

Role of Project Management Competency and Spiritual Intelligence as Mediator of the Relationship between Enterprise Resource Planning and Organizational Sustainability: An Applied Study

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Abstract: Ability of a small firm to incorporate an Enterprise Resource Planning (ERP) system into its operations is becoming a more financially viable alternative for small firms, providing them with efficient and cost-effective management solutions. Small Medium Enterprises (SMEs) are deploying ERP systems to become more competitive, efficient, and customer-friendly as the business climate becomes tougher. However, ERP providers and implementers face certain specific challenges in the SME sector. The purpose of this study is to analyze the impact of enterprise resource planning on organizational sustainability and to explore mediating role of project management competency and spiritual intelligence on enterprise resource planning and organizational sustainability of the SME sector in Pakistan. The sample size for this study was 190, and the participants were employees of the SMEs sector in Twin cities (Islamabad and Rawalpindi) of Pakistan. The findings show that enterprise resource planning (ERP) has a significant positive impact on organizational sustainability and project management competency and spiritual intelligence play mediating roles between enterprise resource planning (ERP) and organizational sustainability. Besides, our findings have implication for theory and practice.

Keywords: Enterprise resource planning, project management competency, spiritual intelligence, and organizational sustainability.

Introduction

Organizations everywhere are under pressure from a fiercely competitive market to boost their productivity with new approaches if they hope to keep going strong. Different strategies such as Enterprise Resource Planning (ERP) (Uwizeyemungu & Raymond, 2010) and Total Quality Management (Oakland, 1999), have been adopted by firms to aid in the development process. The IT industry has used the resource-based view theory (RBV) of the firm to study and theorize the impact of unique IT capabilities on long-term competitive advantages (Masli et al., 2010). The RBV and contingency theories underpinning ERP's impact on operational domains like the supply chain (Hwang & Min, 2013). Previous studies have shown a correlation between advanced IT competence and business success. The enterprise resource planning (ERP) system is among the best IT developments in recent years.

In the beginning, ERP was only used by major corporations, now its is implemented by different types of businesses, including SMEs (Everdingen & Waarts, 2000) and public sector organizations (Kumar, Maheshwari, & Kumar, 2002). Organizations have reported both positive and negative outcomes after using an ERP system, according to research (Barker & Frolick, 2003). Consequently, picking the best system to use is not a simple job. It is imperative for businesses to develop a system that will facilitate the attainment of their objectives with minimal risk. Despite ERP's complexity, it has been shown to help businesses improve their performance and gain a competitive edge when paired with the right external and internal environments. Small and medium-sized enterprises (SMEs) can increase their chances of providing high-quality service and achieving their goals by upgrading and adapting their existing business systems and organizational structures on a regular basis to function within an Enterprise Resource Planning environment. However, as was previously said, ERP implementation is not the only avenue for business process optimization. Before installing an enterprise resource planning (ERP) system, businesses should seek to pinpoint problem areas and make adjustments (Christofi et al., 2013).

ERP has many benefits, however its impact on an organization's long-term viability has been questioned. Despite the fact that the majority of businesses have implemented ERP across all or a significant portion of their operations, many will readily admit that they are only scratching the surface. Some further worry that ERP's early stages will be fraught with instability because of the company's large investment and high risk level. So, researchers from the US and elsewhere have started looking

at the effects of ERP on businesses. The impact of enterprise resource planning (ERP) adoption on business performance must be measured, both before and after implementation (Al-Sabri et al., 2022).

At the same time, by continuously streamlining the various stages of the organization, the cost of producing the day-to-day tasks and management of the organization has been eliminated, which unquestionably improves the company's current competitiveness in the market and makes it more beneficial when compared to other organizations. Interdepartmental communications, material procurement, inventory management, promotion, and employee administration will all be rethought. An integrated and uniform ERP software framework has the potential to dramatically streamline a business's processes. Management structures within each network facilitate swift responses to customer demands, higher levels of market responsiveness, more efficient business operations, and longer-term viability (Zhang & Zheng, 2019). This study investigated the impact of ERP on productivity in SMEs. This study uses a quantitative research approach based on a questionnaire survey to inquire into the mechanism of TQM and the mediating roles of project management competency, spiritual intelligence, and organizational sustainability in developing countries like Pakistan that can explain the connection between ERP and organizational performance.

