START-UP COMPANY? GET YOUR ERP SYSTEM ASAP!

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Abstract

Enterprise Resource Planning (ERP) systems are increasingly being implemented in organizations around the world. Scholars and practitioners consider the ERP system to be one of the most important technological products in an organization. Such systems have the potential to support organizations in their business operations and business growth, and can provide powerful solutions for integrating business processes. While there are a number of studies on ERP system implementation and use in general, little is known about the ERP experience of newly established companies. This exploratory study thus contributes to the growing literature on ERP implementation by studying a large, newly established company. The study applied a qualitative case-study approach to draw from the experiences of a Palestinian company that implemented an ERP system before starting business operation. Our findings suggest that new ventures can experience fewer challenges in realizing business benefits because they can more easily adopt business processes that match the software features. New ventures do not have entrenched business practices, historical business processes, or persistent culture, factors that have been found to impede realization of ERP benefits. This study recommends that new ventures, especially those who have adequate resources and expect to consistently grow in the market, should consider implementing ERP systems in the early stages, because such systems can help in establishing business operations and can support business growth. Further, many of the known barriers that obstruct benefits from ERP systems do not seem to occur in newly established firms.

Keywords: Newly-established, start-up company, new venture, enterprise systems, enterprise resource planning (ERP), benefits realization, post-implementation challenges.

1 INTRODUCTION

Technology is increasingly playing an effective role in organizations' lives, and many studies have shown evidence of the potential of technology to create and develop business practices in many organizations. ERP systems, in particular, play an important role in business operation and business development. Scholars and practitioners consider ERP systems the most important technological product for organizations (Chen, 2009; Davenport, 1998; Hawking et al., 2004; Melin, 2010; Wagner et al., 2010). Research and practice have paid attention to enterprise systems because these systems have the potential to solve many traditional problems in a company, like scattered systems and files that are not properly integrated and do not provide comprehensive data storage, in addition to other problems such as increasing business complexity (Robey et al., 2002; Wagner et al., 2006). ERP systems are considered standard systems embedded with standard business functions that most organizations have, and these systems are designed to serve businesses in different countries, in different industries and in standard functionality, and can be implemented in different places to serve a single firm (Davenport, 1998; Williams and Pollock, 2012). Many organizations consider such systems as strategically important element for their growth. This makes many small and medium sized

enterprises adopt ERP systems (Malhotra and Temponi, 2010; Soja, 2008; Panorama Consulting, 2013), and makes newly established firms, in early times, adopt the same systems (Chen, 2009).

The literature shows many challenges that face organizations when they start using an ERP system, after it has been successfully delivered. Robey et al. (2002) found two principal challenges that influence system use and influence the reaping of the system's benefits: configuration barriers and assimilation barriers. In other studies, scholars found further challenges, such as usage resistance (Kim et al., 2005), poor change management especially in the case of extensive customization or extensive organizational change (Kim et al., 2005), poor technical competence (Rajapakse and Seddon, 2005; Kim et al., 2005), and misfits between the culture including the new processes introduced by the system compared with the existing organizational culture and the old way of working (Hawari and Heeks, 2010; Peng and Nunes, 2009; Rabaa'i, 2009; Soh et al., 2003), in addition to other challenges.

It can be argued that many of these challenges are largely addressing concerns of established firms. Investigation of the original barriers that face already-established companies shows that these companies have existing systems, entrenched working practices and staff that has historically worked in certain ways. However, little is known about ERP implementation in newly established firms. Such firms are special in that they do not have a historical organizational heritage, such as existing processes, legacy systems, or an established organizational culture. Therefore, there is a call to conduct more studies on ERP implementation in such organizations (Chen, 2009). Most importantly, one of the few studies conducted on ERP implementation in newly established firms (Chen, 2009), indicated that implementing ERP in newly established firms is critical as it can leverage organizational development and build a solid infrastructure for organizational growth. Hence, scholars (e.g. Chen, 2009) have expressed the need for more research on these organizations in order to understand many issues about ERP implementations in newly established firms and their role in business growth, survival and benefits cultivation.

