

Change management practices, internal communication, and training as key drivers of ERP implementation Success

ASBAI Mustapha¹ and GHILANE Hind²

¹ Groupe ISCAE

m.asbai.mustapha@gmail.com

² Faculty of Legal, Economic and Social Sciences – Souissi
Mohammed V University of Rabat

Abstract. An ERP implementation project within an organization is not always successful because it involves several organizational components. This integrated management software package generates significant organizational changes that can lead to human resource resistance to change within a structure. To better manage this resistance, the organization must develop a change management approach based primarily on internal communication, awareness-raising, training, and the integration of department managers and their entire teams into this project. This research examines the impact of internal communication, awareness-raising, training, and the integration of human capital on the successful implementation of this ERP project. To conduct our research, we conducted a qualitative study through interviews with the executive management committee and the human resources and information systems department. The results of our research show that the quality and continuity of communication, as well as the frequency of well-targeted awareness-raising and training sessions, promote the success of an ERP project implementation. Communication must therefore provide a clear overview of the information and facilitate understanding of the various aspects of the project. It must also occur periodically throughout the project implementation process.

Keywords: Resistance to change, training, internal communication, enterprise resource planning (ERP) software, ERP project, change management.

1- Introduction

Today's market is driven by performance and competitiveness. Therefore, companies seek to establish a position and develop their market presence to ensure their sustainability. To maintain these aspects, they are constantly seeking elements that can improve their technological and organizational capabilities. In such a race for performance, organizations have an interest in having the latest technological tools such as ERP systems. That said, the organization must equip itself with the means to face competitors on the one hand, and consumers and their demands on the other. Several researchers and authors have highlighted this complex situation, which was theorized by

Porter in 1985 with the principle of competitive advantage. According to him, this offers a solution to ensure a distinctive point for the company in the market, and therefore a factor of competitiveness. According to Marcus (2011), competitive advantage is defined as a market position or performance superior to the norm in a sector of activity.

In this current research work, we focus mainly on the following variables: internal communication, awareness, and training as contributing factors to the development of a good change management process. Based on the literature review on the variables we have just mentioned, we were able to highlight that a number of scientific studies have shown the failure of the ERP implementation project due to the lack of commitment and resistance to change of human capital (Levine - Toffel, 2010). Knowing that ERP projects induce organizational transformations, which can lead to certain resistances that can influence the success of these projects (Bareil, 2004), we can say that the success of the implementation of an integrated management software package depends on the consideration of the role of the human factor (Heras et al. 2011). On a practical level, the implementation of an ERP creates several changes at the organizational level, something which risks causing resistance (Bareil, 2004).

On a practical level, implementing an ERP system creates several organizational changes, which can lead to resistance (Bareil, 2004).

To address resistance in an ERP implementation project, the organization must adopt a well-managed change management process. Thus, to ensure the success of an ERP project, it is important to manage the major changes it entails (Slimani and Boukrif, 2017). To this end, internal communication regarding the ERP project is essential to reduce resistance and ensure its success (Evling, 2005). This is without forgetting the role of awareness-raising and training.

Thus, we emphasize that communication plays a key role in the success of organizational change. "To change is to communicate, to communicate is to change: communication is at the heart of the change process," Carton (1999) notes. In this context, communication aims to reduce stakeholder resistance and strengthen commitment to the project by clarifying strategic choices and directions and meeting the information needs of various stakeholders. Therefore, targeted and ongoing communication and training can influence and convince stakeholders of the general benefit of change and minimize resistance.

Our research question is as follows: To what extent can internal communication and training related to the ERP project impact its success in Moroccan companies?

The objective of this article is to determine whether Moroccan companies are developing communication strategies and training plans related to the implementation of integrated management software, and the role played by communication and training in this project. We will also aim to assess the impact of these variables on the success of the project. To do this, we will conduct a qualitative study based on the case study method.

