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EXPLAINING THE FACTERS AFFECTING THE SPEEDUP OF-END-USERS ADOPT

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ABSTRACT

The objective of this paper is to answer the following question: "Which factors impact the technological change adoption speed of an information system?" Regarding an empirical study, our results finds out three factors that have a direct effect on the speed of technological change adoption. The paper analyzes the impact of eight variables in four categories: the perceived attributes of change, social effect, facilitating conditions and individual characteristics. Results show that based on a 20-month study of a workflow system implementation in a telecommunications firm, the results emphasize that performance expectancy, supervisor effect and self-efficacy have a direct effect on the speed of technological change adoption. The finding of this research may be valid in the particular organization in which it is developed. Moreover, the organizational culture, the company's internal rules, and the history of the organization are factors which significantly affect the speed of change.

KEYWORDS: Change management, Management information systems, Technological change, Issue of adoption, Iran, speed of change adoption

1. INTRODUCTION

By IT substantial investment in many companies (Peppard et al., 2007), technological change management research suggests that the benefits of such IT systems remain unrealized (Hitt and Brynjolfsson, 1996). According to Neufeld et al. (2007), less than one-half of IT project results. Aiman-Smith and Green (2002) explained these failures reach to that the cost exceeding of the project is because of these changes and implementation delays may be very harmful for organizations(Umble et al., 2003),. The new technology to a firm's performance if is widely adopted, can be realized (Hall and Khan, 2003). Adoption itself is based on the basis of various factors. The understanding of these is essential to the technological change management. (Bradley, 2008) To answer this gap, our key question here is to differentiate answer factors that have an impact on the speed of end-users adoption. In line with Venkatesh et al. (2003), we focus on the four critical factors related to technology use in organizational context: perceived attributes of change, social effect, facilitating conditions and individual characteristics. For empirical analysis, we use a statistical model of survival analysis. We present empirical evidence from a 20-month longitudinal study of a workflow system implementation in a telecommunications firm. In this paper, first, we justify our decision to focus on technological change. Second, the theoretical background is introduced. Then, before presenting our findings, the research methodology is explained. Finally, the paper outlines the implications for practitioners and researchers.

2. BACKGROUND AND HYPOTHESES

2.1 The emphasis on technological change

According to Umble et al. (2003), "companies today face the challenge of increasing competition, expanding markets, and rising customer expectations. This case for companies lower total costs, shorten throughput times, reduce inventories, expand product choice, provide delivery dates and better customer service, improve quality, and coordinate global demand, supply, and production." To accomplish these objectives many firms have changed their information system (IS) strategies, adopting application software packages (Hong and Kim, 2002). Bradley (2008) adds that ISs are used as a tool

to improve customer service, and reduce costs. The advantages of IT systems explain why so many large firms have completed their IT implementations and that demand from small and mid-sized organizations is increasing. However, many studies have demonstrated that IT projects are very risky (Nelson, 2005). Nelson (2005) indicates that due to cost and time overruns only 34 percent of IT projects are judged to be successful because the full effect of Enterprise Resource Planning adoptions for firms do not surface until after a considerable time lag (Nicolaou, 2004). Nicolaou and Bhattacharya (2006) reported that at least two years was necessary before adopters would begin to demonstrate positive financial performance in comparison to their non-adopting peers (Nicolaou, 2004; Bradley, 2008; Michel et al., 2013). Nicolaou (2004) suggested that ERP implementation relies on user participation and involvement in system development, estimation of business needs, and data integration into the new system. Bradley (2008) showed that choosing the right time project manager and training personnel affects project success and successful managers must focus their scarcest resource. Michel et al. (2013) suggest that the predisposition of individuals toward a specific change project will be affected by the way the change is managed. Bruque and Moyano (2007) investigated the factors that reduce the time lag before end-users would adopt the new IT system. Knowing the factors which affect the speed of adoption would indicate which characteristics new technologies should possess and how it should be implemented to become quickly adopted. The objective of our study is to prioritize the factors that have an impact on the end-users adoption and how issue differently change adoption process in a perspective of a technological change, in the case of a top-down change imposed by top managers on field employees.