In addition, the old system's stability was the sole aspect ruled out, which can be attributed to the current emphasis placed by implementation teams on data migration plans. This approach is supported by the availability of standardized migration plan templates, enabling a smoother conversion process (Zhang & Fareed, 2020). As highlighted by Van Groenendaal et al. (2020), this emphasis on data migration and careful planning significantly reduces the probability of project failures, making it less likely to be considered a critical success factor (CSF). For the training of individuals working with the ERP package, it is essential to strike a balance. Ideally, the training should be of medium duration and depth, ensuring users are familiar with general and commonly used features without overwhelming them with exhaustive, lengthy, and detailed sessions (Van Groenendaal et al., 2020). This approach helps users feel comfortable with the package and prevents them from feeling alienated during the implementation process.

According to AlMuhayfith and Shaiti, (2020), employees initially found the transition from the old legacy applications to the new ERP system is difficult, necessitating extensive change management. In recent years, the increasing financial viability of incorporating an ERP system has prompted many small firms to adopt this technology into their operations. As the business climate becomes more challenging, SMEs are deploying ERP systems with the aim of enhancing their competitiveness, efficiency, and customer-centric approach. Despite the evident benefits, ERP providers and implementers encounter particular challenges unique to the SME sector (AlMuhayfith & Shaiti, 2020). Business defects and difficulties can be localized across project management borders, such as sales orders, inventory control, and bill of material handling, and can have an influence on ERP adoption and usage in SME (ibid, 2020). These business issues were discovered to include ascribed several organizational, technical, and human factors because of this research, that, to properly integrate ERPs, organizations may need to adapt people's work behaviors and Knowledge of technology, ownership, and management of business processes, and company-wide policy are all important (Sadrzadehrafiei et al., 2016).

For ERP installation projects to be completed on time and budget, SMEs must identify and address any flaws or shortcomings in their business operations during ERP preparation/pre-implementation. Because of the difficulty of ERP, the increased prices connected with it, and the difficulties in adopting it, businesses are rethinking their plans for procuring and installing enterprise-wide solutions (Zhang & Fareed, 2020). One of the most serious issues is a lack of understanding of the advantages of an end-to-end system according to Rodriguez et al. (2019), the essential link that had been lacking between IT and SMEs was knowledge of the benefits that an enterprise business solution could give, regardless of the size of the company.

Despite the numerous ERP installation studies, the fundamental difficulty with ERP studies has identified several reasons why ERP systems fail. Poor project management, reluctance to change, a lack of top-level support, and insufficient user training were among the reasons related to the failure of ERP. Furthermore, most of the literature believes that off-the-shelf software installations simply involve a vendor and a client, ignoring the importance of the intermediary partners who are often present (Sahran et al., 2016). SMEs may also encounter issues such as a shortage of long-term strategy and inadequate training. Because training is sometimes too expensive for SMEs, they may be forced to pay exorbitant consulting fees. Installing an ERP system in a small organization requires extra effort for a variety of reasons, including organizational change, business process design, data integration, and user training (AlMuhayfith & Shaiti, 2020). According to Sahran et al. (2016), access to the market and money, a lack of technology, a shortage of labor and competent staff, and work culture are all difficulties that SMEs face while implementing ERP systems. Most businesses do not consider long-term company strategy, instead of focusing solely on survival. Companies that can take some risks and adapt to changing conditions are more likely to survive and develop (Sahran et al., 2016). There are several barriers related to ERP implementation which include project management competency, project planning, data integration, data quality, cost overruns, and continuous improvements.

