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Article

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MANAGING IMPLEMENTATION OF THE ERP SYSTEMS: THE IMPORTANCE OF TECHNICAL AND CONSULTANT SUPPORT

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Abstract: *Although the first adoptions of ERP systems in Morocco date back to at least the mid-1990s, the literature on ERP implementation is very scarce. It mainly addresses the topic of critical success elements for businesses implementing ERP systems. Indeed, a major problem that may cause the failure of ERP systems implementation is the non-acceptance of these systems by the users. Research on ERP implementation success and acceptance has attracted much interest in the information system field. While this study is very rare in developing countries, this paper proposes to fill this gap in the literature by exploring the important antecedents of users' intention to use ERP systems. This research aims to explore whether the use of consultants and end-user technical assistance are important antecedents of end-user acceptance of ERP systems and to examine the mediating effect of perceived ease of use and perceived usefulness on the intention to use ERP systems. Using a longitudinal survey that was administered both via email and social networks to all persons willing to participate in the study, data from a matched sample of 284 end users across a range of Moroccan organization that uses the ERP system was analyzed. The authors examined the relationships between consultant support, technical support, and end users' acceptance of ERP information systems. PLS structural equation modeling (SEM-PLS) analyses indicated a significant direct effect of perceived usefulness on the intention to use ERP. Technical support also strongly and significantly affected perceived ease of use. Perceived ease of use and perceived usefulness mediated the relationship between technical support, consultant support, and the intention to use ERP systems. The present empirical study supports the hypotheses of the TAM model. The three main constructs of the model, namely perceived ease of use, perceived usefulness, and intention of use, are significant with ERP technology in the Moroccan context. This study shows the importance of end-user technical assistance and support from consultants in successfully implementing ERP systems.*
Keywords: ERP implementation, consultant support, intention to use ERP, technology acceptance model, technical support.
JEL Classification: M15, M30, O32.

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Introduction. Companies operate in a competitive environment that is no longer local or regional but global. Whether large or small, companies must now be able to withstand increasingly fierce competition and adapt to an environment that is more hostile and unpredictable than ever. Companies and organizations, in general, are forced to constantly face volatile and unexpected threats and opportunities, thanks to their flexibility and agility. In this context, it seems very difficult, if not impossible, to cope without information systems that facilitate the achievement of these objectives. Indeed, large investments are made in information systems such as ERP. The size of the market exceeded 38 billion dollars in 2018. It is expected that the CAGR of this market will reach 8.5% by 2026 (Fortune Business Insight, 2021). The context of COVID-19, accelerating the digitalization of companies, pushes market studies to be even more optimistic by predicting a CAGR of 9.8% until 2027 (Gaikwad and Rake, 2021).ERP systems integrate all of a company's functions (accounting, supply chain, production, HRM, etc.) in a modular fashion embedded into a single integrated database. This system allows data to be shared between functions (Pishdad and Haider, 2013), departments, and subsidiaries to achieve the company's competitiveness and efficiency objectives (Arekete et al., 2014). The interest and enthusiasm of companies for ERP systems are due to multiple benefits (Al-Jabri, 2015). The democratization of best practices, the speed of information flow in transactions, the fluidity of logistics flows, improved customer service, and supplier relations, and reduced inventory. Being the backbone of a BI system allows the improvement of decision-making processes (Al-Jabri and Roztocki, 2015) and, eventually, the granting of competitive advantages (Maldonado and Sierra, 2013). However, ERP systems have a very bad reputation for being very risky projects, with failure rates reaching up to 90% (Almajali et al., 2016). Companies that do not abandon this type of project see their implementation time extended (Huang et al., 2004) and their investment budgets exceeded (Sun et al., 2015). It poses an enormous challenge for companies and leads a significant proportion of them to be very reluctant to use this type of system. The risk is to paralyze the company or even disappear in extreme cases. FoxMeyer is a textbook case (Scott, 1999).

