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Article

### Technology Innovation and Social and Behavioural Commitment: A Case Study of Digital Transformation in the Moroccan Insurance Industry

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**Abstract:** Digital transformation (DT) has become an imperative for companies seeking to evolve in a constantly changing industrial ecosystem, driven by the continual development and application of innovative digital technologies. Nevertheless, the success rate of DT initiatives remains surprisingly low, which only serves to highlight the need for a deeper understanding of the factors that determine the success of these initiatives. This study adopts a quantitative methodological approach to address this challenge, focusing on the Moroccan insurance industry. First a systematic literature review was undertaken to identify the key change dimensions and related factors that influence DT acceptance, at both individual and corporate levels, as well as the potential risks associated with the adoption of DT. A survey of 100 employees of insurance companies in Morocco was then undertaken, to statistically establish the key factors that determine the success of DT in these companies. Research results reveal that planned behavioral factors, as well as the innovative features of digital technologies, exert a positive influence on the attitude towards acceptance of DT. Furthermore, this positivity translates into greater personal acceptance of new technologies within the Moroccan organizations studied. Although the paper focuses on one industry sector in one country, the authors believe the results make a valid contribution to both theory and practice. The findings indicate a clear distinction between individual acceptance of innovation and acceptance at a social level, an approach that has scarcely been addressed in previous research. It also offers valuable insights for leaders and organizational managers seeking to succeed in their DT projects by highlighting key determining factors to effectively guide this complex process.

**Keywords:** digital transformation; key determinants; acceptance criteria; insurance industry; behavioral factors; technology innovation; new framework

#### 1. Introduction

Digital transformation (DT) has become a priority for businesses seeking to remain competitive in a global environment increasingly influenced by digital technologies [1]. The rapid transformation of the industrial ecosystem, driven by innovative digital technologies continues to gather pace [2]. Advances such as the emergence of global platforms, the evolution of business models, and the multiple applications of artificial intelligence across industry is profoundly redefining business practices. However, this degree of change inevitably involves a range of challenges at both company and individual levels. Indeed, according to Bughin et al.[3], more than 70% of digital transformation initiatives fail, often due to poor management of human and organizational factors. This failure rate raises the crucial question of how prepared companies are to integrate these technologies in a way that generates real added value. Indeed, DT goes beyond the integration of technological tools; it

involves a significant restructuring of internal processes and organizational, economic and financial behaviors.

Acceptance of digital technologies, both at an individual and collective level, is a key factor in the success of transformation initiatives. As Vial[4] explains, DT "is not simply a technological transformation, but a profound and continuous organizational reinvention" (p. 121). This change can only be effective if employees and managers adopt a positive attitude towards new technologies, which highlights the importance of understanding the behavioral and social factors that influence this adoption. Previous research has highlighted the importance of a holistic approach, integrating both technological capabilities and human dynamics. Wessel et al.[5] concluded that "the success of a digital transformation depends not only on an organization's ability to integrate advanced technologies, but also on its ability to create an organizational environment favorable to the adoption of these technologies" (p. 236). These authors emphasize that alignment between social and technological dynamics is essential to ensure a smooth and successful transition to a digital enterprise.

Furthermore, the management of human behavior in the face of digital innovation is a critical issue. Warner and Wäger [6], in their research of DT in the context of strategic renewal, found that the dynamic capabilities of an organization play a key role in managing the DT process, especially when it comes to adapting to new technologies and organizational changes. In other words, it is not just about acquiring technologies, but about developing an organizational culture that encourages their adoption and effective use. In this context, this research study focuses on the analysis of the key factors that influence the acceptance of DT. It aims to identify the behavioral factors and innovative characteristics of digital technologies that influence employees' attitudes towards DT. The results provide a better understanding of how these elements contribute to the success of DT initiatives in the Moroccan insurance industry.

Following this brief introduction, there are five further sections to the article. In Section 2, relevant literature is reviewed and the research hypotheses are set out. In Section 3, the research methodology is outlined. Results are presented in Section 4 and some key emergent themes are identified and discussed in Section 5. Finally, in Section 6, the overall contribution of the research is discussed, along with the limitations of the study, and possible future areas for research in this field are noted.

#### 2. Literature Review

#### 2.1. Introduction

Digital transformation has become an essential strategic lever for companies aiming to maintain competitiveness in an ever-evolving global environment. Strategic, organizational, and technological dimensions reveal a significant impact on performance, innovation, and agility within organizations. According to Sebastian et al. [7], DT involves a fundamental reinvention of operational processes through the integration of advanced technologies such as artificial intelligence, data analytics, and the Internet of Things. These tools go beyond mere technological adoption; they also entail a profound structural and cultural transformation. Furthermore, the role of organizational culture in the success of digital initiatives is widely emphasized in the literature. Fitzgerald et al. [8] emphasize that a culture centered on experimentation, continuous learning, and adaptability is crucial to overcoming internal resistance to change. Additionally, dynamic capabilities, defined as an organization's ability to respond quickly and effectively to market changes, are considered pivotal for developing and implementing coherent digital strategies [9].

The potential benefits of DT are also well-documented. According to Fang and Liu [10], adopting digital technologies not only enhances internal processes but also enriches the customer experience, opening new avenues for competitive differentiation. However, recent research underscores risks related to cybersecurity, data ethics, and organizational imbalances, which can hinder or disrupt the implementation of digital projects [11,12].