2- Enterprise Resource Planning (ERP): A Competitive Advantage

Several authors have discussed the concept of enterprise resource planning (ERP) and addressed the complexity of thinking around this concept, based on the fact that the notion of "enterprise resource planning" (ERP) is interpreted according to different

approaches. However, it is difficult to find a definition that is unanimously accepted by stakeholders in the ERP world. The diversity of situations experienced with regard to ERP explains a diversity of perceptions and therefore definitions (Mourlon and Neyer, 2002).

Recently, ERPs have undergone a significant transformation. It should therefore be noted that enterprise resource planning (ERP) software, often referred to by its English acronym ERP (Enterprise Resource Planning), is currently enjoying great success within organizational structures.

ERP is considered "a collection of application modules from a single creator, entirely developed on a single, logical database and encompassing the complete management of the company" (Tomas and Gal (2011)). In many companies in Morocco, data is not consolidated and stored in a single location. Instead, data is dispersed across various separate IT systems. The advantage of an integrated management software package lies in its ability to unify all these diverse systems and functionalities into a single software package.

For Reix (2005), ERP is considered: "a configurable, modular, and integrated IT application that aims to unite and optimize the company's management processes by providing a single repository and relying on standard management rules." Thus, this software package enables the simultaneous IT management of different sectors of the company. That said, instead of several management systems (supply, production, marketing, warehouse, sales, etc.) that operate without communication between them, the company that acquires an ERP has a system that covers all, or almost all, of the processes and services.

3- The Role of Internal Communication in the Implementation of an ERP Project

According to Autissier and Moutot (2013), communication is defined as: "a system for transmitting meaning through language manipulated by a medium." The communication process can use various tools, including: documents, posters, brochures and leaflets, websites and forums, conferences and meetings, the organization of events and gatherings, screening sessions, etc. Furthermore, Mezghani and Maaloul (2003) maintain that: "Communication is essential not only to establish understanding and support for the implementation, but also to obtain user approval."

Change often generates resistance, and the ERP implementation initiative represents a process of organizational transformation. To overcome this difficulty, internal communication acts as a facilitator to achieve project success. There are many models to support change management, but all emphasize the importance of communication in this process. According to Kanter et al. (1992), a change management method based on ten operational levers has been suggested: Collaborate and share a common vision of reality, set up a motivating system that recognizes everyone's contributions, evaluate progress using benchmark-based criteria that allow feedback, establish rules and procedures to standardize practices, promote strong communication accompanied by exchange and practice organizations, strive for rapid improvements, support sponsors and

supporters of change, Assistance through training, supervision and monitoring of the transformation process, symbols and signals that illuminate the change.

Thus, through communication, the company can transmit its fundamental principles, strengthen the role of each individual within the organization, disseminate a common vision, encourage adherence to the company's collective project, establish shared rules and reassure about the company's sustainability. Meade (2010) offers a reflection highlighting the importance of an internal communication strategy during organizational change, aimed at preserving staff cohesion and encouraging a sense of belonging among employees. Considering that human capital is the central element of the ERP project.

4- The Role of Training in ERP Project Implementation

Training plays a vital role in the successful implementation of an ERP system, as it constitutes a strategic tool for addressing organizational change. ERP implementation undoubtedly radically alters operational processes, the responsibilities of software users, and management methods, thus requiring progressive and specific development of employee skills. According to Chouchane, Louati, and Boudabbous (2017), continuing professional development is a fundamental element of company performance because it improves the ability of human capital to adapt to various technological and organizational changes. As part of ERP implementation, it not only significantly reduces resistance to change but also ensures optimal use of the computerized management system's features, a key element in achieving productivity and quality objectives. Furthermore, Zarifian (1998) emphasizes that competency-based management, accompanied by an appropriate training strategy, stimulates the emergence of a learning culture that is essential for the implementation of technological projects. Therefore, training should not be considered as a simple phase of the ERP project, but rather as a process of supporting continuous change that ensures the sustainability of the expected benefits.