Implementing ERP systems in newly established firms is assumed to be dissimilar from implementing the same system in already established firms. This is because newly established firms have contextual characteristics that differ from established firms. However, it is evident in the literature that some contextual characteristics are affecting ERP implementation and benefits gained from such systems. For example, Soja (2008) found that ERP implementations are influenced with several conditions that vary from one context to another. He argues that factors like company size, implementation scope and adopted modules, are critical criteria to evaluate results from ERP projects. To address the mentioned issues, this study examines business age. That means we aim to focus in ERP implementation in new ventures as ample of existing research does not adequately pay attention to this considerably deviated context.

Interestingly, McDougall and Oviatt (1996) argued that newly established firms that have the potential to grow or who are expecting growth, in addition to private companies seeking internationalization, are required to set up policies, processes, procedures and culture that support such potential development at a very early stage. Otherwise, when these newly established firms grow, they may experience weak performance if they did not establish a substantial and solid base to foster healthy growth in the early stages (McDougall and Oviatt, 1996). Organizations can be considered new ventures or start-up companies until they are six to eight years old (McDougall et al., 2003). Some studies considered new ventures to be those less than eight years old (Biggadike, 1979 in McDougall and Oviatt, 1996; Miller and Camp, 1985), whereas others classified new ventures as those six years old or younger (McDougall et al., 2003). In other studies, this limit was considered to be up to five years (Birley and Westhead, 1994). In this work, we use terms such as 'newly established firms', 'start-up companies' or 'new ventures' to denote organizations that implement ERP systems at a very early stage after their establishment, and particularly before the business operation. This means that such

organizations, when they start their business operation, do not have existing systems, established business processes, or a completely constructed culture. These special features of newly established firms, in addition to the lack of studies about ERP implementations in such organizations, suggest that there is a need for further investigations into newly established firms.

We conducted an exploratory case study to further develop our understanding of whether the challenges discussed in the literature are also applicable to new ventures. We put forward a set of propositions for further research.

This study investigates a Palestinian telecom company that implemented an enterprise system in the early stages of its business start-up, specifically before starting business operations. The paper continues as follows: Section 2 reviews a number of relevant studies and outlines the theoretical perspective that has been considered. Section 3 explains the methodological choices that have been applied. Results are shown in Section 4 and discussed in Section 5. Section 6 presents the conclusions and recommendations.

2 THEORETICAL BACKGROUND

2.1 Barriers to realizing the benefits of implementing ERP systems

An ERP implementation is considered an important organizational practice and its success is seen as a powerful solution for business operations and for staff working in these organizations (Robey et al., 2002). Many studies have been conducted on ERP implementation and on the improved use of the system after implementation. The previous body of research has addressed highly important aspects that influence the gaining of ERP benefits. There are studies focused on benefits classification in ERP projects (e.g. Schubert and Williams, 2011; Shang and Seddon, 2000). There are also many studies focused on the drivers or motives that could lead to more benefits from ERP systems (e.g. Anaya and Olsen, 2014; Davenport et al., 2004; Gattiker and Goodhue, 2005; Seddon et al., 2010; Staehr et al., 2012; Peng and Nunes, 2009). However, a number of studies have focused on the barriers or challenges that could obstruct benefits-realization from ERP systems (e.g. Kim et al., 2005; Markus et al., 2000; Robey et al., 2002; Ross and Vitale, 2000; Sedmak, 2010). Accordingly, analysing these different studies results in a set of areas that are considered the main issues that, if dealt with and managed effectively, could lead to improved benefits, and when they are neglected they could lead to a lack of benefits-realization. In this regard, Ross and Vitale (2000, p. 238) state, "It is not clear how many firms that implement ERPs will actually achieve the benefits. It is clear that there are a number of possible pitfalls that put the benefits at risk, and careful planning can reduce the risk of failure."