2.2. THE ISSUE OF ADOPTION

When a technological change is implemented, end-users may adopt it based on the evaluation of the IT introduction (Kim and Kankanhalli, 2009). Analyzing the technology acceptance literature appears that several theoretical models have searched to explain technology acceptance and use: the theory of reasoned action, the technology acceptance model, the motivational model, a model combining the technology acceptance model, the model of PC utilization, the innovation scattering theory, and the social cognitive theory (Venkatesh et al., 2003). By synthesizing these, the Unified Theory of Acceptance and Use of Technology (UTAUT) was formulated, with four core determinants of intention and usage of information technology: *performance expectation, effort expectancy, social effect and facilitating conditions*. The UTAUT model explains about 80 percent of the variance in behavioral intention to use a technology and about 55 percent of the variance in technology use (Venkatesh et al., 2012). Venkatesh et al. (2003) suggest that "UTAUT provides a useful tool for managers to assess the success of new technology introduction and helps the issue of acceptance in order to design interventions." In line with the UTAUT (Venkatesh et al., 2003, 2012), our model consists of four dimensions that may affect the speed of change adoption:

(1) Perceived attributes of change (performance expectancy and effort expectancy);

(2) Social effect (peer effect and supervisor effect);

(3) Facilitating conditions (training); and

(4) Individual characteristics (self-efficacy and personal receptivity).

2.2.1 Perceived attributes of change.

The UTAUT theorizes that individual technology acceptance is determined by two beliefs: performance expectancy and effort expectancy. Performance expectancy is defined that individual believes that using the system will help him or her to attain gains in job performance (Venkatesh et al., 2003). This concept was first proposed under the term "perceived usefulness" in the Technology Acceptance Model (Davis et al., 1989) before as "job-fit" in the model of PC utilization (Thompson et al., 1994), as "outcome expectations" in the social cognitive theory (Compeau and Higgins, 1995) and as "relative advantage" in the innovation scattering theory (Rogers, 1995). Effort expectancy is defined as the degree of ease associated with the use of the system (Venkatesh et al., 2003).

2.2.2 SOCIAL AFFECT

Social effect is defined as that an individual perceives that important people believe he or she should use the new system (Venkatesh et al., 2003). According to Kets de Vries and Balazs (1998), this is the most

important factors in helping an individual overcome the barriers to change. Peer effect: Eby et al. (2000) point out that interpersonal and social dynamics within one's work group may impact organizational readiness for change. They add an employee has trust that organization is ready for change to a team-based structure" (Eby et al., 2000). As Tenkasi and Chesmore (2003) remark, "for successful on-time change implementation, learning has to occur organization as the whole system assumes a new architecture, and there has to be learned within the network as they craft local approaches. "Ensure that uses the new IS, new shared meanings have to be developed through a local sense making and learning processes. Burt (1987) showed that the adoption behavior of change can be affected by the advice of co-workers. The interaction, between members of a social group can enhance the innovation adoption (Zmud, 1984). Supervisor effect: Gomez and Rosen, (2001) address the importance of a trusting relationship between managers and employees as the basis for organizational change initiatives (Oreg, 2006). Oreg (2006) suggests that supervisors are more effective in resistance to change. Oxtoby et al. (2002) add that each supervisor would be expected to play the role of "key player" to overflow the vision embedded in the corporate strategy. Supervisors are responsible for communicating the change project (Neufeld et al., 2007) than supervisor's support and play a central role in mobilizing and motivating employees to change. Pardo-del-Val et al. (2012) suggested that supervisors should give their employees the opportunity to question aspects that could threaten changes.

2.2.3. FACILITING CONDITIONS

Facilitating conditions are defined as that an organizational and technical infrastructure exists to support the use of the system (Venkatesh et al., 2003). This perceived organizational support refers to an employee's perception that the organization cares about his or her concerns (Eisenberger et al., 1986). Eby et al. (2000) suggest that this support may impact an individual's reaction to the forthcoming change such that it is perceived as less threatening (Rush et al., 1994), and may affect all schema for organizational change such that the change is viewed more favorably (Lau and Woodman, 1995). In the IS context, we refer to service efforts targeted to end-users such as training, which are resources invested in organizational learning (Davis et al., 1989).