The study investigates how ERP has affected the long-term viability of small and medium-sized enterprises (SMEs) in Pakistan. This is vital because it determines whether or not SMEs in Pakistan will benefit from investing in ERP technology by evaluating the efficacy and applicability of ERP systems in their unique context. Secondly, this study also explores well an organization's project managers can bridge the gap between ERP adoption and long-term success. The study is enriched by the inclusion of this section, which investigates how project managers' skill sets and competencies affect the smooth implementation of ERP systems and, by extension, the long-term viability of small and medium-sized enterprises (SMEs) in

Pakistan. It's a helpful guide to understanding the role of project management in ERP initiatives. Thirdly, this study looks into how spiritual intelligence might bridge the gap between enterprise resource planning and long-term success in the workplace. Examining how SMEs' spiritual intelligence affects their decision-making, problem-solving, and teamwork during ERP adoption brings a new and interesting angle to the study. It acknowledges the importance of looking at leadership and management in these contexts as a whole. Fourthly, it examines effect of ERP on the long-term viability of SMEs in Pakistan. This is important contribution because it will quantify the direct impact of ERP systems on the long-term viability of SMEs, information that will be useful to policymakers, business executives, and academics studying ERP technology. The fifth goal looks at how spiritual intelligence, organizational sustainability, and skill in managing projects may all work together to improve development outcomes in nations like Pakistan. This is a big deal, since it places the research in the context of the specific difficulties and opportunities that small and medium-sized enterprises (SMEs) in these areas confront. While it recognizes that its findings may not be applicable in all situations, it can nonetheless offer recommendations that are unique to the circumstances in which their target firms operate.

In sum, these contributions, which take into account factors like project management competence, spiritual intelligence, and the unique challenges of doing business in a developing country, add up to a thorough comprehension of how ERP systems can affect the sustainability of SMEs in Pakistan. This all-encompassing method not only contributes to the expansion of theoretical understanding, but also provides useful insights that can influence policy decisions and SME decision-making.

Literature Review

In the last decade, ERP implementations have skyrocketed. ERP software had a global market value of €22.4 billion in 2013 (Costa et al., 2016). In addition to being a necessity for successful and cutting-edge businesses, enterprise resource planning (ERP) software has become an invaluable tool for corporate administration (Costa et al., 2020). Early adopters of enterprise resource planning (ERP) systems were concentrated in the manufacturing sector, as stated by Selchert (2004). However, times have changed, and ERP systems are now widely employed across a variety of industries, including nonprofits, government agencies, and NGOs. It has been proposed that the ERP system can be viewed as a software package, each of which is comprised of a collection of modules. Each of these sections handles data processing and collection for a single operational unit or group of related tasks. The Enterprise Resource Planning (ERP) system, as defined by Muscatello et al. (2003), is a collection of interconnected software modules used in tandem with a central database to help businesses better oversee their asset and personnel management. There was a lack of integration between the various historical information systems, as stated by Al-Muharfi (2010). For instance, there was disconnection between the customer management and financial systems. According to Kang et al. (2008), the lack of integration is a defining feature of legacy information systems. ERP systems shifted their focus from supporting individual operations to aiding in broader company processes. Investment in an enterprise resource planning (ERP) system, as claimed by Veljanoska and Axhiu (2013), centralizes data needed for different business activities, such as accounting and customer relationship management, in a single database. Thus, all team members will have access to the most recent data (Calisir, 2004). According to Kang et al. (2008), many companies have used ERPs for reasons other than improving efficiency. This could be to follow the lead of competitors who had already made the investment in ERP. It's common knowledge that ERP systems are more difficult and distinct from legacy ones (Chou et al., 2014). Based on the findings of researchers like Thomas (1998), Yusuf et al. (2004), and Al-Turki (2013), it appears that implementing an ERP system might have a significant cultural impact on a corporation. In their 2013 article, Veljanoska and Axhiu suggested that IS has the potential to affect the company's norms, practices, and structure.