This section comprises three sub-sections. In section 2.2, some fundamental definitions and perspectives are briefly reviewed. This is followed in sub-section 2.3 by an examination of some of the theory and practice around the acceptance of DT. Building upon this, section 2.4 then draws out the key determinants of DT from the extant literature and puts forward the related hypotheses to be tested in the primary research phase.

#### 2.2. Digital Transformation: Definition and Importance

Digital transformation can be defined as a comprehensive process through which companies adopt and integrate digital technologies to improve performance, generate new sources of value, and adapt to changing market dynamics [4,13]. However, DT is not limited to simple technological adoption. According to Kleinert [14], DT entails a fundamental reconfiguration of business models and organizational processes, as well as a major cultural shift. This requires a systemic approach that combines technological innovation, organizational transformation, and stakeholder engagement [15].

Companies must rethink their internal processes and value chains to adapt to a digital economy characterized by uncertainty and rapid cycles of change [16]. Fernandez-Vidal et al. [17] emphasize DT's central role as a catalyst for organizational agility and innovation, enabling companies to better meet market expectations. Warner and Wäger [6] describe it as a transformation of operational paradigms, offering businesses the opportunity to thrive in a dynamic economic context. Moreover, DT redefines the organizational competencies needed to leverage interconnected digital ecosystems, enhancing collaboration and customer engagement [18]. In the financial sector, technologies such as automation, artificial intelligence, and blockchain have improved operational efficiency while personalizing services to meet customer expectations [19,20].

Furthermore, DT promotes cost optimization through automation and improves value chains [21]. It can also contribute to sustainability by reducing companies' carbon footprints through optimized resource management and digitalized practices [22,23]. According to Sebastian et al. [7], this transformation enhances companies' dynamic capabilities, enabling them to adapt to market disruptions while maximizing financial and operational performance. DT acts as a driver of innovation, with technologies like the Internet of Things, cloud computing, and advanced analytics allowing companies to rethink business models and value chains [5]. However, Faraj and Pachidi [24] stress that the success of these initiatives depends on strategic alignment between organizational objectives, technological requirements, and stakeholder expectations.

#### 2.3. The Acceptance of Digital Transformation

The acceptance of DT by employees and stakeholders is a critical factor for the success of digital initiatives. Perceived usefulness and ease of use of digital technologies remain major determinants of their acceptance, as highlighted by the Technology Acceptance Model (TAM) developed by Davis [25]. These concepts have been expanded in recent research to include elements such as compatibility with existing processes and organizational efficiency [26]. Oh et al. [27] conclude that balancing ease of use with advanced functionalities is crucial to ensuring sustainable adoption, particularly in complex digital environments.



**Figure 1.** Requirements (shaded grey) for successful transition to a digital enterprise in the hospitality sector. Source: Wynn and Lam [31].

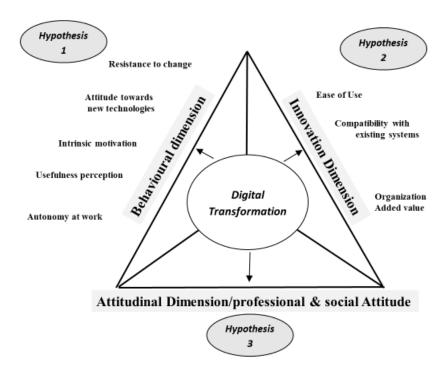
The Unified Theory of Acceptance and Use of Technology (UTAUT), introduced by Venkatesh et al. [28], enriches this perspective by identifying social influence and facilitating conditions as critical factors. Trenerry et al. [29] argue that organizational engagement and employee training are essential to strengthening these dimensions and ensuring successful adoption of digital technologies. Moreover, Slavković et al. [30] highlight the role of digital capabilities in aligning technology with organizational practices, emphasizing that employees' digital citizenship plays a decisive mediating role in this process. In similar vein, Wynn and Lam [31], in their study of DT in four major hospitality enterprises, found that workforce adaptability, process agility and a data culture were key requirements for a successful transition to a digital enterprise (Figure 1).

Building on Rogers' [32] Diffusion of Innovation (DOI) theory, Steiber et al. [33] explain that the acceptance of digital technologies depends on their perceived characteristics, such as relative advantage, compatibility, and complexity. These findings are supported by ElMassah and Mohieldin [34], who highlight the importance of DT in localizing Sustainable Development Goals (SDGs). The authors note that the perception of societal or environmental benefits can also drive employee engagement. Organizational factors, such as digital leadership and an innovation-driven culture, directly influence technology acceptance. Benitez et al. [35] argue that leaders with strong digital capabilities foster better innovation performance, encouraging employee adoption of technologies. Schildt [36] addresses this issue from an institutional logic perspective, showing that underlying organizational values must align with DT initiatives to ensure their success.

#### 2.4. Key Determinants and Hypothesis Development

The acceptance of DT stems from a complex amalgamation of antecedents that depend not only on individuals but also on the organizations in which they operate. This has profoundly influenced management systems underpinning organizational coordination and control, and a range of models and frameworks are being used to assess the key determinants of successful DT in a rapidly evolving technology environment. These include a number of models that pre-date the digital era, such as those noted above (TAM; UTAUT; DOI), which can be applied to identify the determinants that directly impact workers' intention to embrace DT in their professional activities. Such acceptance

within organizational ecosystems relies on a triadic framework encompassing behavioral, innovation-related, and attitudinal dimensions (Figure 2).