5- Research Methodology

To address our research question and understand how internal communication, awareness, training, and human capital integration impact the success of an ERP project implementation, we opted for a qualitative study using the case study method, particularly the single case study. As Yin (2018) points out, case research is a qualitative approach that allows us to analyze a modern phenomenon in its authentic context, particularly when the boundaries between the phenomenon and its context are blurred. Our case study focused on the processing of a company in the construction sector that is ISO 9001 certified. The choice of this case study is justified by the company's commitment to quality and continuous improvement, as stipulated by the ISO 9001 standard. To support this development, the company launched a project to implement an ERP system to better manage information flows between various stakeholders and optimize decision-making, all with a view to optimizing quality.

The qualitative study is organized through semi-structured interviews organized by an interview guide organized around three main themes. The first theme addresses the motivations, benefits, and limitations of the ERP system implementation project.

The second theme focuses on studying human resources resistance to understand how human resources participate in the implementation of the ERP system and to identify the role of human resources skills in the success of the process. The third theme concerns internal communication. For the sample target, we targeted the executive committee and the management committee.

Table 1: Presentation of the study sample

Direction Committee	General Manager, Deputy General Manager, Manager
Execution Committee	Administrative staff (mainly HR manager, administrative staff, other department managers)

Source: Author's own elaboration

The objective is therefore to understand how internal communication and training contributed to managing resistance in the context of an ERP implementation.

To process the qualitative data, we alternated between content analysis and the development of a conceptual cluster matrix.

6- Presentation and Discussion of Results

6-1 Motivations Behind the Implementation of an ERP

The launch of the ERP (Enterprise Resource Planning) implementation project was motivated by the desire to structure the company around a solid organizational culture, faithful to the company's founding values, and primarily focused on customer satisfaction through improved product and service quality. To achieve this goal, it became imperative to organize across departments, defining clear processes and procedures for all of the company's activities.

Contrary to a strictly competitive strategy, management focused on continuous internal improvement. The idea was that good management, through an ERP, would implicitly provide a sustainable competitive advantage.

"The main motivation for the ERP project is, above all, to structure processes." [...] It's a way to better manage relationships with customers, suppliers, and other stakeholders." – Executive Committee

"[...] It's a guarantee of reliability, organization, and quality, which gives the company greater visibility among its partners." – Executive Committee

On the part of the implementation committee (HR, tenders, project managers, logistics, accounting, etc.), the motivations expressed are primarily related to a search for organizational efficiency and the satisfaction of internal and external needs.

"The main benefit of an ERP is organizational, [...]." – Implementation Committee

"[...] It provides tools to measure and evaluate performance. This monitoring helps to sustain and improve operating methods." – Executive Committee

6-2 Resistance and Human Issues

One of the main difficulties raised concerns resistance to change, particularly from staff who may perceive the project as a threat to their comfort or professional habits.

"First, it's resistance to change. Employees don't easily accept committing to a new project that changes their comfort zone." – Implementation Committee

The ERP project relies on the involvement of the human factor. It requires the mobilization of human resources around a common goal: the digital transformation of processes. This requires employee motivation and their involvement in implementation actions.

"[...] The ERP has given us clear visibility into progress within the company." – Management Committee

"The fact that the company is organized around an ERP forces teams to work more efficiently." – Management Committee

"The training associated with the ERP project allows us to meet new requirements while developing staff skills." » – Executive Committee

The executive committee's statements highlight three key dimensions of implementing an ERP (Enterprise Resource Planning) system within an organization: operational visibility, organizational efficiency, and skills development. These elements are part of a systemic perspective of organizational change driven by information technology.

6-2-1 Visibility of Business Progress: Management and Transparency

"ERP has given us clear visibility of progress within the company."

This statement echoes the central role of ERPs in integrating business processes and centralizing data in real time. From a scientific perspective, this corresponds to an improvement in management capacity (Gorry & Scott Morton, 1971) thanks to access to consolidated, reliable, and up-to-date information. ERP reduces information silos (silo effect) and allows for more cross-functional governance, facilitating coordination between departments (Davenport, 1998). Increased visibility becomes a lever for strategic decision-making.

6-2-2 Organizational Efficiencies and Process Standardization

"The fact that the company is organized through an ERP forces teams to work more efficiently."

