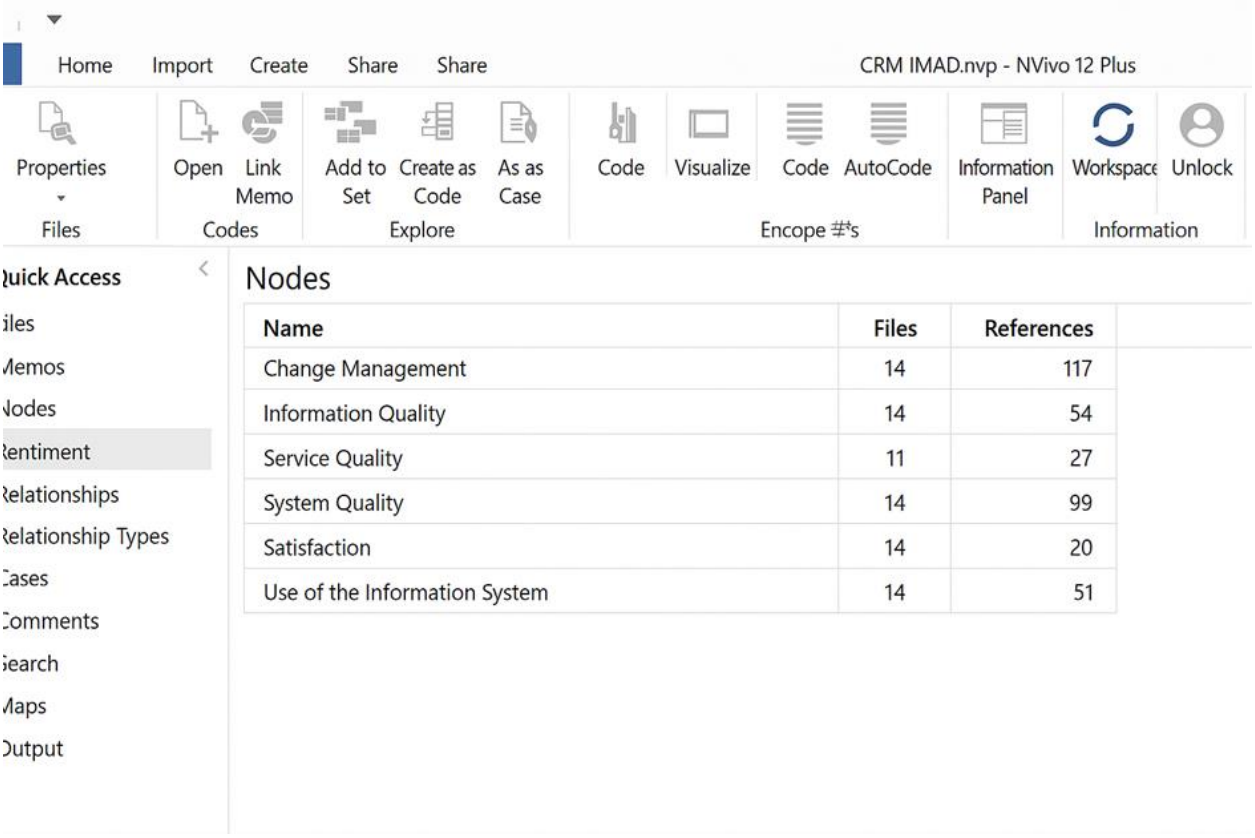
Position	Bank	Gender
Head of Adoption Change Management Unit	BCP Group	F
Commercial Director of the Group	BCP Group	H
IT Project Manager - International Wealth, Banking & Market	CM Bank	H
Group Director	BMCI	H
Project Owner in Digital Transformation, Banking Sector	-	H

Source: Authors

Data Analysis

In this study, we employed thematic content analysis, an evolving method based on deduction and inference, aimed at interpreting diverse interviews by balancing objectivity and subjectivity (Bardin, 1977). This approach involves identifying themes and structuring data transversally. To facilitate this process, we used NVivo software, which enables efficient coding, sorting, and classification of large volumes of data (Paillé & Mucchielli, 2003; Gavard-Perret et al., 2008). The coding performed allowed us to generate the thematic tree presented in Figure 3.