**Figure 2.** Conceptual framework: the key dimensions of digital transformation and related factors (determinants).

From the extant literature, including from the three models noted above (See Table A1 in Appendix A), five distinct factors (or determinants) relating to the behavioral dimension can be discerned: resistance to change; attitude toward new technologies; intrinsic motivation; perceived usefulness of technologies; and workplace autonomy. Regarding resistance to change, organizations perceive it as both a hindrance to economic development and an opportunity to understand their workers' abilities and foster learning within a complex ecosystem [37]. This resistance arises from feelings of fear of the unknown and loss of control [38]. Resistance to change is thus considered an inhibitory determinant of DT acceptance. It materializes as anxiety and discomfort, stemming from employees stepping out of their comfort zones. However, proactive management of this resistance can facilitate transition [39].

Despite its inhibitory nature, employee resistance to change also highlights positive aspects, as it prompts organizations to prioritize resources for facilitating workers' adaptability to DT [31] [40]. In this context, supporting employees throughout the DT process can change resistance into anticipatory engagement [41]. Conversely, positive attitudes toward new technologies can facilitate their use and support the acceptance of DT [42]. Such positive attitudes toward adopting new technologies and integrating them into all professional activities enhance the success and acceptance of the transition, contributing to the sustainable improvement of organizational performance [43].

Intrinsic motivation plays a crucial role in employees' conscientious engagement in the DT process, driven by the personal and professional benefits they derive [44]. High levels of employee motivation contribute to the ease of acceptance and flexibility in adopting complex digital tools, heightening the likelihood of success of DT [29,45]. The perceived usefulness of new technological advancements is a key predictor of the success and acceptance of DT within organizations [46]. A strong perception of usefulness facilitates smoother acceptance and integration of the transition [47]. The introduction of new technologies that promote workplace autonomy leads to higher job satisfaction and serves as a bridge to the successful acceptance of DT [48]. Furthermore, the autonomy

fostered by incorporating new technologies into management processes positively impacts the flexibility of transition acceptance [49,50].

The innovation dimension also has a significant impact on employees' intention to embrace DT. This dimension has three main related factors: the ease of use of new technologies; their compatibility with existing systems; and their organizational added value. Regarding ease of use of technological advancements, Venkatesh et al. [51] maintain that their user-friendliness reduces initial adoption barriers and increases acceptance levels. Furthermore, employees' perception of the flexibility of these technologies positively influences their acceptance behavior toward DT [52,53]. Additionally, the perception of enhanced ease of use of new technologies can transform negative impressions into enthusiastic acceptance [54]. Employees may exhibit acceptance of complex technologies from a learning and skills development perspective [55].

As regards the compatibility of new technologies with existing organizational systems, Martínez-Peláez et al. [56] argue that harmony between the implemented technological advancements and the existing management system encourages acceptance of DT and reduces employee resistance. Moreover, this alignment with existing practices helps reduce the costs of the transition and limits disruptions in management procedures and practice [57,58]. However, Amini and Javid [59] argue that emphasizing the compatibility between existing systems and newly introduced technologies can constrain innovation. Chaudhuri et al. [60] also point out that, irrespective of the technology compatibility issue, organizations often find themselves at a critical juncture in DT, requiring the adoption of scalable and transformative technologies, regardless of their complexity and the resources needed for their implementation.

Employees' perception of the organizational added value generated by the introduction of new technologies enhances their involvement and commitment to accepting DT. Improvements in productivity and cost reduction support employees' willingness to adopt these new technologies and associated process changes [51]. Conversely, in scenarios where financial improvements are not in evidence, employees' perception of the implementation of these technologies may take a negative turn [61], potentially leading to resistance [62].

The attitudinal dimension also demonstrates a significant correlation with employees' intention to accept DT [39,63]. This dimension encompasses two main factors: professional attitude and social attitude. The first refers to employees' willingness to develop skills and adapt to changes and new demands. This learning-oriented attitude fosters acceptance of new technologies [64]; moreover, employees engaged in lifelong learning and actively seeking career advancement opportunities will demonstrate greater flexibility during the upheavals involved in DT [65]. Social attitude plays a crucial role in technology acceptance [53]. Specifically, the influence of colleagues and managers in promoting DT creates a positive sensory effect, encouraging employees to align with required initiatives and project goals [66]. However, in some cases, social attitudes may negatively impact employees' intentions when they perceive the technologies as irrelevant to specific organizational practices, thus hindering the acceptance of DT [67].

Building upon this analysis of the extant literature, hypotheses were developed to test the relationships between the three main dimensions in the conceptual framework (Figure 2) in the context of the Moroccan insurance industry: innovative characteristics of digital technologies; behavioral factors; and attitudinal (professional and social) influence on the acceptance of DT. These hypotheses are as follows:

 $H_1$ : The behavioral dimension has a significant impact on the acceptance behavior of insurance employees with regard to DT.

 $H_{1.1}$ : Resistance to change has a significant impact on the acceptance behavior of insurance employees towards DT.

 $H_{1.2}$ : Attitude towards new technologies has a significant impact on the acceptance behaviour of insurance employees towards DT.