One of the interesting approaches to overcoming this failure rate of ERP systems is to identify the critical success factors (KSF) that can facilitate the success of this type of project. The literature lists no less than 80 KSFs (Al-Fawaz et al., 2010; Ferratt et al., 2006; Sun et al., 2015). The successful implementation of ERP systems remains a difficult task for companies. Academic research on the subject is perplexing and confusing. Indeed, both in terms of measuring the success of ERP implementation and its antecedents, the literature abounds. Ferrat et al. (2006) list no less than 50 key success and risk factors that affect how ERP systems are implemented successfully. This research proposes an analysis examining the mediating role of perceived ease of use (PEU) and perceived usefulness (PU) of ERP systems in explaining the relationship between the role of consultants and end-user technical support and ERP system usage intentions.Although the first adoptions of ERP systems in Morocco date back to at least the mid-1990s (Achchab et al., 2014), the literature on ERP implementation is very scarce. However, qualitative studies have become more prevalent recently, often in the form of case studies that discuss the crucial elements for Moroccan businesses to successfully use ERP systems (Amine Arrahmane and Abdellah, 2016; ElAbbassi and Chafik, 2014; Khadrouf et al., 2017; Mahraz et al., 2018; Mrini et al., 2015). A major problem that may cause the failure of ERP systems implementation is the non-acceptance of these systems by the users. Indeed, what would the use of an information system that has mobilized substantial investments be if the end users shun it? Therefore, it is crucial to research the variables influencing the acceptance of ERP systems. While this type of study is very rare in developing countries(Almajali et al., 2016), to our knowledge, there are no quantitative empirical studies in Morocco that have looked at the acceptance of ERP systems. This paper proposes to fill this gap in the literature by exploring the essential antecedents of users' intention to use ERP systems. This study aims to explore whether the use of consultants and end-user technical assistance are important antecedents of end-user acceptance of ERP systems and to examine the mediating effect of perceived ease of use and perceived usefulness on the intention to use ERP systems.The rest of this article is structured as follows: the research model's theoretical underpinnings and its hypotheses are discussed first. The methodology used in the research will then be described, followed by a discussion of the results. Finally, a conclusion and limitations of the research will be highlighted.

Literature Review. Failure to implement ERP systems in an organization can have an enormous impact on its productivity and competitive advantage at all levels of the value chain (Rouhani and Mehri, 2018), especially since the major contribution of ERP systems is to bring all business functions into harmony by enabling the integrity of the information system. The success of taking advantage of the benefits that ERP systems could provide depends on the success of the implementation phase and the perception that users have of the new system (Esteves and Bohorquez, 2007). This section explains the theoretical foundations of

the study, starting with the Technology Acceptance Model (TAM). Numerous theoretical frameworks explain why end users adopt certain technologies. These include the theory of planned behavior (Ajzen, 1985), the TAM model (Davis, 1989), and the task-technology fit (Goodhue and Thompson, 1995), among others. However, in the literature on information systems, the TAM model is still one of the most often used in acceptance and adoption (Al-Jabri, 2015; Al-Jabri and Roztocki, 2015; Rajan and Baral, 2015). According to the TAM model, technology is more or less likely to be accepted by end users if it is perceived as beneficial (useful) and easy to use. It means that the more a user finds the technology in question useful for his work and does not find it difficult to use, the more his attitude toward the technology contributes to its acceptance. In this respect, the TAM model is based on the theory of reasoned action developed by Ajzen & Fishbein in 1980. According to Davis (1989), perceived usefulness (PU) is «the degree to which a person believes that using a particular system would enhance his or her job performance». However, even if an information system is perceived as useful, its acceptance also depends on the perceived ease of use. Otherwise, its usefulness will be overweighted by its difficulty of use. The PEU measures «the degree to which a person believes that using a particular system would be free of effort» (Davis, 1989). These two variables, therefore, affect the intention to use the new system.

Consequently, it is possible to state the following assertion, as stipulated in the TAM model:

H1: PEU is positively associated with the intention to use ERP system.

H2: PU is positively associated with the intention to use ERP system.

H3: PEU is positively associated with PU.