Figure 3: Illustration of closed coding using NVivo 12 Plus



Statement Frequency (Occurrence)

This involves calculating the frequency of the most widespread themes within the interview corpus (El-Abbadi, 2020). The underlying hypothesis is that the higher the frequency of an idea, the more important it is to the speaker. This corresponds to the postulate: "the importance of a recording unit increases with its frequency of occurrence" (Bardin, 1977, p. 140). Table 3 reflects the frequency of themes derived from the fourteen interviews analyzed.

Table 3: Thematic Tree

Themes	Sub-Themes	Number of Citations	% of Citations	Number of Interviewees
Change Management	Training	33	07.08%	13
	Communication	26	05.57%	10
	User Participation	28	06.00%	10
	Management Commitment	30	06.43%	10
System Quality		99	21.24%	14
Service Quality		27	05.79%	11
Information Quality		54	11.58%	14
Information System Use		51	10.94%	14
User satisfaction		20	04.29%	14

The frequency analysis results reveal that all themes have significant frequency. The most frequent themes are those most often mentioned by the interviewees. The majority of themes were addressed by all fourteen banking professionals.

Relationships Among Central Themes (Co-occurrences)

Co-occurrence or contingency analysis highlights the relationships developed between themes. It enriches the range of analytical methods focusing particularly on the frequency of theme occurrence (Assabane and Mssassi, 2019). To conduct this analysis, we created a matrix combining all relationships identified from the fourteen interviews. Below is our contingency matrix.

Table 4: Contingency Matrix

Themes	Change Management	System Quality	Service Quality	Information Quality	Information System Use	User satisfaction	Number of Relations
Change Management		11	2				**2**
System Quality	11			8			**2**
Service Quality	2			5			**2**
Information Quality		8	5		4	3	**4**
Information System Use				4		4	**2**
User satisfaction				3	4		**2**

The relationship matrix is considered an effective analytical technique that quantitatively maps interviewees' statements. It serves as a record of the relationships or co-occurrences developed between the study's central themes. This matrix thus allows visualization of all relationships between themes across the fourteen interviews analyzed.

DISCUSSION OF RESULTS

The thematic analysis of the interviews, conducted using NVivo 12 Plus, enabled the identification of the central themes of the study. These themes genuinely explain the success of the information system in Moroccan bank branches. The coding process produced three main categories, encompassing the themes and sub-themes (dimensions) derived from the fourteen interviews analyzed. In total, 368 citations were coded; this number also corresponds to the total citation frequency used to calculate the frequencies. The table below presents the categories resulting from the data coding, along with the number of citations and citation frequencies.

Table 5 : Coding Categories, Number and Frequency of Citations

Categories	Total Number of Citations	% of Citations within Theme
Change Management (training, communication, management commitment, and user participation)	117	31.79%
Technical Factors (System, Information, and Service Quality)	180	48.91%
Behavioral and Attitudinal Factors (Usage and User Satisfaction)	71	19.29 %
Total	**368**	**100%**

The results shown in the above table clearly reflect that interviewees primarily emphasize the importance of technical factors, representing 48.91%, followed by change management factors at 31.79%, and 19.29% relate to behavioral and attitudinal factors for the success of banking information systems.

Analysis of Significant Excerpts on Change Management

The theme entitled *change management* is based on techniques and tools aimed at promoting end-user adaptation to an information system (IS). This important theme emerged from the richness of the interviewees' statements, with a total of 117 citations, representing 31.79% of the occurrences identified. It encompasses four sub-themes (dimensions), namely: training, communication, managerial commitment, and user participation.

Training was mentioned by almost all interviewees (13/14). These participants clearly indicated that training is a fundamental component of the banking structure and should therefore keep pace with the various enhancements of information systems.

"After each modification in the system, it is mandatory to undergo training." (Banker, No. 2)

Communication was highlighted by the majority of respondents (10/14), who stressed that its purpose is to unify language, culture, and a set of values in order to strengthen the acceptance of the information system.