 $H_{1.3}$ : Intrinsic motivation has a significant impact on the acceptance behavior of insurance employees towards DT.

 $H_{1.4}$ : The perceived usefulness of technologies has a determining effect on the acceptance behavior of insurance employees with regard to DT.

 $H_{1.5}$ : Autonomy at work significantly influences the acceptance behavior of insurance employees towards DT.

 $H_2$ : The innovation dimension has a significant impact on the acceptance behavior of insurance employees with regard to DT

 $H_{2.1}$ : The ease of use of technologies has a significant impact on the acceptance behavior of insurance employees with regard to DT.

 $H_{2.2}$ : Compatibility with existing devices suggests a significant impact on employees' acceptance behavior towards DT.

 $H_{2,3}$ : Organizational added value contributes significantly to employees' acceptance behavior towards DT.

 $H_3$ : The attitudinal dimension exhibits a significant influence on the acceptance of insurance employees with regard to DT.

 $H_{3,1}$ : Professional attitude has a significant influence on employees' acceptance of DT.

 $H_{3.2}$ : Social attitude plays a determining role in employees' acceptance of DT.

These hypotheses provided the basis for subsequent data analysis to identify and validate the key determinants for DT in the Moroccan insurance sector.

#### 3. Research Method

#### 3.1. Research Design

This study adopts a quantitative approach to analyze the factors influencing the acceptance of DT. This method was chosen for its ability to provide a comprehensive understanding of the phenomena under study, particularly by triangulating the results from quantitative data collected through surveys conducted with employees of Moroccan financial institutions, specifically insurance companies. The determinants of DT acceptance were drawn from a range of literature as discussed above, but they lean heavily on the theoretical models of TAM, UTAUT and DOI (See Table A1 in Appendix A). A post-positivist epistemological stance was adopted. This approach places particular emphasis on formulating core hypotheses based on a theoretical framework, with the aim of validating or refuting them within an appropriate empirical context.

There were three main phases in the research study (Figure 3). Phase 1 comprised a literature review that allowed for the identification of the basic conceptual framework for the hypotheses generation, as reported in Section 2 above, and subsequent primary research.

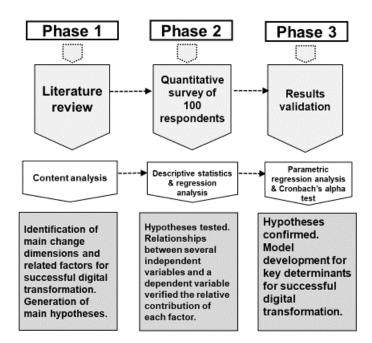


Figure 3. The 3 phases of the research process.

Phase 2 involved a survey of 100 employees from Moroccan insurance companies, which are characterized by significant exposure to digital pressures where technological innovation is essential to maintaining competitiveness [68,69]. The sampling method used was non-probabilistic convenience sampling, selected to capture a diversity of opinions from various hierarchical levels. This method, commonly applied in exploratory studies, enables preliminary empirical analysis and hypothesis testing on a representative basis [70].

The data were collected using a structured questionnaire consisting of 34 questions based on the TAM, UTAUT, and DOI theoretical models and related literature, and was divided into four main sections. The first section includes six demographic questions collecting general information such as age, gender, education level, and participants' tenure. The second section contains eleven questions focused on behavioral factors, based on validated scales from the literature and measuring dimensions such as resistance to change, motivation, and attitude toward innovation. In section three, eight questions explored the innovative characteristics of technologies, including perceived usefulness and technological compatibility. Finally, the fourth section comprised nine questions evaluating participants' overall attitudes toward DT, including professional and social acceptance. Responses were collected using a 7-point Likert scale ranging from "strongly disagree" to "strongly agree," allowing for nuanced insights into participants' perceptions.

The analysis relies on using multiple linear regression models to measure the relative impact of each determinant on acceptance intention. All analyses were conducted using IBM SPSS Statistics software, version 27. The multiple linear regression model is a natural extension of the simple regression model for any number of explanatory variables, and more detail is provided in Appendix B.

The quantitative data collected underwent a thorough analysis, including descriptive statistics and regression analyses, to explore and understand the relationships between various behavioral factors and the acceptance of DT. A multiple regression analysis was subsequently conducted to test the research hypotheses by examining the effect of behavioral, innovative, and attitudinal dimensions on the acceptance of DT.

Finally, in Phase 3, a parametric regression analysis was employed to validate the results, ensuring that the assumptions of linearity and normality of residuals were met, thereby guaranteeing the robustness of the conclusions.

#### 4. Results

#### 4.1. Demographic Characteristics of Respondents

Table 1 presents the demographic characteristics of the 100 employees who participated in the study, indicating the profile of the participants and their distribution according to the main socio-demographic variables.

Variable	Category	Frequency (n)	Percentage (%)	
Age	18-25 years old	15	15%	
	26-35 years old	45	45%	
	36-45 years old	30	30%	
	46 years and over	10	10%	
Sex	Male	60	60%	
	Female	40	40%	
Education level	Baccalaureate	30	30%	
	Undergraduate degree	50	50%	
	Masters or higher	20	20%	
Professional seniority	0-5 years	25	25%	
	6-10 years old	40	40%	
	11-15 years old	20	20%	
	16 years or older	15	15%	

**Table 1.** Demographic characteristics of respondents.

The majority of participants (45%) are in the age group of 26 to 35, and 60% of respondents are men. Regarding the level of education, 50% of participants have a bachelor's degree, while 20% have a master's degree or higher. In terms of professional seniority, 40% of participants have between 6 and 10 years of experience, which suggests a sample mainly composed of relatively experienced employees in the insurance sector.