Besides, businesses of any size that adopt an ERP system will reap both measurable and intangible rewards. The significant benefits of using ERP systems have previously been confirmed by numerous studies. Rapid process management is one of the many benefits of enterprise resource planning systems (Hunton, 2003; Olhager et al., 2003). The time it takes to execute company procedures is shortened and information sharing is facilitated by ERP systems. Additional advantages of ERP include optimization of corporate operations, adoption of industry best practices, and consolidation of separate businesses into a single entity. ERP systems also facilitate information sharing between businesses and help shorten the duration of business operations. Additional advantages of ERP include optimization of corporate operations, adoption of industry best practices, and consolidation of separate businesses into a single entity. Companies are beginning to invest in such a system since the returns might be so high (Abdinnour-Helm et al., 2003). Over the past decade, ERP has become commonplace in large and medium-sized businesses, as reported by Kullunki et al. (2011).

According to Qureshi and Abdulkhalq (2015), SMEs need to use ERP systems in order to manage worldwide expansion. ERP systems, as observed by Equey and Fragnière (2008), were primarily adopted by large organizations. In the past, SMEs were unable to compete due to the limitations of traditional management and legacy technologies, especially when up against larger competitors who had access to more cutting-edge solutions. There is a growing selection of tools available to help small and medium-sized enterprises (SMEs) succeed. Esteves and Jose (2009) agree that ERP systems are essential for SMEs to improve efficiency and competitiveness. According to Veljanoska and Axhiu (2013), using information technology allows smaller businesses to level the playing field with their larger competitors. Doom et al. (2010) analyzed the variation in CSFs among Belgian SMEs that adopted ERP software. They demonstrated the urgency with which SMEs make changes to their operations in order to maximize the benefits of their current situation. They can get there by reviewing their infrastructure frequently and focusing on streamlining and innovating their processes. Large firms are distinct from SMEs (Ian et al., 1995), hence there may be a number of difficulties in implementing technology like ERP systems. It has been proven in the literature

that establishing an enterprise resource planning (ERP) system at a large organization may come at a relatively cheaper cost than for a small or medium-sized business (SMB) (Maber et al., 2003).

Due to their limited resources, small businesses have a lower chance of surviving or fast recovering from the failed installation of ERP systems, as noted by Muscatello et al. (2003) and Christofi et al. (2013). Small businesses, in comparison to their larger counterparts, have fewer available resources and a lower capacity to generate more funds. According to Hunton et al. (2003), businesses that want to install an ERP system need to set aside sufficient funds for the project. Inadequate training and a lack of long-term planning are two other challenges that SMEs may encounter. Reason being, SMEs may have difficulty paying high fees for consulting help because thorough training is frequently costly for them (Ian et al., 1995). Several factors, such as change management, business process innovation, data migration, and user training, add extra work to the ERP installation process for SMEs. Adopting such systems may be difficult because of the difficulties associated with implementing these changes.

Since small and medium-sized enterprises (SMEs) differ from major corporations in many ways, it is important to examine how these firms adopt enterprise resource planning (ERP) systems. Knowing how small and medium-sized enterprises (SMEs) implement enterprise resource planning (ERP) systems is crucial for improving business processes and overall system performance (Iris and Cebeci, 2014). As a result, we'll dive deeper into the ERP implementation process below.

Use of ERP System

According to the research of Ruivo et al. (2012), "ERP use" describes the point at which businesses routinely employ ERP software. According to Venkatesh et al. (2003), "system usage is considered to be the dependent variable in technology adoption models in the IS literature," and "system usage is considered to be the main factor in IS success models," as observed by Delone and McLean (2003). According to Shaikh and Karjaluo (2015), utilizing these systems is the key to reaping the benefits of IT/IS investments. Firms need to enable and support users to use ERP systems to maximize benefits after implementation (Jespersen et al., 2005). A botched implementation of enterprise resource planning software is a real possibility. The degree to which users embrace ERP systems, as reported by Nah and Teh (2004) and Umble et al. (2003), determines the system's ultimate level of success or failure. It is important to understand how people learn to effectively use ERP systems, as stated by Chou et al. (2014). Even if ERP system implementation goes smoothly from a technological standpoint, users' actions in making the most of the system will determine its ultimate success (Kwahk and Lee, 2008). The majority of businesses that have adopted ERP systems have, however, neglected to place sufficient emphasis on the implementation phase.