"We are always notified and informed about any change or modification." (Banker, No. 4)

Managerial Commitment was also emphasized. The analysis of the interview content shows that participants attached significant importance to leadership support in ensuring the successful implementation of the IS project.

"The bank has shown strong commitment through the creation of committees, called Adoption Change Management, which foster collaboration between the IT department and the marketing department to ensure successful adoption of the information system." (Banker, No. 8)

User Participation is a dimension mainly relevant to customer advisors. Interviewees expressed that participation is a multidimensional concept encompassing their decision-making and psychological behaviors, directly or indirectly, during the IS implementation process.

"With the participation of staff in pilot branches, they manage to adjust and further develop the information system." (Banker, No.12)

Triangulation of Interviewee Results with Decision-Maker Perspectives

"[…] During the deployment of such a system, change management is required through training and communication so that stakeholders, including users, are able to understand the added value and how to use or leverage such a system." **(Project Owner in Digital Transformation, Banking Sector).**

"[…] My role in the bank is to oversee a unit called Adoption Change Management. This unit fosters collaboration between the IT department and the marketing department to ensure the successful adoption of the system. Through this unit, the bank avoids modification costs, particularly during the post-implementation phase. This change project has also led to a revolution in the way people communicate. We have an internal communication social network, called YAMMER, which initially allows 2,000 bankers to use it." **(Head of Adoption Change Management Unit, BCP Group).**

"[…] Initial training is mandatory. It is also necessary to provide ongoing support to users after the system implementation to help them adapt to any new features." **(Commercial Director, BCP Group)**

"We are preparing our bank for the future, with a medium-term mobilization spanning several years during which all departments must comply, align, and each innovate in the service of the bank's ultimate goal—successfully transitioning from a traditional to a digital model." **(Head of Adoption Change Management Unit, BCP Group)**

Analysis of Significant Excerpts from Technical Actors

All interviewees mentioned **system quality** as a critical technical indicator for IS success, accounting for 26.90% of responses. All banking professionals interviewed emphasized the high quality of the information system used, describing it as technically sound and user-friendly.

"The information system allows us to consult client accounts and have a good understanding of the bank's various products. It helps the branch manager assign each employee a client portfolio to manage, thus providing a 360° view of the customer. The system is very easy to use: switching from one application to another and sharing information is very flexible. It greatly streamlines our work." (Banker, No. 10)

Information quality, on the other hand, is a key component representing the value of IS "output" as perceived by its users. It largely depends on a high-performing information system. Many interviewees revealed the close relationship between the system used and the quality of information obtained.

"Thanks to this system update, we get reliable information about clients." (Banker, No. 12)

Some participants also emphasized that the reliability of information depends on the banking agent, meaning that good client–advisor interaction can produce higher-quality information.

"The reliability of the information depends on the work of the account manager." (Banker, No. 3)

Regarding **service quality**, interviewees noted its essential role in IS success. This refers to the variety of services provided by IT staff—either from the internal IS department or external service providers—to IS users. Nearly all respondents (11/14) stressed the importance of having a service that meets their specific needs.

"For the information to be adequate, IT support staff must have training in the banking profession to respond effectively to our needs." (Banker, No. 5)

Triangulation of Interviewee Results with Decision-Maker Perspectives

"Our system enables us to generate reports for commercial actions, and even access management is highly developed, particularly with role-based authorizations." **(Commercial Director, BCP Group)**

"A good functional understanding of the banking domain is essential to better grasp business needs; after that, good system design will always deliver the desired results. An important factor is to keep in mind the idea of being an ally of the Front Office in achieving the bank's objectives." **(IT Project Manager – International Assets, Banking & Markets, Crédit du Maroc bank)**

Analysis of Significant Excerpts on Behavioral and Attitudinal Factors

Among the major components identified from the interviews are the perceptions of banking professionals regarding the IS in use. This category focuses on the process of IS acceptance by users and includes two main themes: *usage* and *user satisfaction*.