The TAM model also assumes that the interaction between the intent to use information systems and external factors is mediated by PEU and PU (Kwak et al., 2012). It means that the model predicts that PEU and PU could be affected by external variables that act on the intention to use through the mediating role of the endogenous TAM variables (Szajna, 1996). The research model used in this study adds two extra external variables (consultant and technical support) to the TAM model. These two variables are considered important key success factors for successful ERP implementation. Apart from the famous case of FoxMeyer, who sued his consulting firm Anderson Consulting and the vendor of his SAP system, accusing them of having caused his ruin, the literature gives an important role to the assistance of consultants and places it among the critical key factors of success for the implementation of ERP systems (Al-Fawaz et al., 2010; Ferratt et al., 2006; Kwak et al., 2012; Sedera et al., 2003; Somers and Nelson, 2001). Indeed, the contribution of external know-how in projects as complex as ERP (Kwak et al., 2012) can be of great help. In the opposite case, the company may suffer greatly from an asymmetry of information from the vendor, especially if it lacks the skills related to ERP systems. The extent to which consultant intervention makes ERP deployment successful is referred to as the consultant support variable (Chung et al., 2008; Kwak et al., 2012). Thisvariablehasbeenusedintheliterature(Chung et al., 2008; HancerliogullariKoksalmis and Damar, 2019; Kwak et al., 2012) as antecedents of endogenous variables in the TAM model. Kwak et al. (2012) found that the relationship between consultant support and PEU is highly significant (P-value less than 0.0001). The study by Hancerliogullari and Damar (2019) confirmed this finding. Chung et al. (2008) found a positive relationship between support consultants and the success of ERP system implementation.Therefore, it could be assumed that:

H4: Consultant support is positively associated with PEOU.

H5: Consultant support is positively associated with PU.

In working environments such as ERP systems, especially when they are newly implemented, it may be worthwhile for the organization to provide the end users with tools to facilitate their familiarization with the new system. It is apparently not an easy task (Maditinos et al., 2011; Wang and Chen, 2006) and requires the users' commitment and dedication to adapt to the ERP system. That is to increase their productivity and performance with their new work tool (Rajan and Baral, 2015). Furthermore, according to the UTAUT model, presented by Venkatesh et al. (2003) and widely used in the information system literature (Williams et al., 2015), Facilitating conditions are a determinant of the intention to use technologies. In a way, users' intention to use ERP systems will be influenced by the existence or lack of support from their organization (Uddin et al., 2019). Technical support is defined as individuals assisting users of computer hardware and software products. This assistance may be provided through hotlines, online support services, knowledge bases that machines can read, fax machines, automated telephone voice response systems, remote control software, and other tools(Rajan and Baral, 2015). Consequently, it is possible to state the following hypothesis:

H6: Technical support is positively associated with PEOU.

H7: Technical support is positively associated with PU.

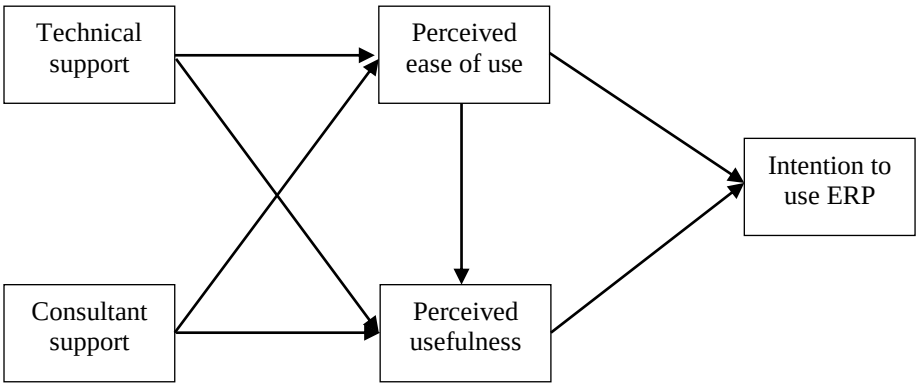

Figure1. Proposed research framework

Sources: developed by the authors.

Methodology and research methods. The research design adopted is the deductive approach. The questionnaire developed to measure the constructs is based on prior studies to collect data from the end users of the ERP systems. The data collection was undertaken from December 2020 to January 2021. Considering the context of Covid-19 and the traffic limitation in Morocco, the only available means was the online questionnaire. The questionnaire was administered both via email and social networks to all persons willing to participate in the study. The non-existence of a database listing companies in Morocco with ERP systems justifies this choice of questionnaire administration methods. In order to analyze the data, PLS-based structural equation modeling (PLS-SEM) was used. It has been widely used in management science for the last 40 years (Uddin et al., 2019). Moreover, the scientific community prefers SEM to simple regression because it ensures the reliability of the results through the simultaneous investigation of all the models instead of analyzing the relationships one by one (Hair et al., 2017).