#### 4.2. Descriptive Statistics of the Main Variables

The table below presents the descriptive statistics for the key variables influencing the acceptance of digital transformation, including their mean (X) and standard deviation  $(\delta)$ .

_						
Dimension	Variables	Coding	$\bar{X}$	δ		
	Resistance to change	RES-CH	3.20	0.85		
Behavioral	Attitude towards new technologies	ATT-TC	4.80	0.72		
benaviorai	Intrinsic motivation	INT-MT	4.50	0.65		
	Perceived usefulness of technologies	PER-TC	4.90	0.78		
	Autonomy at work	SE-USE	3.80	0.80		
	Ease of use	EASE-USE	5.10	0.75		
Innovative	Compatibility with existing devices	COMP-PR	4.70	0.68		
	Organizational added value	VAL-ORG	5.20	0.80		
Attitudinal	Professional attitude	PRO-ATT	4.72	0.41		
Atutudinai	Social attitude	SOC-ATT	4.65	0.38		

**Table 2.** Descriptive statistics of the main independent variables (X).

The results show an overall favorable perception of the variables studied. In the behavioral dimension, the perceived usefulness of technologies (4.90) and the attitude towards new technologies (4.80) stand out as strong points, while resistance to change (3.20) is moderate. In the innovation dimension, ease of use (5.10) and organizational added value (5.20) obtain the highest scores, indicating a strong potential for adoption of new technologies. Finally, in the attitudinal dimension, professional (4.72) and social (4.65) attitudes demonstrate a positive predisposition of participants towards the DT. These results highlight an overall positive perception of the factors influencing the acceptance of the DT, despite some nuances concerning autonomy at work and resistance to change.

#### 4.3. Responses of Respondents on "Intention to Accept Digital Transformation"

The table below presents respondents' assessments of their "intention to accept digital transformation", categorized by key dimensions and variables, along with their respective frequency distributions.

Tuble 5. In	esponses from respondents of accept	aigitai	transi	omunoi	(1).	
Dimension	\$7 1. 1	Frequencies				
	Variables	*	**	***	****	****
	Resistance to change	-	-	4%	10%	86%
	Attitude towards new technologies	-	-	9%	15%	76%
Behavioral	Intrinsic motivation		-	7%	21%	72%
	Perceived usefulness of technologies		-	1%	10%	89%
	Autonomy at work		-	2%	21%	77%
	Ease of use	-	-	3%	23%	74%
Innovative	Compatibility with existing devices	-	-	-	21%	79%
	Organizational added value	-	-	2%	10%	88%
Attitudinal	Professional attitude	-	-	6%	10%	84%
	Social attitude		-	7%	13%	80%

Table 3. Responses from respondents on "intention to accept digital transformation" (Y)

The results of the table show a strong intention to accept DT among respondents. The most used variables include the perceived usefulness of technologies (89%), organizational added value (88%) and compatibility with existing devices (79%), indicating very positive perceptions of these factors. Similarly, the professional (84%) and social (80%) attitude suggest a favorable climate for the adoption of new technologies. However, some aspects such as the motivation generated (72%) and autonomy at work (77%) show slightly lower scores, suggesting room for improvement to strengthen these behavioral determinants. These data confirm an overall positive predisposition, but with nuances in some dimensions.

#### 4.4. Model Adjustment

The table below indicates how the results fit the model, including key statistical indicators adjusted R,  $R^2$ , the standard error of the estimate  $R^2$ , and the significance of changes in model fit.

Modify Standard statistics error of R  $R^2$  $R^2$ Sign. the Variation Change adjusted Variation ddl1 ddl2 estimate of R-two in F in F 0.92 0.94 0.91 99 0.081 0.02 0.137 891 0.000

Table 4. Model fit.

<sup>\*:</sup> Not at all likely. \*\*: Unlikely. \*\*\*: Neutral. \*\*\*\*: Quite likely. \*\*\*\*: Probable.

The value of the correlation coefficient R = 0.92 gives the strength of the relationship between the independent variables (X) and the dependent variable (Y). This value expresses the appropriate adjustment of the observations to the statistical model used. However, the coefficient of determination (= 0.94) refers to the proportion of the variation of the response variable Y (acceptance of DT) explained by an assortment of explanatory variables using the multiple linear regression model. This value indicates that this statistical model used is capable of explaining the response variable at a rate of 94% in the sample proposed in the study. However, the Fisher statistics associated with the linear model are highly significant, suggesting a bilateral asymptotic significance of  $p = 0.000 < 0.05.R^2$ 

#### 4.5. Assessment of Regression Model Quality (ANOVA)

Table 5 provides an assessment of the quality of the regression model (ANOVA), highlighting the distribution of variance via the sum of squares, degrees of freedom, F-statistic and significance level.