There are many particular aspects related to the management of changes, whether it be organizational changes or system changes or modifications. Markus et al. (2000) emphasized the importance of change management, entailing organizational commitment and a high level of functional coordination (Anaya and Olsen, 2014; Kim et al., 2005; Markus et al., 2000; Ross and Vitale, 2000; Staehr et al., 2012). Many scholars have studied the business benefits derived when organizations implementing ERP systems change their business processes to fit the system. In fact, changes on the organizational side are not limited to changes in business processes and rules, but also include changes in the job design (Ross and Vitale, 2000; Staehr et al., 2012). On the other hand, extensive changes of the ERP product to fit the established business processes could lead to poor benefits, as the organization could lose the benefits of the best practices imbedded in the system (Markus et al., 2000). Particularly, new ventures tend to adopt the ERP system because it can equip the organization with 'best practices' (Chen, 2009). Most importantly, the large amount of requested changes may create conflict with the ERP structure and logic, and as a result, the staff might prefer not to use the system, leading to marginal benefits (Markus et al., 2000; Robey et al., 2002; Soh et al., 2003). This paper aims to

construct a classification for the barriers found in many studies, to be considered a theoretical base for this work. These main barriers are presented in Table 1.

Furthermore, many studies have found that ERP systems were unable to deliver the expected results because the staff did not use the system in effective ways, which can be attributed to a lack of human expertise and a lack of enthusiasm (Markus et al., 2000; Robey et al., 2002). In particular, Chen (2009) argued that newly established firms can acquire resources from related business groups to make the system work effectively and to obtain value from the ERP system. Furthermore, in many cases the organizations were disappointed with the technical features of the ERP system and its ability to deal with the historical data and the historical reporting mechanism (Markus et al., 2000; Ross and Vitale, 2000).

Table 1 provides a summary of the key barriers to benefits-realization from ERP systems.

Key barrier	Literature	Explanations and findings from literature
1. Organizational misfit	Gattiker and Goodhue, 2005; Hawari and Heeks, 2010; O'Donovan et al., 2010; Markus et al., 2000; Robey et al., 2002; Soh et al., 2003	Misfit between the existing systems, processes and culture from one side compared to the new ERP system, and the new processes and new ways of working from the other side.
2. Technical misfit	Carton and Adam, 2008; Markus et al., 2000; Ononiwu, 2013; Robey et al., 2002; Ross and Vitale, 2000	Dissatisfaction when the ERP system did not fulfil the needs of the business requirements, management reporting and historical data from the legacy systems.
3. People competence and availability	Anaya and Olsen, 2014; Boudreau and Robey, 2005; Chen, 2009; Kim et al., 2005; Markus et al., 2000; Ononiwu, 2013; Robey et al., 2002; Ross and Vitale, 2000; Saraf et al., 2013; Seddon et al., 2010; Staehr et al., 2012	Weaknesses in dedicated team members, who should be carefully selected, competent, well-educated, motivated and available throughout and after the implementation.
4. Managing system implementation and managing the requested changes	Kim et al., 2005; Markus et al., 2000; Ross and Vitale, 2000; Sedmak, 2010; Somers and Nelson, 2004; Staehr et al., 2012	Ineffective change management or inappropriate software modifications. Modifying the ERP system to implement the existing processes and rejecting the consideration of ERP as best practice. Lack of effective management for the consequent changes that the system entails, such as changes in roles and responsibilities.

Table 1.   Key barriers that influence benefits gained from ERP systems.

3   RESEARCH METHOD

3.1   Research Strategy

The objective of this exploratory study is to investigate whether implementing an ERP system in a newly established company differs from experiences reported in the existing literature. For this objective, the study employed an in-depth case study strategy. The case study strategy is known for its

ability to conduct exploratory investigations for the phenomenon under study, consequently providing compelling explanations for the findings (Eisenhardt, 1989; Yin, 2009). Furthermore, the case study helps the researchers understand the context, which in this study is a new venture implementing an ERP system before the actual business operation begins. Despite the limitation of the case study in the findings' generalization, it was seen as the most appropriate strategy to handle the data richness (Walsham, 1995). In addition to that, the case study strategy enables the researchers to develop theoretical propositions revealed from the data (Eisenhardt, 1989; Seawright and Gerring, 2008).