The questionnaire was sent to Moroccan companies in all public and private sectors. As far as possible, the aim was to ensure that all sectors designated by the Moroccan nomenclature of activities (Souaidy, n.d.) were represented. In addition, eleven of the twelve regions of Morocco were represented, with a predominance of the region of Casablanca, the country's economic capital. The questionnaires were addressed to employees of companies at all levels of the hierarchy, from small to large companies. All this increases the robustness of the results that will be found as long as they come from a general representation of both organizations and respondents. Table 1 shows some demographic details about the respondents and their organizations. 612 responses were collected.

Table 1. Sample description

Activity	Frequency	%	Number of employees	Frequency	%
Mining	42	14,8%	<50	75	26%
Finance/Insurance	38	13,4%	50-250	65	23%
IT and Com	34	12,0%	>250	144	51%
Construction	39	13,7%	**Revenue**		
Energy	25	8,8%	<500 K	15	5%
Tourism	21	7,4%	500 K to 10 M	98	35%
Transports/Logistics	19	6,7%	>10 M	171	60%
Education and Health	16	5,6%	**Level**		
Commerce	14	4,9%	High	132	46%
Industry	13	4,6%	Intermediate	107	38%
Others	23	8,1%	Operating	40	14%
Total	284	100			

Sources: developed by the authors.

After eliminating responses from respondents not using an ERP system, the number of available responses dropped to 352. After eliminating more than 15% of incomplete responses, suspicious responses, and outliers (Hair et al., 2017), the number of responses retained was 284. All questionnaire items were measured on a seven-Likert scale (1 – strongly disagree and 7 – strongly agree). The survey was administered in French. The PEU, PU and intention to use constructs were measured by items taken from Davis (1989), Davis et al. (1989) and Venkatesh, Thong and Xu (Venkatesh et al., 2012), Venkatesh and

Davis (Venkatesh and Davis, 2000). The items relating to consultant support were taken from prior studies (Chung et al., 2008; HancerliogullariKoksalmis and Damar, 2019; Kwak et al., 2012), while the items relating to technical support were taken from Venkatesh et al. (2003), Kwak et al. (2012), Rajan and Baral (2015).

Results. PLS structural equation modeling (PLS-SEM) with Smart PLS 3 software was used to test the model. The measuring model and the structural model are crucial in this technique. Thus, the analysis of the model is done in two steps: 1) the analysis of the measurement model done through discriminant validity and convergent validity; 2) the analysis of the structural model done through path-significance, coefficient of determination, and beta-coefficient (Hair et al., 2017). Factor loadings, Cronbach's Alpha (CA), Composite Reliability (CR), and Average Variance Extracted (AVE) were used to assess convergent validity for all model constructs. The discriminant validity was also checked using Cross loading tables. Table 2 presents the estimates of convergent validity. All CA and CR exceeded the threshold value of 0.7 (Nunnally and Bernstein, 1994; Thorndike, 1995), indicating that all the constructs possessed good reliability.

Table 2. Reliability and convergent validity

Constructs and Items	Outerloadings	CA	CR	AVE
Consultant support		**0,948**	**0,960**	**0,828**
C1	0,901			
C2	0,914			
C3	0,934			
C4	0,884			
C5	0,916			
Technical support		**0,933**	**0,952**	**0,833**
TS1	0,888			
TS2	0,877			
TS3	0,903			
TS4	0,814			
P.Ease of use		**0,944**	**0,960**	**0,856**
PEU1	0,927			
PEU2	0,928			
PEU3	0,912			
PEU4	0,935			
P.Usefulness		**0,963**	**0,969**	**0,819**
PU1	0,919			
PU2	0,907			
PU3	0,935			
PU4	0,908			
PU5	0,896			
PU6	0,918			
PU7	0,847			
Intention to use ERP		**0,894**	**0,926**	**0,759**
I_Use1	0,914			
I_Use2	0,904			
I_Use3	0,934			
I_Use4	0,899			

Sources: developed by the authors.

Additionally, all of the outer loading measurements of the reliability of the individual items are higher than the suggested value of 0.7 (Hair et al., 2017). A construct that explains more than half of the variance of its component items and consequently exhibits sufficient convergent validity has an AVE value of 0.5 or above(Al-Jabri, 2015). The minimum AVE of the model is 0.759 concerning the Intention to use ERP construct. Thus, the model has good convergent validity.Additionally, Fornell and Larker (1981) recommended using the square root of the AVE for all constructs. Each construct's square root AVE must be greater than its correlation with every other construct. Table 3 shows that the measurement model respects that condition. The diagonal elements are larger than those in the same row and column. Consequently, the metrics effectively distinguish between the constructs.