Therefore, it is crucial to investigate what aspects affect ERP system utilization in order to understand what will inspire users to make the most of the software. It is the users, not the technology, who are usually to blame when an organization fails to fully exploit its IT resources, says Garson (2020). Al-Gathani (2003) claimed that the first step in the answer to assuring the successful utilization of the system is to determine the variables that make individuals consent to or oppose IT. The authors concede that while receiving attention in the West, these aspects have been largely ignored in the context of small and medium-sized enterprises (SMEs) in Pakistan. Little is known about the current state of ERP implementation in Pakistan. Studies focusing just on the stabilization (use) phase are scarce, as reported by Basahel et al. (2016).

Influences on Enterprise Resource Planning (ERP) System Adoption

Several factors influencing ERP system adoption have been identified in the literature. Using the IS success model developed by Delone and McLean, Bokhari (2008) investigated the connection between system utilization and user happiness. A meta-analysis concluded that there is a weak but substantial correlation between system utilization and end-user happiness.

The influences on ERP's adoption were investigated by Chang et al. (2008). Six hundred Hong Kong service and manufacturing sector ERP system users were polled. According to the data they analyzed, there is no correlation between system complexity and ERP application adoption. Lin (2010) conducted a study of major companies in Taiwan, and used the results to create an empirical model that analyzes the effects of IS quality and management support on ERPs' adoption. ERP adoption was found to be influenced by top-down buy-in. Based on the diffusion of innovation theory (DOI) and the resource-based value theory (RBV), Ruivo et al. (2012) created a research model. Using a survey as their primary data source, they performed a cross-country analysis and found that while complexity and compatibility were important to Portuguese businesses, they were not to Spanish businesses. Their research on Portuguese businesses ran counter to that of Chang et al. (2008), who found that system complexity plays a major role in the adoption of enterprise resource planning (ERP) software. Companies in Portugal and Spain both rated training as a critical factor in deciding whether or not to implement ERP. Comparing the ERP value and use of SMEs in the Iberian Peninsula with the Nordic countries, Ruivo et al. (2012) conducted a large-scale web-survey study. They discovered that training had little role in the adoption of ERP systems by SMEs in Scandinavia, but played a crucial role by SMEs in Iberia. Their findings were consistent with those of Ruivo et al. (2012), who examined the role of training in the adoption of ERP systems in small and medium-sized enterprises (SMEs) in Portugal and Spain.

Consistent with the findings of (Ruivo et al., 2012), which show that the compatibility has a major influence on ERP system use among Portuguese enterprises, we find that compatibility is important for both regions. Their findings were consistent with those of Ruivo et al. (2012), suggesting that the complexity of ERP systems is a significant factor in their adoption by

Portuguese SMEs. Similar to this, Nwankpa and Roumani (2014) published a report based on a survey of ERP users across multiple industries to determine what factors affect ERP adoption and user happiness. Comparable results to those found by Baroudi et al. (1986) and Bokhari (2005) were found. According to their findings, user happiness is crucial to the success of ERP implementations. Equally important is the fact that a new study by Costa et al. (2016) was a groundbreaker in its pursuit of the elements most influencing ERP user happiness and adoption. Information from 260 randomly selected businesses was used to compile the study's findings. A questionnaire was used to gather the information. Their findings corroborated Lin's (2010) finding that ERP adoption is significantly affected by the approval of upper management. Uddin et al. (2019) also examined the relationship between ERP adoption and other parameters by drawing on the unified theory of acceptance and use of technology framework and the literature on innovation. They discovered a noteworthy impact on the practical application of ERPs. They also discovered that the intention to use ERPs mediated the relationships between the four constructs of performance expectancy, effort expectancy, social influence, and ERP use.

Therefore, it is clear from the aforementioned studies that ERP system utilization is positively correlated with complexity, compatibility, training, user involvement, user satisfaction, and top-level management support.