However, the case selection procedure was based on theoretical sampling, in which the decision to choose a case was based on a specific purpose (Eisenhardt, 1989). Multiple techniques were used to choose the case under investigation. Initially, the 'Snowball technique' (Patton, 2002) was used. In this regards, we sought advice from experts and consultants in Palestine to suggest candidate cases. Afterwards, we purposely selected the case as 'Stratified purposeful sampling technique' (Patton, 2002). This study focused in newly established firms, so we ensured the selected company was newly established, as defined earlier, when the company implemented the ERP system. Selecting cases based on environmental variations can clarify the findings domain, and make the study's results highly pertinent to the environmental characteristics that are chosen to determine the selection (Eisenhardt, 1989). However, as the major stream of research address established firms, this study aims to fill a theoretical categorization ignored in the literature. Hence, we assume the case type is 'deviant' according to a classification by Seawright and Gerring (2008). Generally, the purpose of a deviant case study is to "probe for new—but as yet unspecified—explanations…there is also a second, less common reason for choosing a deviant case. If the researcher is interested in disconfirming a deterministic proposition, then any deviant case will do" (Seawright and Gerring, 2008, p. 302). In this study, we assume that many barriers suggested in existing literature, may not be applicable to start-up companies. Thus, we aim to develop a set of propositions, for further research, that can explain how the implementation of ERP system in newly established firms differ from implementing the same system in already established firms. These propositions can provide insights to what extent newly established firms face the challenges that encounter already-established ones. In doing so, we can disconfirm many assertions that argue organizations experience many challenges because of the legacy systems, existing business culture and entrenched business practices, as these aspects are absent in start-up companies.

3.2   Data Collection

This study adopted a qualitative approach, which was helpful to construct a clear and deep understanding concerning ERP implementation in a new venture. Achieving a high level of understanding required conducting several interviews with the many individuals who participated in the system implementation. Many of these individuals worked at the telecom company, but the investigation also included team members working for the consulting company that participated in the system implementation. Hence, the semi-structured interviews were the primary data source in this study.   These interviews enabled the researchers to access the people-dependent knowledge by understanding the social world from the viewpoints of the people who are using the system or participated in the system's implementation (Walsham, 1995). Furthermore, besides conducting the interviews with the main people, other techniques were also used as observation and documents analysis. In order to ensure data validity, the study's results were discussed with external experts who are familiar with the ERP implementations in Palestine.

The researchers used the tape-recording technique to record the interviews. This technique is recommended in order to capture participants' views and interpretations in a more effective way (Walsham, 1995). This was supplemented with note-taking to draw the most important interpretations and to record non-verbal events. Finally, transcription was used to document all interviews' details.

Table 2 provides details about the interviewees, their business roles and the interview duration.

Business Role	Duration (in minutes)
Chief Financial Officer (CFO) & Project Sponsor	45
Head of Accounting Section & Functional Consultant	110
Financial Accountant	45
Inventory & Fixed Assets Accountant	50
Technical Consultant & Application Administrator	60
Cash Management Accountant	40
Head of Human Resources Section	60
HR Assistant	40

Table 2.   Interviewees' details.

3.3   Data Analysis

Data analysis is the cornerstone of exploratory studies that aim to develop theory from case studies (Eisenhardt, 1989). This section will briefly discuss the technique that lead the researchers outline their conclusion from the huge details they had collected. We applied the 'within-case analysis technique' (Eisenhardt, 1989; Yin, 2009) to comprehensively understand the case from different aspects, but, mainly, we paid attention to the specific matters related to the objective of this work. In order to develop this comprehensive understanding, we adopted hermeneutics approach (Klein and Myers, 1999) that entails understanding the whole from the parts, and the parts from the whole. In particular, we analysed every interview, as one part, by looking for interesting concepts related to this study, and we coded these concepts or themes. This process was iterated through all interviews to develop the whole understanding. Furthermore, we were iteratively revisiting the data collected from the interviews, the notes and the secondary sources, like the website and company reports, to make sense of the case, and to ensure that different sources are consistent. However, to conclude a set of themes that are highly related to this study, those reported in the results section, we analysed these themes under the light of the literature by comparing the generated themes with the theoretical constructs developed earlier. In this case, the four key barriers were considered a theoretical template (Langley, 1999) to compare the empirical data through it.