Sum of F Source ddl Sig. squares Regression (SSR) 653.157 99 56.16 0.000 Residue (SSE) 0.00 0 99 Total (SST) 653.157

**Table 5.** Assessment of regression model quality (ANOVA).

The ANOVA table mentions the contribution of the multiple linear model used in the explanation of the response variable Y (acceptance of DT). Based on the bilateral asymptotic significance of the F value (p = 0.000 < 0.05), the null hypothesis ( $H_0$ ) is rejected, confirming the quality of the adjustment of the model used in the explanation of the dependent variable Y.

#### 4.6. Non-Standardized Coefficients

PER-TC

5,022

Table 6 illustrates the non-standardized coefficients of the regression model, along with their statistical significance and 95% confidence intervals. The non-standardized coefficients make it possible to reconstruct the equation of the linear adjustment line, also called the equation of the regression line. The column of non-standardized coefficients  $\beta$  also provides information on the sign of this value (+ or -). This sign is important for interpreting the direction of the relationship between the dependent variable Y and the independent variables X. The value of these coefficients indicates the direction of variation of the relationship between the response variable "acceptance of the DT" and the other explanatory variables introduced in the study. For example, the explanatory variable "resistance to technological change" (RES-CH) exhibits a coefficient  $\hat{\beta}$  = -3.079, suggesting an inverse interrelation with the dependent variable "acceptance of the DT".

95.0% Confidence Unstandardized Sig Interval for β Coefficients β Standard error Lower Upper Constant 0,780 4,811 6,167 0.000 3,262 6,360 **RES-CH** -3,079 0,056 -1,4250.008 -0.0310,190 ATT-TC 2,089 0,056 1,587 0.006 1,980 2,422 **INT-MT** 0,059 0.009 2,990 3,726 3,067 1, 135

0.333

0.000

4,874

5,735

0,066

**Table 6.** Table of Coefficients.

SE-USE	4,028	0,064	0.431	0.000	3,951	4, 680
EASE-USE	2,177	0,018	1,115	0.000	1,917	2,837
COMP-PR	1,019	0,042	1,587	0.011	0,790	1,724
VAL-ORG	2,017	0,027	1, 135	0.013	1,879	2,398
PRO-ATT	1,291	0,085	0.333	0.007	0,942	1, 792
SOC-ATT	1,028	0,020	0.431	0.000	0,916	1,437

On the other hand, the other explanatory variables explain a positive impact on the intention to accept DT. In other words, the other determinants of the behavioral dimension such as an improvement in attitudes towards new technologies, high motivation, appropriate utility, and accomplished autonomy generate a positive impact on the intention to accept DT among insurers.

However, the innovation dimension, conglomerating the ease of use of digital tools, the compatibility with existing devices, and the organizational added value, also provides a positive influence on the intention of insurers to accept DT. Similarly, the attitudinal dimension bringing together professional and social attitude advances positive consequences on the ability of insurer employees to accept DT in the exercise of their daily tasks.

#### 4.7. Parametric Regression Analysis

To further study the influence of dimensions on the acceptance of DT, a parametric regression analysis was undertaken. This statistical method is particularly suitable for evaluating the contribution of explanatory variables to a continuous dependent variable, respecting the fundamental assumptions of normality, homogeneity of variances and linearity.

Table 7. Results of parametric regression analysis.

Independent	Unstandardized	Standard error	t value	p-value	Meaning
variables (X)	coefficients ( $\beta$ )			(Sig.)	
Constant	4,811	0.780	6,167	0.000	Highly significant
RES-CH	-3,079	0.056	-1,425	0.008	Significant inhibitor
ATT-TC	2,089	0.056	1,587	0.006	Significant contributor
INT-MT	3,067	0.059	1, 135	0.009	Significant contributor
PER-TC	5,022	0.066	0.333	0.000	Major Contributor
SE-USE	4,028	0.064	0.431	0.000	Significant contributor
EASE-USE	2,177	0.018	1,115	0.000	Significant contributor
COMP-PR	1,019	0.042	1,587	0.011	Significant contributor
VAL-ORG	2,017	0.027	1, 135	0.013	Significant contributor
PRO-ATT	1,291	0.085	0.333	0.007	Significant contributor
SOC-ATT	1,028	0.020	0.431	0.000	Significant contributor

Table 7 indicates that all the variables studied are significant (p < 0.05), which confirms their relevance in the model. The variable "perceived usefulness of technologies" (PER-TC) presents the highest  $\beta$  coefficient, highlighting its key role in the acceptance of DT. On the other hand, resistance to change (RES-CH) acts as an inhibiting factor, with a negative effect on the dependent variable. These results reinforce the overall relevance of the model and its ability to explain the determinants of acceptance. These results highlight the importance of technological adaptation and employee behavior in the success of DT.

#### 5. Discussion

The results of this study demonstrate that the acceptance of DT is based on a combination of behavioral, innovative, and attitudinal factors. Descriptive statistics (Table 2) reveal that innovative characteristics, such as ease of use (M = 5.10) and organizational added value (M = 5.20), achieve the highest averages, highlighting their crucial role in DT acceptance. These findings are supported by the frequencies observed in Table 3, where 88% of participants consider organizational added value as "highly probable," and 74% view ease of use favorably. This confirms that the innovative characteristics of digital technologies are major predictors of their adoption.

From a behavioral perspective, factors such as attitude toward new technologies (M = 4.80) and motivation (M = 4.50) also play an important role. These factors are rated as "highly probable" by 76% and 72% of respondents, respectively. However, resistance to change (M = 3.20) remains moderate, although 86% of participants consider it unlikely to be a significant obstacle to successful DT.