2.2.4. INDIVIDUAL CHARACTERISTICS

The issue here is to analyze individual traits, in the UTAUT model, which have an impact on the change adoption. Change receptivity is an important factor in implementing organizational change strategies (Frahm and Brown, 2007). This notion can be associated with the construct of Personal Innovativeness in the Information Technology (PIIT) "the willingness of an individual to try out any new information technology" (Agarwal and Prasad, 1998a). According to Agarwal et al. (1998b), individuals may "dive in" and try the technology due to their curious and risk-taking nature. Consequently, PIIT seems important factors in accelerating the adoption changes. Self-efficacy is important to the study of individual behavior toward information technology (Agarwal, 2000). Social Learning Theory (Bandura, 1986) claims that self-efficacy, a belief in one's capability to perform certain actions, is a major determinant of choice of activities, degree of effort, period of persistence, and level of performance in the face of challenging situations. According to Armenakis et al. (2007), self-efficacy can be defined in the context of organizational change as the perceived capability to implement a change initiative (Bandura, 1986). In the IS literature, it is expected that an individual who has a strong sense of her or his computer capabilities (a self-efficient agent) will be more willing to accept and use the new system.

2.3 THE SPEED OF CHANGE ADOPTION

The frequency of use (Davis et al., 1989), the decision is whether to adopt or reject (Gatignon and Robertson, 1989), and the number of people who adopt the innovation during one period of time (Rogers, 1995). These indicators constitute discrete and dichotomous measures that are static and that ignore variations over time in terms of the degree of adoption by the targeted population. Lately Hall and Khan (2003) suggested considering the scattering of a technology as a continuous process. According to them, "scattering can be seen as the aggregate result of a series of individual calculations that weight the incremental benefits of adopting a new technology against the cost of change. The resulting scattering rate is then determined by summing over these individual decisions." we analyze how technological and social issue affects the speed of adoption. The longitudinal nature of our research enables us to move toward a dynamic perspective through four moments of observation during the adoption process.

3. METHOD

3.1 Research is setting

The research reports a major change to the project on a large Iranian telecommunications company. The "Work Force Management System" (WFMS) is an integrated management system whose purpose is to optimize the distribution of field technician's work. The goal of this project is to implement an IT system handling technical and commercial information and generating work orders that are sent to field technicians. Also, data is directly sent to the laptop of every field technician. In this perspective, field technicians have constantly to encode into the system what they are busy with. An important element to highlight about this kind of project is that at any point in time the choice being made is not a choice between adopting and not adopting but a choice between adopting now and deferring the decision later (Hall and Khan, 2003). The researcher took advantage of these opportunities of regular contact with end user to administer the questionnaire, to avoid any cultural differences. Our sample consists of eight local services located in the west of Iran, for a total of 54 field technicians and these are homogeneous in age and seniority (Table I). Empirically, data were collected four times one month before implementation (T – 1), one month after implementation (T+1), five months after implementation (T+5) and 20 months after implementation (T+20).

Table I. Descriptive statistics of the sampling

Variable	Obs	Mean	SD	Min	Max
Age	54	41.87	3.56	35	48
Seniority	54	23.97	4.2	16	32

3.2 DEPENDENT VARIABLE

For studying dependent variables of the adoption process, including binary adoption/non adoption, time of adoption and frequency of use (Fichman, 2000). In this study, adoption is analyzed in terms of the relative speed with which a change is adopted by members of a social system. For measuring adoption is to ask adopters to express judgments about their own adoption behavior by comparing several proposals (Evrard et al., 1997). Also, participants estimated the degree of their adoption on a four-point ordinal scale: 1= opponent: "I am against the new system"; 2= skeptic: I am not convinced by the new system"; 3= supporter: "I am convinced by the new system"; 4= champion: "I am ready to defend the new system in front of my colleagues." This metric captures the belief of adopters four times over a period of 20 months. To test the reliability of our indicator, we compare the self-estimation by respondents with their supervisor's estimation of adoption behavior. "We decided to aggregate the four first categories into two generic categories: the categories "opponent" and "skeptic" formed a generic category called "against change" and the categories "supporter" and "champion" formed a generic category called "for change." For the four periods studied, we have convergence coefficients of 0.93; 0.93; 0.82and 0.83. Self-estimation by respondents seems to capture their degree of willingness to change.