3.4   Case description

This study investigates a Palestinian company, called in this study 'Telco M'. This company provides mobile telecommunication services in Palestine, and started its business operations in 2009. Within its first three years of operation the company engaged about 600,000 subscribers in the West Bank alone. This success was despite the political and economic instability and crises that affect Palestine. Telco M has invested heavily in technology; in 2012 alone, the company invested U.S. $21.4 million for network upgrades and operational information systems. By the end of 2012, the company had 419 employees (of whom 397, representing about 95% of the company staff, had a bachelor's degree or higher), whereas it had only about 150 employees when the system's implementation was begun in early 2009. The company started the implementation of the Oracle E-Business Suite, which is classified as a tier 1 global product (Panorama Consulting, 2013). When the company launched its services to customers in November 2009, many fundamental modules (e.g. general ledger, accounts receivable, accounts payable) of this wide and global system were ready to be used. This system has been viewed as an important component of the technological infrastructure of the company, helping to introduce its business services and streamlining business processes, and leading the company towards more growth.

4   RESULTS

Reviewing the existing literature provides a set of challenges, classified in Table 1. These principal barriers and challenges will be considered through a theoretical lens to examine the extent to which they exist in newly established firms. The findings will be presented according to the illustrated barriers.

4.1   Misfit between the existing culture or processes and the new ERP system

When Telco M implemented an Oracle ERP system in 2009, it had just been established. Therefore, the organizational culture was not yet completely formed. On the contrary, the ERP system was seen as an organizational initiative to effectively contribute to a modern culture for the company. The key functional consultant, who also served as the accounting section head, commented, "When we face a new business requirement or any business issue, the first thing we think about is how this emerged matter could be assimilated into the system, and what functionality and what features are in the system that could help us deal with this issue." Echoing this, the finance director noted that "in many cases and through the meetings with the company board, we stated some terms used in the ERP system as if they are business terms known to everybody, before being reminded by the board members that these terms were unclear to them." Therefore, the ERP system, including its terms and concepts, was used by the company staff, and the system brought in new terms to become part of the new corporate culture of the company. The human resources section head commented that "in order to recruit a new staff member and through the job interviews, we ask the applicants if they have worked with the Oracle ERP business suite, as this competence is desirable, and we mention to them that they will work on this ERP system and that this enterprise system will be the main information system that they will work on for most of the day." However, it is clear from the data that the system brought a new and acceptable culture to the company. The company considered the ERP system a regulation mechanism or a working platform that provided a base for the regular business procedures and rules. In fact, the informants did not see any significant conflict between their business procedures and rules and the ERP system, with some exceptions related to country rules, as the system was seen as a driving force to do work.

This conceptualization differs from the existing literature, which has found that ERP implementations in organizations, particularly in established companies, create a cultural dialectic between the existing working practices and culture on one side, and the practices implied by the ERP system on the other.

4.2   Technical barriers from the software

Since Telco M is newly established and the system has been adapted to use 'best practices', there was no obvious misfit between the business requirements and the ERP system. Although the ERP system provided a standard functionality for the company, many informants noted that the system lacked many important reports. Therefore, the company staff, in collaboration with external consultants and implementers, developed a wide range of reports necessary for the company. Most importantly, since the company was a new venture, there was no data migration. In contrast, the literature shows that inconsistencies between old data and new system functionality can create significant problems (Markus et al., 2000) and impede benefits-realization.

4.3   People competence and availability

The company began the implementation with a limited number of staff (120 employees), including only three in the IT department. In addition, the company hired external staff as technical and functional consultants, who were available throughout the implementation and in the first period after the implementation. Telco M also hired staff members, many of them were seniors, in different business functions that would use the system, and hired additional staff when required. By the time the ERP system was in operation, the number of staff was increasing, with approximately 450 employees

by the end of 2012. Staff members underwent training sessions when they joined the company, and the ERP system functionality and procedures were the main topical areas. This meant the staff were learning about the system without unlearning previous procedures. The HR assistant noted, "I was very motivated to work on the system, and I was asking my colleagues, and looking at the system help files and on professional blogs, to learn some features and to learn how to use the system efficiently." It is worth mentioning that many of the staff who were hired after the implementation were competent in and had previous experience with ERP systems, and were motivated to use the system and to develop their experience working with such systems.

The literature shows that one of the main barriers that obstructs ERP system use and benefits-achievement is staff competence. This is because the existing staff's skills are related to the previous system and they most likely lack the skills related to large-scale ERP systems.