This statement highlights the ability of ERPs to standardize processes and strengthen organizational discipline. From a theoretical perspective, ERP acts as a technological artifact that structures organizational behavior (Orlikowski, 1992), imposing shared workflows and rules. This leads to a streamlining of practices (Weber, 1922) and a reduction in redundancies or human errors. Efficiency is driven not only by technology, but also by the transformation of organizational routines (Nelson & Winter, 1982).

6-3 Importance of Training and Communication

Training has emerged as a fundamental lever for supporting change and improving internal skills. It enables gradual skill development, facilitates understanding of ERP tools, and strengthens overall performance.

"Training helps identify learning needs for greater efficiency and increased performance." – Implementation Committee

"[...] By implementing targeted training, we develop human capital." – Implementation Committee – Project Manager

"Training associated with the ERP project helps meet new requirements while developing staff skills."

ERP integration cannot be effective without change support through training. This point refers to research on the dynamic capacity of organizations to learn and adapt (Teece et al., 1997). ERP-related training is not limited to technical learning; it constitutes an opportunity to develop skills and capitalize on knowledge (Nonaka & Takeuchi, 1995). This approach contributes to system ownership and reduces resistance to change, often mentioned in the literature (Lapointe & Rivard, 2018).

It was also noted that internal communication plays a critical role in the success of the ERP project. For processes to be understood, accepted, and implemented, they must be accompanied by written procedures, measurable objectives, and clear communication channels.

"The ERP has enabled better information distribution" – Implementation Committee
Awareness-raising activities were also carried out to reduce resistance by explaining the benefits of the ERP project for the company and employees. However, some obstacles persist, particularly around the rigidity of documents and the lack of responsiveness in managing system changes.

Table 2 : Presentation of the study results

Thematic Axes	Observed results	Parties concerned
Organization and Process	Structuring activities, formalizing business processes, clarifying procedures	Steering Committee, Execution
Human capital	Better distribution of tasks, skills development, increased involvement	HR, Managers, Operational
Resistance to change	Initial adhesion difficulties, need for reinforced communication, importance of human support	HR, Execution Committee
Training & Skills	Continuing education as a lever for system integration, improving business and digital skills	Steering Committee, Execution

Internal communication	Crucial role in understanding the project, team buy-in, clarification of expectations via written materials	All parties
Performance and Monitoring	Implementation of performance indicators, measurement tools and continuous improvement	Management, Project Managers
Satisfaction client	Improved quality perceived by customers, better responsiveness thanks to a centralized organization	Commercial, Direction

Source: Author's own elaboration

7- Conclusion

In a constantly changing economic environment, marked by increased competitive pressure and growing customer demands, Moroccan companies, like many others internationally, are seeking to strengthen their performance and competitiveness through the adoption of integrated technological solutions. Enterprise resource planning (ERP) is thus establishing itself as a strategic tool for organizational transformation, providing greater process visibility, standardized practices, and more efficient business management.

However, while the technical and operational benefits of an ERP are widely recognized, its successful implementation cannot be separated from human factor management. This research has demonstrated that internal communication, awareness raising, and training are essential levers for supporting the organizational change induced by the introduction of an ERP. Moreover, these factors largely determine stakeholder buy-in and, consequently, the project's success. The case study conducted with an ISO 9001-certified Moroccan construction company highlights that resistance to change represents a major obstacle, often linked to a loss of direction and fear of the unknown. In this regard, internal communication plays a central role: it helps clarify project challenges, align stakeholders around a shared vision, and build a climate of trust conducive to system adoption. At the same time, training promotes skills development, reduces uncertainty, and ensures efficient use of the ERP system in the long term.

Thus, the initial question, concerning the impact of communication and training on the success of an ERP project in Moroccan companies, finds a clear answer through the empirical results obtained: mastering these two variables proves decisive in overcoming resistance and ensuring change adoption. Beyond the technical aspects, it is indeed the consideration of human capital that determines the lasting success of an ERP system. In short, any company wishing to implement an ERP in an effective and sustainable manner must integrate, from the upstream phase, a structured change management strategy, focused on listening, continuous communication, and skills development. This

integrated approach represents a promising path to making ERP not only a management tool, but a real lever for organizational transformation.

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