The multiple linear regression analyses (Tables 4 and 5) confirm the excellent fit of the model. The  $R^2$  value of 0.94 indicates that 94% of the variance in the dependent variable (acceptance of DT) is explained by the model. The significance of the F-statistic (p = 0.000 < 0.05) supports the robustness of the model.

Finally, the regression coefficients (Table 6) highlight the variables with significant influence on the acceptance of DT. Among them, the perceived usefulness of technologies ( $\beta$  = 5.022, p < 0.001) and workplace autonomy ( $\beta$  = 4.028, p < 0.001) emerge as the most influential predictors.

Innovative characteristics, such as ease of use ( $\beta$  = 2.177, p < 0.001) and organizational added value ( $\beta$  = 2.017, p < 0.001), further reinforce the idea that positive perceptions of digital technologies are essential for their adoption. From a behavioral perspective, factors like attitude toward new technologies ( $\beta$  = 2.089, p < 0.01) and motivation ( $\beta$  = 3.067, p < 0.01) confirm their importance. Conversely, resistance to change ( $\beta$  = -3.079, p < 0.01) exerts a moderate negative influence on acceptance.

These results underline that the acceptance of DT depends on an effective alignment between technological innovation and individual behaviors. They also confirm that positive attitudes toward DT and favorable perceptions of technologies are critical in ensuring their success within organizations.

#### 6. Conclusions

This study provides an in-depth understanding of the key factors that influence the acceptance of DT in the Moroccan insurance industry. It emphasizes the importance of combining behavioral, technological innovation, and attitudinal dimensions in such studies.

The results reveal that behavioral dimensions play a crucial role in the adoption of digital technologies. Factors such as resistance to change, attitude toward new technologies, motivation, perceived usefulness of technologies, and workplace autonomy significantly influence how employees perceive and integrate these innovations. Simultaneously, the innovation dimension, which includes ease of use, compatibility with existing systems, and organizational added value, emerges as a critical driver in encouraging the acceptance of new technologies. Lastly, the attitudinal dimension, encompassing professional and social attitudes, moderates the impact of digital innovations by reinforcing acceptance within social and professional groups.

These findings confirm that an integrated approach is indispensable for successful DT. Deploying innovative technologies alone is insufficient; it is essential to consider human factors, such as raising employee awareness about the benefits of technologies, reducing resistance to change, and fostering an organizational climate conducive to innovation. This study highlights the importance of supporting employees during their transition by valuing their autonomy and implementing tailored strategies to address their behavioral, technological, and social expectations.

This study clearly has limitations. It is based on an analysis of relevant literature and a 100-respondent survey. The survey respondents were selected through non-probabilistic convenience sampling. Generalizations from such a study must therefore be treated with caution. In addition, the study focuses on a specific context— the Moroccan insurance sector—which restricts the extrapolation of results to other regions or industries. Cultural, organizational, and economic specificities of Morocco generally influence the dynamics of technological acceptance. Nevertheless, the authors believe this research contributes to the development of theory and practice relating to DT. From a theoretical perspective, this research situates DT within the specific context of emerging economies, specifically Morocco. By exploring the interactions between behavioral, innovation, and attitudinal dimensions, it proposes a comprehensive framework that goes beyond traditional paradigms often limited to Western contexts. This contribution enriches the understanding of the complex dynamics of technological adoption, while emphasizing the importance of social acceptance and organizational compatibility in the success of digital projects.

From a practical standpoint, business leaders must adopt change management strategies that integrate training initiatives, organizational support mechanisms, and awareness campaigns. These efforts will strengthen employee engagement and maximize the success of DT. By focusing on the identified dimensions and related change factors, companies can develop tailored solutions to encourage the adoption of technologies while addressing behavioral and organizational barriers.

In conclusion, while this study has provided valuable insights into the factors influencing DT in Morocco's insurance sector, it also provides a platform for future research. Future studies could explore these dynamics in other sectors or cultural contexts to broaden the understanding of critical change factors. DT is ultimately a multidimensional process that requires harmonious integration between technological innovations and human dimensions to ensure successful adoption. Future studies could explore several avenues. An examination of the interactions between behavioral dimensions and organizational change policies could be of value, particularly by investigating the effect of participative leadership strategies on the adoption of digital technologies. In addition, an intersectoral comparison could be conducted to identify similarities and differences in the factors influencing DT acceptance. The impact of DT on organizational performance and employee satisfaction represents another promising research area with significant practical implications for businesses. Future research can thus build on the findings reported here to further explore the complex dynamics of technological acceptance in diverse environments and through varied methodological approaches.