Table 3. The square root of the AVE

	Consultant support	Intention to use ERP	P. Ease of use	P. Usefulness	Technical support
Consultant support	**0,910**				
Intention to use ERP	0,482	**0,913**			
P. Ease of use	0,540	0,663	**0,925**		
P. Usefulness	0,555	0,810	0,654	**0,905**	
Technical support	0,601	0,667	0,779	0,657	**0,871**

Sources: developed by the authors.

Furthermore, confirmatory factor analysis (CFA) is evaluated using cross-loading (Hair et al., 2017). The examinations in Table 4 show that all the items representing a variable were higher correlated to it than to other variables. It can be stated that there is no issue relating to the discriminant validity of the model.

Table 4. Confirmatory factor analysis (cross-loading)

	CS	IU	PEU	PU	TS
C1	0,901	0,439	0,477	0,523	0,542
C2	0,914	0,429	0,484	0,513	0,556
C3	0,934	0,473	0,510	0,527	0,572
C4	0,884	0,422	0,451	0,457	0,520
C5	0,916	0,427	0,531	0,499	0,542
I_Use1	0,396	0,914	0,613	0,740	0,611
I_Use2	0,410	0,904	0,543	0,748	0,605
I_Use3	0,483	0,934	0,663	0,765	0,626
I_Use4	0,470	0,899	0,599	0,704	0,595
PEU1	0,525	0,597	0,927	0,615	0,736
PEU2	0,511	0,634	0,928	0,618	0,746
PEU3	0,487	0,578	0,912	0,570	0,685
PEU4	0,475	0,642	0,935	0,614	0,713
PU1	0,525	0,734	0,606	0,919	0,609
PU2	0,504	0,702	0,539	0,907	0,604
PU3	0,538	0,734	0,594	0,935	0,608
PU4	0,512	0,670	0,511	0,908	0,584
PU5	0,428	0,735	0,563	0,896	0,517
PU6	0,462	0,796	0,628	0,918	0,596
PU7	0,539	0,747	0,680	0,847	0,636
TS1	0,551	0,560	0,688	0,547	0,888
TS2	0,524	0,524	0,631	0,539	0,877
TS3	0,488	0,631	0,728	0,620	0,903
TS4	0,535	0,604	0,659	0,578	0,814

Notes: CS – Consultant support, IU – Intention to use, PEU – Perceived ease of use, PU – Perceived usefulness, T – Technical support.

Sources: developed by the authors.

The measuring model complies with the requirements regarding its reliability, convergent validity, and discriminant validity. According to Hair et al. (Hair et al., 2017), the path coefficient (standard Beta), coefficient of determination (R2), and goodness of fit of the model (GOF) are evaluated for the structural model assessment. The Goodness of Fit of a structural model must be at a minimum of 0.1, according to Wetzels et al. (Wetzels et al., 2009), and it should be higher than 0.36 for large effect size. Equation (1) is used to calculate the GOF of the model. The result obtained for the model is 0.704, demonstrating that the model suited the data well.

$$\text{Golf} = \sqrt[2]{AverageAVE * AverageR^2} \quad (1)$$

$$\text{Gof} = \sqrt{0.819 * 0.605} = 0.704$$

The coefficient of determination (Table 5) indicates that the model had a very excellent explanatory power, explaining 68.7% of the intention to use ERP systems. The model also explained 61.5% of the Perceived Ease of Use and 51.2% of the perceived usefulness.

Table 5. Coefficient of determination(R^2)

	R^2	R^2Adjusted
Intention to use ERP	0,687	0,685
P.Ease of use	0,615	0,612
P.Usefulness	0,512	0,506

Sources: developed by the authors.

As Figure 2 illustrates, there was a significant direct effect of perceived usefulness on the intention to use ERP, which supports H2. Technical support also strongly and significantly affected the perceived ease of use supporting H6. Perceived ease of use had a significant direct effect on Perceived Usefulness supporting H3. However, Consultant Support barely affected perceived ease of use, not supporting H4.