3.3 INDEPENDENT VARIABLE

According Perceived attributes of change, the performance expectancy and effort expectancy were treated as separate items and they were not combined. These variables were measured with two statements using a five-point Likert-type scales, from (1) strongly disagree to (5) strongly agree. Social effect was estimated from peer and supervisor perspectives. Peer effect and supervisor effect on the adoption of the new system by the adopters were measured with two statements using a five-point Likert-type scales, from (1) strongly disagree to (5) strongly agree. Training was also measured with one item. The participants expressed their belief in a statement using a five-point Likert-type scale, from (1) strongly disagree to (5) strongly agree. This statement was as follows: "The training period was effective in learning how to use the new system."

3.3.4. INDIVIDUAL CHARACTERISTICS

The characteristics of change recipients were captured through personal receptivity to change and

self-efficacy. We measure the responses to two statements using a five-point Likert-type scale, from (1) strongly disagree to (5) strongly agree.

3.4 STATSTIC ANALYSIS

For determining the change of adoption, we used "historical outcome analysis, we used "event history analysis" to determine the speed of adoption, change, measure the start-up of the WFMS to the acceptance decision by employees. Historical outcome analysis is a term used to describe a variety of statistical methods (Hardy and Bryman, 2004) and often called "survival analysis, (Manigart et al., 2002). Survival analysis concerns are analyzing the time of the incident of an event. The assumption of survival model works that when the study ends and the analysis begins, one will find the event in question which has occurred in some individuals but not for others (Aalen et al., 2008). The advantage and the ability of this kind of model is dealt with missing information, called censored information. In our study, at the end of the observation phase if the subject did not accept the changes, the subject may censor "on the right. For "right-censored" people, we can record the time since they were firstly polled. Among the families of the parametric time distributions, we chose an exponential distribution, based upon the survival function F (t) =1 – exp (–$\boldsymbol{\lambda}$ t) where $\boldsymbol{\lambda}$ consists in a constant rate of change over time. This approach assumes that the chance of accepting change is constant over the lifetime of the process. We also tried to relax this constraint with a Weibull distribution within which the hazard function was increasing or decreasing over time, but without improving the quality of estimations. Hazard ratios indicate the effect of a one-unit change in the corporate on the risk of adopting change. The hazard ratio is the ratio of the hazard rates corresponding to the conditions described by two levels of an explanatory variable. Hazard ratios in one model are directly comparable with each other. Consequently, the higher the positive hazard ratio, the more effective the covariate (the explanatory variable) on the adoption process.

4. FINDINGS

Table II reports the descriptive statistics of independent and dependent variables, and Table III presents the correlation matrix. To note that, 40 out of 54 people have been censored on the right, this seems consistent with the studies of Hunton et al. (2003) and Nicolaou (2004) which suggests that the full effect of IT adoptions for firms do not surface until after a two-year time lag. General findings are presented in Table IV. We analyze our findings in relation to the four categories – perceived attributes of change, social effect, facilitating conditions and individual characteristics. The results report that the performance expectancy speeds up the processes of change. Our findings are partially consistent with the literature (Venkatesh and Davis, 2000). Given the characteristics of the change studied reveal that the complexity of the new system is statistically insignificant to explain the adoption. In fact, the effort expectancy for field technicians is limited to the use of a laptop.

Table II. Descriptive statistics

Dependent variable Adoption	Proportion	SE	(95% Conf. Interval)	
0	0.654	0.0578	0.0542	0.780
1	0.321	0.0576	0.209	0.448
Time				
t–1	0.025	0.020	_0.010	0.069
t+1	0.056	0.026	0.001	0.120
t+6	0.039	0.021	_0.002	0.100
T+20	0.848	0.036	0.763	0.941
Independent variables	Min	Max	Mean	SD
Performance expectancy	1	5	3.529	1.739
Effort expectancy	1	5	4.202	1.776
Peer influence	1	5	4.121	1.789
Supervisor influence	1	5	4.243	1.727
training	1	5	4.601	1.568
Receptivity to change	1	5	3.739	1.389
Self-efficacy	1	5	4.609	1.739

Age	1	5	4.737	3.689

Table III. Correlation matrix

	Performance Expectancy	Effort expectancy	training	Peer influence	Supervisor influence	Self-efficacy	Receptivity to change
Performance expectancy	1.000						
Effort expectancy	_0.213*	1.000					
training	_0.067	0.021	1.000				
Peer influence	0.332***	_0.022	0.262**	1.000			
Supervisor influence	0.404***	_0.116	0.176	0.346***	1.000		
Self-efficacy	_0.100	_0.035	0.478***	0.276**	0.022	1.000	
Receptivity to change	_0.011	_0.076	0.200	0.145	0.189	0.049	1.000