Usage of the IS was discussed by all interviewees (14/14). On one hand, they indicated that system use is necessary to maintain client relationships:

"Using the system is mandatory to manage client relations." (Banker, No. 4)

On the other hand, some reported that it is difficult to handle and even increases workload:

"The system is not practical in terms of use; it is difficult and generates additional workload." (Banker, No. 7)

This implies the need for alignment between the application/system and the banker's job requirements.

User Satisfaction measures the cognitive and affective attitudes of customer advisors toward the banking IS. This theme was mentioned by all users, who expressed differing opinions:

"As long as the system has not reached full maturity, I am totally satisfied with its current level." (Banker, No. 11)

"Given the system's shortcomings, I am not satisfied with it." (Banker, No. 1)

Triangulation of Interviewee Results with Decision-Maker Perspectives

"That being said, keeping what I just mentioned in mind, I would summarize that these factors are multiple. They include perceived ease of use of the system, as well as the perceived benefit or value of using it." **(Group Director, BMCI)**

"There is nothing better than this system, especially since it greatly facilitates our tasks. Instead of spending 30 minutes to find information in the old system, I can now find it in 2 minutes. This system's interface integrates numerous databases, so to get a comprehensive view of a client, I just need to use it." **(Commercial Director, BCP Group)**

Hypotheses Related to Change Management

The qualitative analysis identified four dimensions of the *Change Management* variable: training, communication, management commitment, and user participation. These findings support previous work by Mezghani and Mezghani (2007) and Al-Mashari (2003). Our interviewed banking professionals indicated that the change management dimensions are associated with system and service quality.

The training dimension is regarded by almost all participants as an essential component within the banking structure. It enables an effective understanding of information system qualities for front-office bankers, a clear perception of banker-business needs for the support team (IT specialists), and alignment between business processes and the information system. In this regard, the literature supports the existence of this process. Sabherwal et al. (2006), through a meta-analysis, hypothesize a direct, positive, and significant relationship between training and system and service quality. Our interviews reveal these relationships developed between these themes.

"Training and informing staff of any potential change or improvement is an important element to ensure the desired effectiveness and quality of the information system" (Banker, No. 14).

"IT specialists working on the information system must have training in banking operations to adequately support the branches" (Banker, No. 1).

H1a: Training has a positive impact on system quality.

H2a: Training has a positive impact on service quality.

The Communication dimension is strongly associated with system and service quality. Interviewees stated that it plays a major role in overcoming resistance to change. This was empirically demonstrated by Hadoussa (2009), who emphasized that communication about technology-induced changes is a key solution to reduce individual and collective resistance. Interviewees clearly mentioned these relationships.

"This is what is good in our bank: we are informed about the benefits of every improvement in the information system" (Banker, No. 6).

"[...] It is essential that there is smooth communication between the back office and the front office to resolve all blocking or development issues" (Banker, No. 14).

H1b: Communication positively impacts system quality.

H2b: Communication positively impacts service quality.

The Management Commitment dimension is directly linked to system and service quality. The analyzed interviews reveal that this fundamental component ensures alignment between task and technology, enables effective intervention by the support service, and contributes to a high-performing system. These findings were highlighted by Al-Mashari (2003), who noted that effective change management minimizes potential opposition. The interviews support these interconnections.

"The absence of staff support leads any IS project to failure; conversely, with good change management, the bank ensures alignment between CRM best practices and task requirements" (Banker, No. 1).

"We try to raise issues to top management through meetings and branch visits, but so far there has been no response [...] to minimize system reliability problems; however, there is still effort needed at the level of technical support" (Banker, No. 13).

H1c: Management commitment positively impacts system quality.

H2c: Management commitment positively impacts service quality.

The User Participation dimension places the front-office banker at the center of change. Interviewees mentioned that their participation can strengthen the system's proper functioning. They propose improvements and adjustments at the service level to enhance the system. They inform other front-office banking staff about how to use the system, its qualities, and options to facilitate its use.

"Integrating front-office staff into the system project can create true collaborative work between them and back-office staff" (Banker, No. 9).

"With user involvement, they manage to correct and develop the information system" (Banker, No. 12).