4.4   Managing the implied changes

Telco M did not start its business operations until it had an ERP system. The company started implementation of its ERP system at the beginning of 2009 and continued for nine months, until the system was ready for use in September 2009, the same period during which the company launched its services. The financial director remarked, "We adopted the ERP system to bring best practices for the company and to start our business operation according to these international standards, so we were keen to implement the system without extensive modifications." It can be inferred from the interviewees that the system was seen as a cornerstone of the infrastructural system to drive business operations. Furthermore, because there were no pre-existing work practices, there were no system changes or extensive customizations. The technical consultant and the application administrator from the consulting company responsible for the system implementation said, "The customization was limited and it was just to address country needs, like the currency treatment." It is also important to mention that there were no new roles or changed job definitions, so there were no wide organizational changes. The job structures had been recently designed and the company had not yet finished the development of these designs, so there were no changes to job practices to be managed, as there would be in an established firm.

5   DISCUSSION

Telco M began its business operations after the ERP system had been put into use. When the company started using the system, it did not have any historical background or existing culture that could resist the new culture (including organized processes for decision-making and a profound reliance on technology and digital means) embedded in the implemented system. In this case, the organizational cultural conflict revealed in many studies (e.g. Markus et al., 2000; Soh et al., 2003) did not seem to exist. This means that Telco M was not attracted to traditional working practices; rather, it was a newly established company that needed an enterprise system as a basis for introducing a modern way of doing business, based on international standards.

The issue of ERP implementation in newly established firms has received little attention in the literature. This study accentuates the need to address this issue in information system research. We, therefore, posit a number of propositions to be addressed in further research.

The literature shows that many organizations prefer to adapt the system to the organization. These adaptations create tension between what is called the 'commodity standard product' and the organizational processes, which sometimes causes serious conflicts with business strategies or with the success of the whole system, especially in the assimilation stage, when people start using the system (Robey et al., 2002; Chen, 2009; Markus et al., 2000; Melin, 2010; Wagner and Newell, 2004; Wagner

et al., 2010). However, the gap between the new system's functionality and the existing business practices necessitates changes on one of the sides. Organizations either change their business processes to embrace the system's functionality, with a low level of customization, or they change the system to fit the existing business processes (Markus et al., 2000; Melin, 2010; Staehr et al., 2012). This study found that it was beneficial for the case company to create organizational processes that were consistent with the system's functionality; they needed to delay defining the organizational processes until the ERP system was implemented. Therefore, the conflict between existing processes and the new system's functionality, which is apparent in many studies, was not present in this study.

We therefore propose:

P1: Newly established firms experience less organizational misfit between the ERP system and organizational processes than do established firms.

P2: Newly established firms experience fewer challenges in change management related to ERP implementations than do established firms.

However, as illustrated in previous studies (e.g. Markus et al., 2000; Ross and Vitale, 2000), some organizations become quite disappointed with ERP systems because their business requirements and reporting needs were not deliberately met or because they were undermined by the implementers.

There are challenges related to incorporating existing data with the ERP system, especially when some organizations need to retain legacy data for many years (e.g. for regulatory compliance or because their products remain in service for many years) (Markus et al., 2000). However, Telco M, as a new venture, did not encounter such challenges as the company had no historical data. Therefore, the absence of entrenched business practices and existing historical data helped this new venture to implement the new ERP system in a fresh environment without many obstructions, as cited in previous studies.

Hence, we propose:

P3: Newly established firms experience less technical misfit related to ERP implementations than do established firms.

Furthermore, many studies (e.g. Boudreau and Robey, 2005; Kim et al., 2005; Robey et al., 2002; Saraf et al., 2013) have highlighted the importance of a dedicated and motivated team with expertise and enthusiasm to use the system. These studies found that many barriers that obstruct ERP benefits-realization are attributed to the lack of staff members' competence. Such competence would enable them to understand the ERP system and its potential, and would significantly improve their ability to manage such wide-scale systems (Kim et al., 2005). Robey et al. (2002) found that a dedicated core team that is carefully selected, motivated with incentives and empowered to act, along with effectively managed consulting relationships, are critical for responding to configuration challenges; the absence of such staff or their resistance can negatively influence the system's use and the benefits gained from it. However, Telco M only had 120 staff, including three employees in the IT department, when the ERP system was implemented. One challenge faced the company, which is the need for experienced people able to play effective role in the early stages. The company decided to hire a number of key persons who had worked in ERP system in telecom business to be served as advisors to other staff members, and to communicate with the consulting company implemented the system. This is aligned with Chen (2009) who suggested hiring staff in new ventures from relevant business groups. 'Telco M' was thus able to hire staff with adequate skills. The interviews showed that the new staff members were motivated to use the system and there was no significant user resistance. Interestingly, the findings revealed that more than 95% of the company's staff had a bachelor's or higher degree. We