Notes: *p<0.10; **p<0.05; ***p<0.01

4.2.2 SOCIAL AFFECT

The coefficient for the peer effect variable does not have a significant value. Field technicians are not organized on a team-based working arrangement, but are each assigned to specific places according to their work orders. While, opportunities to interact are few. This study calls for additional research that would clarify the precise role of interactions among peers during the change process. Recently, Balogun (2003) has stated that change recipients need to communicate with their colleagues, to gather information, ask questions, and swap experiences. Balogun (2006) suggested that lateral and informal communications between peers are just as important, development of what change is about and we believe that these interactions among peers may alter, change processes in different ways, both positive, (knowledge sharing) and negative (more powerful refusal by a group than by individuals) social pressures. The role of the direct supervisor appears to be one of the most decisive factors. Managerial commitment and support have received consistent attention in the literature as an important effect on technological change adoption in organizations (Agarwal, 1998c). Brown and Vessey (2003) state that top management being committed to the project, is a success factor. Liang et al. (2007) found that management participation positively affects the degree of ERP usage.

Table IV. Hazard function results for the speed of adoption

Covariates	Haz. Ratio	SE	Z	p>z
Performance expectancy	1.647	0.212	3.723	0.000
Effort expectancy	0.937	0.102	_0.319	0.715
Peer influence	1.103	0.162	0.689	0.469
Supervisor influence	1.856	0.264	4.131	0.000
training	0.545	0.110	_2.800	0.002
Receptivity to change	1.150	0.150	1.060	0.257
Self-efficacy	2.226	0.467	3.710	0.000
Age	1.018	0.050	0.510	0.578

Notes: n=54 case (19 events), Log =_31.679, x^2=170.21

4.2.3. FACILITING CONDITIONS

The organizational side of the change process also produces results.

First, it appears that training has a negative effect. Most studies that the full benefits of an IT system cannot be realized until end-users are using it properly. It has been suggested that reserving 15 percent of the total IT implementation budget for training will give an organization an 86 percent chance of successful implementation (Umble et al., 2003), and so it has a positive impact on the adoption of the system by users. Leonard-Barton and Deschamps (1988) found that support was significant only for individuals who reported little interest in experimenting with the technology in question. To find out who needs to be trained and what kind of training is required, the organization should perform a skills analysis by evaluating the qualifications and experience of each operator.

4.2.4 . INDIVIDUAL CHARACTERISTICS

In social cognitive theory, self-efficacy is defined as employees' belief in their ability to mobilize the motivation, cognitive resources, and courses of action needed to exercise control over events in their lives (Wood and Bandura, 1989). Individuals with high self-efficacy perform new tasks at much higher levels than do individuals with lower self-efficacy (Bandura, 1997). This explains why two individuals with the same skills will produce different organizational results. It is one thing to have the skills and another to use them consistently under difficult conditions. The success of organizational change implementation depends on recipients having the required skills, high confidence and a positive belief in their ability to apply their skills to adopt the new behavior. Note also that age is without any effect in our study. The speed of change adoption is not a generational issue. The result shows that when a change is imposed by management, employees have no choice but to accept it. Individual differences, such as personal predisposition to change, cannot significantly affect the individual adoption of the new system.

5. DISCUSSION

5.1 Implications for practice

In this study, we developed a model explaining the factors that affect the adoption of a technological top-down change. The results of this analysis show that performance expectation, supervisor effect and self-efficacy significantly speeds up the speed of technological change adoption (Table V). The study has implications for professionals in that it provides some explanations of the factors that could be considered as "best practices" to speed up the adoption of a new IT system. First, the results for performance expectancy emphasize the importance of communicating with employees about the benefits of the new system in order to facilitate its adoption. Balogun and Jenkins (2003) suggest using two levels of communication. First, project leaders should explain the concepts of the changed organization and second, they should permit individuals to work out the implications for themselves. This second aspect of the communication is generating new knowledge and makes change recipients (Balogun and Jenkins, 2003). Second, our findings suggest that deliberate managerial action by the direct supervisor and the project change managers can have a profound impact on individual adoption of change. Managers should provide appropriate decentralized support through local communication channels; they should ensure the availability of adequate resources through the provision of dedicated training and other means of support. Finally, we suggest that making self-efficacy should become a primary focus of management. In a context of a technological change, employees should skilled enough to work efficiently with the new system. As a case in point, supervisors and change agents should support a coaching environment and provide positive verbal statements that bring about high levels of self-efficacy. We suggest the organization to replace its three-day training. The first advantages of the videotaped training permits highlighting the usefulness of the new system by showing real situations and second, each field technician to advance at his own pace and go back if necessary. Third, the on-the-job coaching provides employees with informative feedbacks about how they are using the new system. To be fully effective, this combined program needs to get the support from the direct supervisor. The latest is responsible for encouraging his employees to go through the videotaped training and to express at their coach the difficulties encountered with the new system.