H1d: User participation positively impacts system quality.

H2d: User participation positively impacts service quality.

Hypotheses Related to Technical Factors

Our exploratory study reveals the importance of technical factors in IS success, notably system quality, service quality, and information quality. Interviews with banking actors clearly showed that information quality results from a quality information system and support service. Several empirical studies have confirmed this positive relationship. Michel and Cocula (2014) confirmed that information quality is a crucial variable in banking, explained by system and service quality. This correlation was expressed by nearly all interviewees.

"[...] Thanks to this system update, we obtain reliable information about clients" (Banker, No. 12).

"For information to be adequate, IT support staff must have training in banking operations to meet our needs" (Banker, No. 5).

H4: System quality positively impacts information quality.

H5: Service quality positively impacts information quality.

Within the technical factors framework, interviewees stated that information quality is an antecedent of IS use and banker satisfaction. This relationship has been widely discussed by several authors. Roh et al. (2005) argued that customer information must be analyzed through system use. Michel and Cocula (2014) showed that information quality explains IS use and user satisfaction in banking. Both relationships were mentioned by the majority of respondents.

"The generated information is a constraint that will improve with database reliability; all this facilitates IS use" (Banker, No. 7).

"Quality information not only facilitates system use but also builds confidence in its reliability" (Banker, No. 4).

H8: Information quality positively impacts IS use.

H9: Information quality positively impacts user satisfaction.

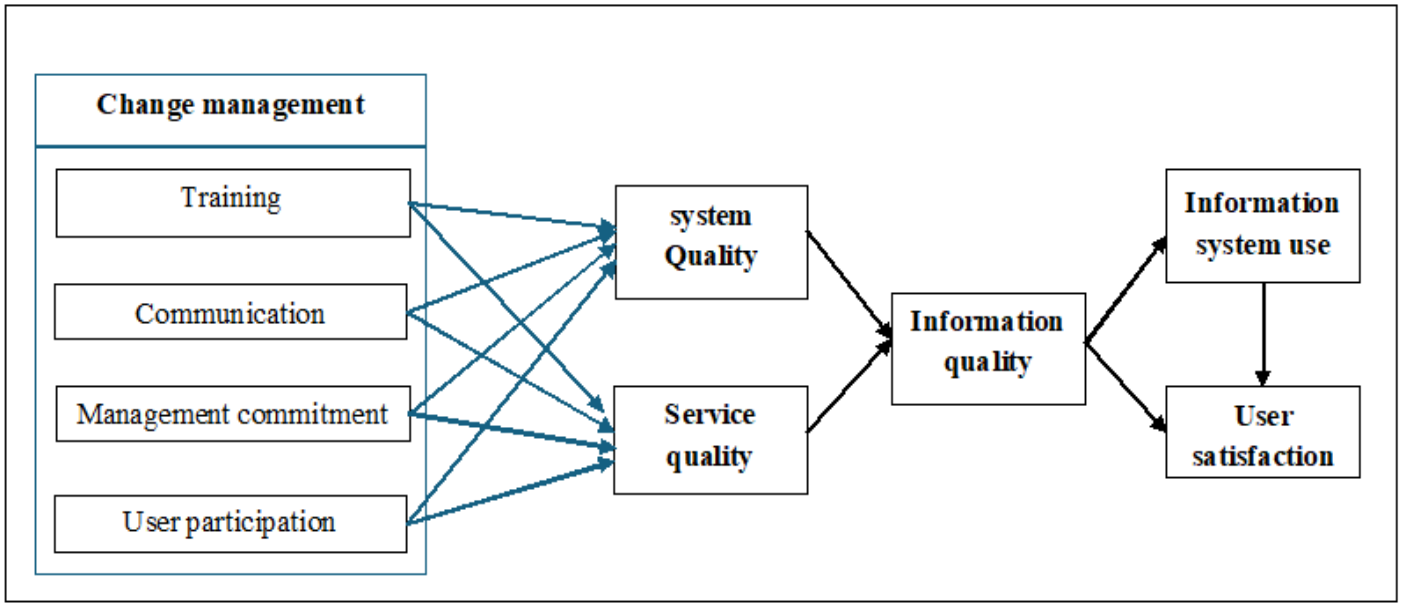
Hypotheses Related to Attitudinal and Behavioral Factors

Among the major factors for IS success are those related to bankers' behaviors and attitudes. Interviews revealed that bankers' satisfaction is associated with their perceptions of IS use. Petter and McLean (2009) justified through empirical studies that this relationship is significantly weak. This was confirmed by several interviewees.