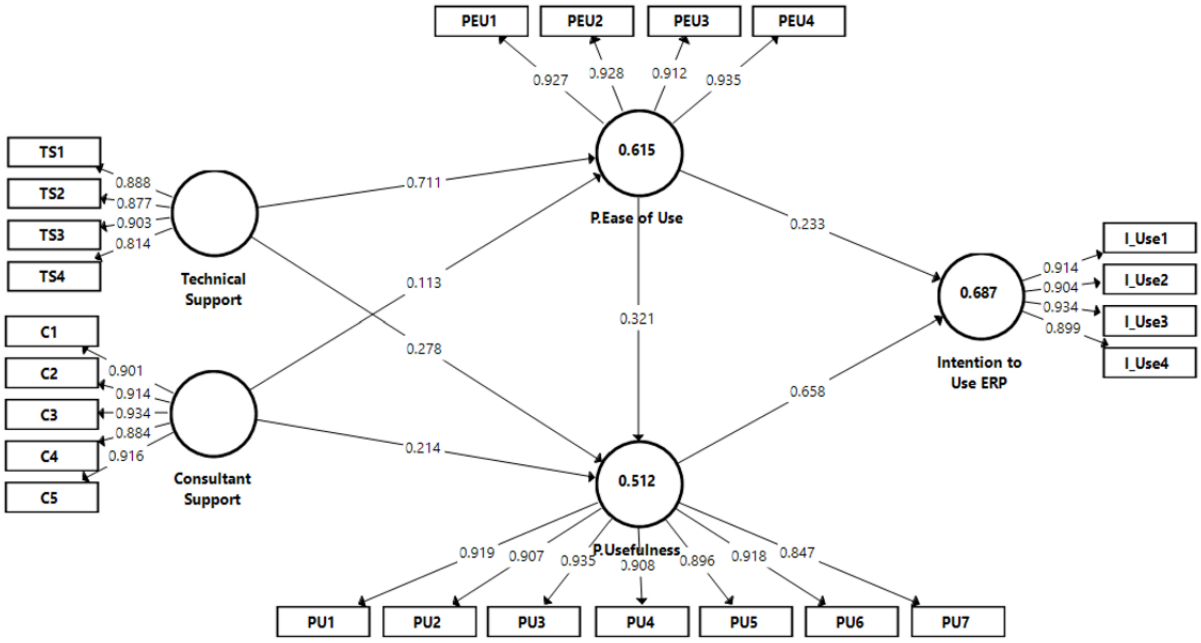

Figure 2. The PLS model with outer loadings and path estimates

Sources: developed by the authors.

All other hypotheses (H1, H5, and H7) were found to be significant (Table 6). In conclusion, the survey findings supported H1, H2, H3, H5, H6, and H7, but H4 was not supported.

Table 6. Results of hypotheses testing

Hypothesis	Path	Coefficient	T-Statistics	p-Values	Support
H1	PEU ➔ IU	0.233	3.106	0.002	YES
H2	PU ➔ IU	0.658	10.198	0.000	YES
H3	PEU ➔ PU	0.321	5.233	0.000	YES
H4	CS ➔ PEU	0.113	2.024	0.043	No
H5	CS ➔ PU	0.214	3.299	0.001	YES
H6	TS ➔ PEU	0.711	15.471	0.000	YES
H7	TS ➔ PU	0.278	3.898	0.000	YES

Notes: IU – Intention to use ERP, PEU – Perceived ease of use, PU – Perceived usefulness, CS – Consultant support , TS – Technical support.

Sources: developed by the authors.

Conclusions. This study's primary aim was to examine the impact of two crucial installation success variables for ERP systems, namely consultant support and technical support, on the acceptance of this technology by the end users.

The current empirical study supports the TAM model's hypotheses. Perceived Ease of Use, Perceived Usefulness, and Intention of Use are the three main constructs of the model that are significant for ERP technology in the Moroccan context. In this respect, the developed model is in line with many other

empirical studies in this sense (Al-Jabri and Roztocki, 2015; Almajali et al., 2016; Hancerliogullari Koksalmis and Damar, 2019; Kwak et al., 2012). This kind of empirical study on ERP systems does not exist in Morocco as far as we know. Therefore, this research will broadly add to the body of knowledge on the subject in Morocco and in the context of developing nations. This study also reinforces the validity of the TAM model even in the context of mandatory usage, whereas some scholars have claimed that it is not valid in this kind of context (Kwak et al., 2012; Marler et al., 2006).