conjecture that when new ventures are able to hire competent and educated people, they are less likely to have problems dealing with wide-scale technological systems. This is related to cultural and technical competence, which is one barrier attributed to the lack of benefits-realization from enterprise systems in previous studies (Rajapakse and Seddon, 2005; Robey et al., 2002).

Accordingly, we propose:

P4: Newly established firms are more agile in terms of acquiring the required ERP competences than are established firms.

P5: Staff in newly established firms will demonstrate less resistance to using ERP systems than will staff in established firms.

Therefore, ERP implementation in new ventures seems to be less challenging because it is not laden with the many obstacles found in previous studies. Consequently, this study suggests that new ventures should give priority to implementing an ERP system early in the organizational life cycle and should allocate appropriate funds for it. The implementation will thus be less risky and challenges can be managed more easily. In addition, this can provide more benefits for newly established companies, such as providing a healthy base for business growth and a working environment based on best practices in the field.

We conjecture that it was essential for the case company to implement the ERP system to develop the organizational infrastructure. The company operates in the telecom industry, which is based on the technology, and the management believes in the role of technology to build strong capabilities. Businesses in other industries not have the same belief, and not pay attention to technology products early. Even if this company was newly established, the case revealed that the company hired 150 employees in the first year. The company also allocated a great deal of investment to implement technology products. This issue is most likely absent in many small and medium enterprises that lacks the resources and usually do not give priority for investment in technology products (Malhotra and Temponi, 2010). Furthermore, this company was planning to grow, and one reason for their adoption to the system was to help them build a solid base to leverage their future growth. The number of employees was 150 in 2009, and jumped to 419 at the end of 2012. Other businesses, particularly small organizations, do not usually have similar growth rate. We argue that implementing an ERP system in a start-up company can lay an important foundation for growth, but the implementation should take under consideration other factors. We advocate the factors suggested by Chen (2009), as they influence the implementation and even the decision to implement ERP systems in newly established firms. For example, factors like company's growth stages, the unique industrial characteristics, and having information technology capabilities found as critical contingencies revealed in Chen's work (2009) and supported in this study. Furthermore, research found that organizations that define their business objectives and align their business strategies with the ERP system implementations are able to create more value and override conflict possibilities (Chen, 2009; Soja, 2008). Thus, new ventures that define their objectives and pay attention to their strategic plans become more able to utilize their ERP systems to leverage growth.

6   CONCLUSION

Based on an exploratory case study, this research suggests that well-known barriers to achieving benefits from ERP systems can be far less problematic for newly established companies than for established companies. Furthermore, we provide interesting suggestions that can assist new ventures in their implementation of ERP systems. Early adoption of an ERP system provided, in our case, a solid foundation for business growth and was seen as a key enabler of business development. At the same time, many barriers that usually affect implementation and benefits from ERP systems in established companies are not clearly present in new companies. For example, dialectic tensions between the

processes implied by the system and the existing organizational processes, and even staff resistance, were not considered very challenging in our case. The findings provide deep insights into the ERP implementation in a newly established company and a set of propositions for further research. It is recognized that employing a single case study has many limitations, especially the generalizability. Despite such limitation, developing the aforementioned propositions reveals the experience of the company under investigation, but certainly these propositions are suggested within many contextual or environmental characteristics discussed like industry environment, the potential to growth, and the capabilities and resources available or can be acquired in early times. Thus, we invite further research, preferably with large samples, to confirm whether organizations that rapidly adopt ERP systems before they have broad functional needs are likely to be more successful than organizations that delay adopting ERP systems until later stages of the organization's life. Finally, there is a need for further studies to investigate the challenges that face newly established firms in particular.

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