"Yes, yes, I am satisfied because previously we were scattered across several system applications, but with this new system, the interface has become simpler to use" (Banker, No. 6).

H10: IS use positively impacts user satisfaction.

Figure 4 : Conceptual Research Model



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After finalizing the model derived from the literature, we conceptualized our enriched model including all interconnections between themes. The table below summarizes all the hypotheses that will be tested subsequently.

Table 6: Research Hypotheses

Number	Hypothesis Description
H1	**Change management influences system quality**
H1a	Training impacts system quality
H1b	Communication impacts system quality
H1c	Management commitment influences system quality
H1d	User participation impacts system quality
H2	**Change management influences service quality**
H2a	Training impacts service quality
H2b	Communication impacts service quality
H2c	Management commitment influences service quality
H2d	User participation impacts service quality
H3	**System quality impacts information quality**
H4	**Service quality impacts information quality**
H5	**Information quality impacts information system use**
H6	**Information quality impacts user satisfaction**
H7	**Information system use influences user satisfaction**

CONCLUSION

This qualitative study, based on an in-depth analysis of fourteen interviews conducted with branch managers and customer advisors from nine Moroccan banks, identified the main factors influencing user satisfaction with information systems. The findings reveal that change management constitutes a key driver of perceived IS success, extending well beyond purely technical considerations.

More specifically, user training, communication, managerial commitment, and user participation emerged as fundamental dimensions that directly influence system quality, service quality, and information quality. These dimensions, in turn, condition the effective use of information systems and ultimately determine user satisfaction. From this perspective, user satisfaction appears as a central variable—perceptual and subjective in nature—that serves as a critical measure of information system success.

From a theoretical standpoint, this research enriches the body of work on IS success in emerging contexts by confirming the relevance of the IS Success Model (DeLone & McLean, 2003) and explicitly incorporating change management-related variables as major explanatory dimensions. It also contributes to the literature on technology acceptance and appropriation by emphasizing user satisfaction as a pivotal indicator for assessing perceived success and by highlighting the interplay between organizational and technological factors.

From a managerial perspective, the results provide banking decision-makers with operational guidelines for designing and implementing more effective change management strategies. They suggest prioritizing a participatory, user-centered approach and strengthening training programs and internal communication to ensure smooth and sustainable IS adoption. These recommendations are particularly relevant in the context of the rapid digital transformation underway in the Moroccan banking sector.

Finally, this research paves the way for future investigations aimed at deepening the analysis of interactions between human dynamics and technological innovations, while extending the scope of inquiry to other economic sectors and cultural contexts in order to consolidate and generalize the findings. Furthermore, testing

the relationships between the variables requires a confirmatory quantitative study; however, this step first necessitates the rigorous operationalization and validation of each variable within the conceptual model.