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# Appendix A. Synthesis of Key Variables Derived from the TAM, UTAUT and DOI Models

**Table A1.** Synthesis of key variables and concepts in the UTAUT, TAM, and DIO models.

Variable	UTAUT	TAM	DIO	Authors
Resistance to	linked to Facilitating	Potential negative	Mentioned in the	[25,28,32,71,72]
change	Conditions and Effort	influence on attitude	categorization of	
	Expectancy, which	towards use and	adopters,	
	address perceived barriers	intention	particularly for late	
	to adoption		adopters	
Attitude towards	Approached via Intent to	Central variable:	linked to the notions	[25,28,32,73–75]
new technologies	Use, influenced by factors	attitude towards use	of compatibility and	
	such as Performance	determines intention to	relative advantage	
	Expectancy	use		
Intrinsic	Associated with Effort	Included in attitude	Not directly	[25,26,28,76]
motivation	Expectancy and the role of	towards use,	mentioned in the	
	moderators	influenced by ease of	model.	
		use		
Perceived	Corresponds to	One of the two main	Equivalent to	[25,28,32,73,76]
usefulness of	Performance Expectancy,	variables under the	Relative Advantage,	
technologies	one of the main	name of Perceived	a key adoption factor	
	determinants of	Usefulness		
	acceptance			
Autonomy at work	Addressed appears in the	Not mentioned, but	Not directly	[28,77]
	Facilitating Conditions	may influence attitude.	mentioned.	
	that facilitate the			
	autonomous use of			
	technologies			
Ease of use	Corresponds to Effort	Central variable under	Similar to the	[25,28,32]
	Expectancy, a key	the name of Perceived	concept of	
	determinant of adoption	Ease of Use, directly	complexity, one of	
		influencing the attitude	the five main factors	
Compatibility with	Indirectly covered by the	directly can influence	Mentioned as one of	[28,32]
existing devices	Facilitating Conditions,	Perceived Usefulness	the main variables	
	which include integration		under the name of	
	with existing systems		compatibility	
Organizational	Addressed in	Can be included in	Related to relative	[25,28,32]
added value	Performance Expectancy,	Perceived Usefulness,	advantage, which	-
	which includes	if the benefits are	considers	
	organizational benefits	organizational	organizational	
	<u> </u>	S	benefits	
Professional	Influence via moderators	Influence on attitude	Not directly	[25,28]
attitude	such as professional	towards use and	mentioned.	. , -1
	r-orestorati			

Social attitude	Corresponds directly to	Explicitly can influence	Related to	[28,32]
	Social Influence, a major	attitude towards use.	observability, which	
	determinant		depends on social	
			context	

### Appendix B. The Multiple Linear Regression Model Used in the Research Project

The linear model is the most frequently used statistical model for analyzing multidimensional data. The term "multiple" refers to the fact that there are several explanatory variables  $x_i$  to explain y (response variable). The information is supposed to be derived from the observation of a statistical sample of size n (n > p+1) of  $\mathbb{R}^{(p+1)}$ . In this situation, the linear model is written assuming that the expectation of Y is the element of the subspace of  $\mathbb{R}^{(n)}$  created by  $\{1, x_1, x_2, \dots, x_p\}$ , where 1 is the vector of  $\mathbb{R}^{(n)}$  composed of "1". In other words, the random variables (p+1) are checked:

$$y_i = \beta_0 + \beta_1 x_{i1} + \beta_2 x_{i2} + \cdots + \beta_p x_{ip} + \varepsilon_i$$
  $i = 1, \dots, n$ 

where,  $y_i$  denotes the random variable to be explained, the  $x_{ij}$  represent known, non-random numbers making explicit the explanatory variables, the  $\beta_j$  refer to the unknown, but non-random parameters to be estimated, and the  $\varepsilon_i$  confer the random error terms of the model.

Using the least-squares estimator, the unknown model parameters  $\beta$ , are estimated by minimizing the least-squares criterion (L.S.) or maximizing the likelihood (L.L.). In this survey the least squares (L.S.) criterion was used to estimate the parameter ( $\widehat{\beta}$ )  $\in \mathbb{R}$  (p+1) that minimizes the sum of squared errors:

$$\varepsilon_i^2 = (y_i - \beta_0 - \beta_1 x_{i1} - \beta_2 x_{i2} - \dots - \beta_p x_{ip})^2$$

To estimate the unknown parameters  $(\widehat{\beta})$ , the following optimization problem was solved:

$$\widehat{\beta} = \arg \min_{\beta \in \mathbb{R}^{(p+1)}} \sum_{i=1}^{n} \left[ \left( y_i - \left( \beta_0 + \sum_{j=1}^{p} \beta_j x_{ij} \right) \right]^2 = \arg \min_{\beta \in \mathbb{R}^{(p)}} \| Y - X\beta \|^2$$

By positing that:

$$\begin{split} F(\beta) &= \sum_{i=1}^{n} [ (y_i - (\beta_0 + \sum_{j=1}^{p} \beta_j x_{ij}) ]^2 \\ &= \| Y - X\beta \|^2 \\ &= (Y - X\beta)^T (Y - X\beta) \\ &= Y^T Y - 2 Y^T X\beta + \beta^T X^T X\beta \end{split}$$

To deduce the regression coefficients  $\beta$ , the optimization problem was solved, conferring the minimum of  $F(\beta)$ , noting:  $\min_{\beta \in \mathbb{R}^{(p+1)}} F(\beta)$ . By matrix derivation of the last equation, the "normal equations" in  $\beta$  were obtained as:

$$\frac{\partial F(\beta)}{\partial \beta} = 0$$
$$X^T \mathbf{Y} - X^T \mathbf{X} \ \beta = 0$$

Assuming that the matrix  $(XX^T)$  is invertible, i.e., that the matrix X is of rank (p + 1) explaining the absence of collinearity between its columns. The parameter estimate  $\beta_i$  is given by:

$$\widehat{\beta} = (XX)^{-1} X^T Y$$

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