Studies dealing with information systems deal with either implementation success or technology acceptance (Kwak et al., 2012). The proposed model combines constructs from the literature on key success factors, namely Consultant Support and Technical Support, as external variables influencing the internal variables of the TAM model. Three of the four assumptions that connected the TAM model to the two crucial success variables for ERP implementation projects were shown to be acceptable. Technical support had a strong and significant relationship with PEU and a moderate and significant effect on perceived usefulness. As for consultant support, despite the study made by Ferrat et al. (2006), it was not clear-cut regarding its impact on the success of the implementation of ERP systems. Other studies have already shown that consultant support influences positively and significantly the acceptance of the technology through the mediating effect of the PEU and the PU (Hancerliogullari Koksalmis and Damar, 2019; Kwak et al., 2012; Maditinos et al., 2011). The present study confirms this except for hypothesis H4 concerning the effect of consultant support on the PEU. In light of this, the suggested model can help managers and IT specialists comprehend the success of ERP system deployment.

In general, this study shows the importance of end-user technical assistance and support from consultants in the successful implementation of ERP systems. In the context of a developing country, such as Morocco, where a significant portion of companies are still reluctant and concerned about using this type of information system, this study can help managers, and IT professionals better understand the stakes of such a project. Therefore, an important effort is required from organizations willing to start a complex and risky project like ERP, to choose the right consultants carefully. The famous FoxMeyer case is always there as a reminder.

A major limitation of this study is the low willingness of companies to participate, either because they are afraid of revealing information, they consider sensitive, because they are not interested or because they lack time. Another problem encountered was the unreliability of the received responses. Some respondents' lack of reliability resulted in many outliers, incomplete responses, and suspicious response patterns. The current empirical study created a coherent framework that carefully examines the process of successfully implementing an ERP system by analyzing the effect of consultant support and technical support on the acceptance of end users, thus, expanding knowledge of the problem as a result.

It would be interesting to include new variables in future studies, such as training and change management, to enrich the model and broaden the understanding of the implementation process of ERP information systems.

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УправліннявпровадженнямERP-систем: технічна та консультаційна підтримки

Перші впровадження ERP-систем в Марокко датуються щонайменше серединою 1990-х років. Однак, наукові напрацювання з питань впровадження ERP-систем є дуже обмеженими та головним чином спрямовані на дослідження питань головних факторів успіху підприємств, які впроваджують ERP-системи. Автори відмітили, що головною проблемою, яка може спричинити збій у впровадженні ERP-систем, є несприйняття цих систем користувачами. Своєю чергою, дослідження успішності та сприйняття ERP-систем викликає значний інтерес у сфері інформаційних систем. Зважаючи на те, що тематика даного дослідження є недостатньо опрацьована в країнах, що розвиваються, ця робота пропонує заповнити дану теоретичну прогалину через дослідження важливих передумов намірів користувачів використовувати ERP-системи. Мета даного дослідження полягає у з'ясуванні чи є консультаційна та технічна допомоги кінцевим користувачам важливими передумовами прийняття ними ERP-систем. Авторами проаналізовано посередницький вплив сприйняття простоти використаннята сприйняття корисності ERP-системина наміри їх використовувати.

Детерміновану вибірку даних сформовано на основі результатів лонгітудинального опитування 284 кінцевих споживачів організацій Марокко, які використовують ERP-системи. Опитування проведено в електронному форматі через електронну пошту та соціальні мережі. Таким чином, авторами досліджено взаємозв'язок між консультаційною та технічною підтримками кінцевих користувачів та сприйняттям інформаційних ERP-систем кінцевими користувачами. За результатами моделювання структурних рівнянь PLS (SEM-PLS) встановлено значний прямий вплив сприйняття корисності на намір використовувати ERP-систему. До того, технічна підтримка має суттєвий та сильний вплив на сприйняття простоти використання ERP-систем. Сприйняття простоти використання та сприйняття корисності опосередковували зв'язок між технічною та консультаційною підтримками, а також наміром використовувати ERP-системи. Проведене емпіричне дослідження підтверджує гіпотези моделі TAM. Враховуючи отримані результати, автори прийшли до висновку, що головні складові моделі (сприйняття простоти використання, корисності та намір використання) є важливими для ERP-систем в марокканському контексті. Таким чином, дане дослідження свідчить про важливість технічної допомоги кінцевим користувачам та підтримки з боку консультантів для успішного впровадження ERP-систем.

Ключові слова:впровадженняERP-системи, консультаційна підтримка, наміри використанняERP-системи, модель впровадження технологій, технічна підтримка.