REFERENCES

1. Ait Ouhammou, M., Ait Taleb, N., & Khariss, M. (2019). La transformation digitale : Quel impact sur les métiers bancaires ? Cas des banques marocaines. *Revue internationale du marketing et management stratégique*, *1*(1), 204–224.
2. Al-Mashari, M. (2003). A process change-oriented model for ERP application. *International Journal of Human-Computer Interaction*, *16*(1), 39–55.
3. Assabane, I., & Mssassi, S. (2019). Les risques en PME exportatrices : incitatifs à la veille stratégique : Une étude exploratoire auprès des PME marocaines exportatrices vers l'Afrique. *Revue internationale du marketing et management stratégique*, *1*(4), 20–40.
4. AUSIM, & BearingPoint. (2021). *Digital banking au Maroc et nouveau rôle de l'agence bancaire*. Étude conjointe présentée lors d'une conférence web.
5. Bailey, J. E., & Pearson, S. W. (1983). Development of a tool for measuring and analyzing computer user satisfaction. *Management Science*, *29*(5), 530–545.
6. Bardin, L. (1977). *L'analyse de contenu*. Presses Universitaires de France.
7. Baroudi, J. J., & Orlikowski, W. J. (1988). A short-form measure of user information satisfaction: A psychometric evaluation and notes on use. *Journal of Management Information Systems*, *4*(4), 44–59.
8. Besbes, R. (2011). *L'évaluation du succès perçu de l'Intranet : Le cas d'une organisation bancaire internationale* (Thèse de doctorat). Université Toulouse 1.
9. Boyer, A., & Nefzi, A. (2008). La relation entre la perception de la qualité et la fidélité. *La Revue des Sciences de Gestion*, *234*(6), 37–48.
10. Calisir, F. (2004). The relation of interface usability characteristics, perceived usefulness, and perceived ease of use to end-user satisfaction with enterprise resource planning (ERP) systems. Computers in Human Behavior, 20(4), 505–515.
11. Comuzzi, M., & Parhizkar, M. (2017). A methodology for enterprise systems post-implementation change management. Industrial Management & Data Systems, 117(10), 2241–2262.
12. Cyert, R. M., & March, J. G. (1963). A behavioural theory of the firm. Prentice-Hall.
13. DeLone, W. H., & McLean, E. R. (1992). Information systems success: The quest for the dependent variable. Information Systems Research, 3(1), 60–95.
14. DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean model of information systems success: A ten-year update. Journal of Management Information Systems, 19(4), 9–30.
15. Doll, W. J., Deng, X., Raghunathan, T. S., Torkzadeh, G., & Xia, W. (2004). The meaning and measurement of user satisfaction: A multigroup invariance analysis of the end-user computing satisfaction instrument. Journal of Management Information Systems, 21(1), 227–262.
16. El-Abbadi, I. (2020). Épuisement cognitif chez les cadres du secteur privé au Maroc : Étude exploratoire. Repères et Perspectives Économiques, 4(6).
17. Evrard, Y. (1989). From involvement to satisfaction in media consumption. Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior, 2, 70–74.
18. Gauld, R. (2007). Principal-agent theory and organisational change: Lessons from New Zealand health information management. Policy Studies, 28(1), 17–34.
19. Gavard-Perret, M.-L., Gotteland, D., Haon, C., & Jolibert, A. (2008). Méthodologie de la recherche : Réussir son mémoire ou sa thèse en sciences de gestion. Pearson Education.
20. Glaser, B. G., & Strauss, A. L. (1967). The discovery of grounded theory: Strategies for qualitative research. Aldine de Gruyter.
21. Grabski, S. V., Leech, S. A., & Schmidt, P. J. (2011). A review of ERP research: A future agenda for accounting information systems. Journal of Information Systems, 25(1), 37–78.
22. Hadoussa, S. (2009). Influence des facteurs de persuasion sur la satisfaction, la flexibilité organisationnelle, et le succès des systèmes d'information : Cas de la Ligue des États arabes (Thèse de doctorat).