Maguire and Redman (2007) state that IS lag time is associated with a lack of attention to management practices such as organization development.

Table V. Prioritization of the factors affecting the speed of adoption

Covariates	Haz. Ratio
Self-efficacy	2.234
Supervisor influence	1.875
Performance expectancy	1.655
Receptivity to change	1.148
Peer influence	1.112
Age	1.024
Effort expectancy	0.945
training	0.544

5.2 FURTHER RESEARCH

According to this research there are limitations which should be addressed. First, regarding opportunities for generalizing results, research findings may only be valid in Technico's organizational context. Indeed, the organizational culture, the company's rules, and the history of the organization are factors which significantly affect the speed of change. However, while the capacity for change is always idiosyncratic to the particular organization for development, our results helps project leaders to be aware of the elements if a change process is to succeed within the allotted time that must be dealt with effectively. Moreover, by using multiple items our constructs evaluation could be strengthened. Although we argue that indicator interchangeability enables researchers to measure the reflective construct by sampling a single item (Nunnally and Bernstein, 1994), future research could strengthen the results by translating each construct into several indicators. This would permit researchers to find out and eliminate measurement error for each indicator using common factor analysis. Coltman et al. (2008) argue that using a multi-item indicator, the factor score contains only that part of the indicator that is shared with other indicators and excludes the error in the items used to compute the scale score. A final limitation is we used the belief of end-users as the dependent variable; it could be interesting to round out our results by focusing future research on the use of the system by change recipients which is similar to the contrast between espoused theories and theories in use (Argyris and Scho¨n's (1978). Orlikowski and Hofman (1997) suggest that there is a difference between how people think about technological change and how they implement it. Moreover, this difference significantly contributes to the difficulties and challenges that contemporary organizations face as they attempt to introduce and effectively implement technology-based change. But few empirical studies have examined the speed of change adoption for future research and extensions of this study. First, future research could take the analysis by checking the factors that speed up the "cognitive" adoption of the new system and quicken its effective implementation. Second, researchers could clear, the analysis by using a design that would enable researchers to test moderator variables such as age and experience. According to the UTAUT model that considers these three factors as moderating variables, future research should explore how age and experience affect the strength of the relation between independent variables and the speed of adoption. Regarding to this future research could explore whether the change is being imposed or voluntary has an impact on the factors that speed up change adoption. Most IS studies have concentrated on the critical success factors of IT implementation projects without taking into account the time lag necessary before change recipients adopt the new system. Using this analysis, our study contributes to both the IS and technological change literature by studying the speed of adoption from a dynamic perspective. Following this approach, the study shows that the speed of adoption of a technological change depends on its own terms of implementation.

6. CONCLUSION

According to our knowledge this research is studying change adoption through an analysis. The evidence shows that the process is not only dynamic, but much more entails different dynamics in the process on a whole. The characteristics of the new IT system, the

profile of end-users, the group norms as well as the organizational culture are all factors that may differently affect the speed of technological change adoption. But the results of this study are limited to the specific context of a telecommunications company. However, the benefit of this research has emphasized the need to consider the IT change in a broader context. Exactly, top managers have not focused their attention on the specificities of the system, but must examine the elements of the context in which it is implemented. Specifically, research has emphases on three elements (performance expectancy, supervisor effect and self-efficacy) of top managers to take into account, even if they are not directly connected to the system implemented. This should help us improve the efficiency of IT system implementation and in many cases improve the customer satisfaction. In terms of future research, we hope that this paper will open new research method in that direction. It would be indeed that to explore more in-depth theses dynamics in action throughout such processes and to refine our first empirical outcomes.

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