23. He, J., & King, W. R. (2008). The role of user participation in information systems development: Implications from a meta-analysis. Journal of Management Information Systems, 25(1), 301–331.
24. Hughes, H. P., Clegg, C. W., Bolton, L. E., & Machon, L. C. (2017). Systems scenarios: A tool for facilitating the socio-technical design of work systems. Ergonomics, 60(10), 1319–1335.
25. Ifinedo, P., Rapp, B., Ifinedo, A., & Sundberg, K. (2010). Relationships among ERP post-implementation success constructs: An analysis at the organizational level. Computers in Human Behavior, 26(5), 1136–1148.
26. Ives, B., Olson, M. H., & Baroudi, J. J. (1983). The measurement of user information satisfaction. Communications of the ACM, 26(10), 785–793.
27. Jaouad, J., & Ouchekkir, A. (2023). La transformation digitale dans le secteur bancaire marocain : Une révolution dans les pratiques et les services financiers. International Journal of Accounting, Finance, Auditing, Management and Economics, 4(3–2), 417.
28. Kositanurit, B., Osei-Bryson, K.-M., & Ngwenyama, O. (2011). Re-examining information systems user performance: Using data mining to identify properties of IS that lead to highest levels of user performance. Expert Systems with Applications, 38(6), 7041–7050.
29. Law, C. C., Chen, C. C., & Wu, B. J. (2010). Managing the full ERP life-cycle: Considerations of maintenance and support requirements and IT governance practice as integral elements of the formula for successful ERP adoption. Computers in Industry, 61(3), 297–308.
30. Lientz, B., & Larssen, L. (2006). Risk management for IT projects. Routledge.
31. Louati, R. (2008). L'évaluation de la performance perçue de la fonction systèmes d'information : Cas de la branche dermo-cosmétique d'un groupe pharmaceutique international (Thèse de doctorat). École Doctorale Sciences de Gestion TSM.
32. Mahmood, M. A., Burn, J. M., Gemoets, L. A., & Jacquez, C. (2000). Variables affecting information technology end-user satisfaction: A meta-analysis of the empirical literature. International Journal of Human-Computer Studies, 52(4), 751–771.
33. Mezghani, K., & Mezghani, L. (2007). Alignement des processus ERP et des processus organisationnels : Le cas du processus commercial d'une entreprise. eJournal of Digital Enterprise, 19, 1–15.
34. Michel, S., & Cocula, F. (2014). L'évaluation des systèmes d'information : Un état de l'art à la lumière des approches de la variance et processuelles. Management & Avenir, (8), 33–51.
35. Myers, M. D. (1995). Dialectical hermeneutics: A theoretical framework for the implementation of information systems. Information Systems Journal, 5(1), 51–70.
36. N'Goala, G. (2000). Une approche fonctionnelle de la relation à la marque : De la valeur perçue des produits à la fidélité des consommateurs (Thèse de doctorat). Université Montpellier 2.
37. Nefzi, A. (2007). La relation entre la perception de la qualité et la fidélité : Une application à la distribution des parfums et cosmétiques en France. Xème Colloque Etienne Thil.
38. Paillé, P., & Mucchielli, A. (2003). L'analyse qualitative en sciences humaines et sociales. Armand Colin.
39. Peterson, R. A., & Wilson, W. R. (1992). Measuring customer satisfaction: Fact and artifact. Journal of the Academy of Marketing Science, 20(1), 61–71.
40. Petter, S., & McLean, E. R. (2009). A meta-analytic assessment of the DeLone and McLean IS success model: An examination of IS success at the individual level. Information & Management, 46(3), 159–166.
41. Reidy, M., & Mercier, L. (1996). La triangulation. Dans M. F. Fortin (Éd.), Le processus de la recherche : De la conception à la réalisation (pp. 317–334). Décarie Éditeur.
42. Roh, T. H., Ahn, C. K., & Han, I. (2005). The priority factor model for customer relationship management system success. Expert Systems with Applications, 28(4), 641–654.
43. Sabherwal, R., Jeyaraj, A., & Chowa, C. (2006). Information system success: Individual and organizational determinants. Management Science, 52(12), 1849–1864.
44. Seddon, P. B. (1997). A respecification and extension of the DeLone and McLean model of IS success. Information Systems Research, 8(3), 240–253.
45. Torkzadeh, G., & Doll, W. J. (1999). The development of a tool for measuring the perceived impact of information technology on work. Omega, 27(3), 327–339.

46. Vial, G. (2019). Understanding digital transformation: A review and a research agenda. The Journal of Strategic Information Systems, 28(2), 118–144.
47. Wang, Y., Kung, L., & Byrd, T. A. (2018). Big data analytics: Understanding its capabilities and potential benefits for healthcare organizations. Technological Forecasting and Social Change, 126, 3–13.
48. Yu, C.-S. (2005). Causes influencing the effectiveness of the post-implementation ERP system. Industrial Management & Data Systems, 105(1), 115–132.