ERP Systems and Organizational Effectiveness

There has been extensive research into the link between enterprise resource planning (ERP) systems and corporate performance, with varying findings published. ERPs have both beneficial and negative effects on company performance, as evidenced by the research. Many studies, however, have concluded that ERP systems have a net beneficial effect on company performance and have brought about measurable shifts in key business metrics. According to Li (2011), the biggest issue with ERPs studies is the lack of investigations linked to their failure, which may be due to the fact that businesses are reluctant to talk about their disappointments. The ERP system deployment project at Dell Computer, for instance, was canceled. They claimed it was too rigid to accommodate their rapidly expanding international activities (Muscatello et al., 2003). It's normal practice for businesses to implement IT solutions in order to boost their efficiency. In order to boost their efficiency, more and more businesses are investing in IS. In order to improve entity decision-making and business performance, several companies have invested in ERP systems, as mentioned by Li (2011). According to Hailu (2014), an IS is crucial if it affects the enterprise functions, performance, and productivity of a business. According to Chien and Tsaur (2007), companies that have implemented an ERP system have seen considerable performance improvements in a variety of areas. These include, for example, the capacity to deliver real-time information to customers and a shorter production cycle. ERP systems have several advantages, and Hunton et al. (2003) emphasized one of them: the ability to boost both market value and business performance. According to research by Kallunki et al. (2011), ERPs are seen as a long-term strategic investment that affects the entire organization, although the effects of this sort of system do not become apparent for several years. ERP investment also has a significant favorable impact on business process outcomes, according to research by Agaoglu et al. (2015). In a similar vein, Ruivo et al. (2012) claimed that businesses implementing ERP systems will see a rise in productivity. However, research by Kang et al. (2008) found that ERP investment did not always improve company output. According to Hunton et al. (2003), there is a lack of credible evidence showing that IT investments pay off for businesses. Although an ERP system could improve business operations, Velcu (2008) contended that it was impossible to assess the system's financial impact with any precision.

Poston and Grabski (2001) examined the detrimental effects of ERP installation on company output. They look into the three years after an ERP system was implemented at 50 different companies. They determined that there was no appreciable improvement in either the remaining revenue or the ratio of selling, general, and managerial expenses to revenue over the course of these three years. In addition, they found that the ratio of employees to income had decreased significantly over the course of the three years, and that the ratio of items sold costs to revenue had increased significantly over the course of the preceding year. Overall, they discovered that while companies who used ERP systems saw gains in efficiency, such gains were outweighed by increases in other costs.

Hayes (2001) identified 63 companies; Hunton et al. (2003) conducted a research matching these businesses with similar companies that had not deployed ERPs. Performance among ERP system adopters was shown to be higher than among non-adopters, according to research by Hunton et al. (2003). Researchers Wieder et al. (2006) examined how Enterprise Resource Planning (ERP) systems are implemented and how that impacts business results. The consequences of their research for the connection between ERP systems, supply chain management, and productivity were substantial. Over 2100 businesses in Australia with SCM or ERP systems and/or their related control units were polled by questionnaire. Results showed that only companies with prior experience using ERP systems saw gains in productivity after adopting ERP and SCM software.

There is clearly an increasing interest in ERP systems in the literature, but relatively few research have looked into the prevalence of ERP systems in Pakistan's smallest businesses. Thus, the purpose of this research is to investigate the connection between enterprise resource planning (ERP) systems and business performance Pakistani small and medium-sized enterprises (SMEs), and to fill a vacuum in the existing literature on this topic.

Theoretical Framework

The current investigation is grounded in the Contingency Theory, which postulates that contextual factors shape organizational patterns of behavior, individual expectations, and interpersonal interactions within groups. Scholars in the field of Information Systems have used the Contingency Theory to investigate what factors influence the efficiency of IT-based knowledge

management systems. After reviewing various theoretical frameworks, this study finds the contingency theory framework developed by researchers like Lawrence and Lorsch (1976) to be the most appropriate for its examination of the connection between the contingency factors, ERP system usage, and business performance for SMEs in Pakistan. The core idea behind the contingency theory is that the study of organizational behavior, as well as the expectations and actions of a workforce, can be affected by external circumstances. Many authors in the IS field have utilized the contingency theory in their work. For instance, in 1988, Tait and Vessey surveyed 30 private companies in Australia. The researchers considered the viability of a contingency analysis to learn more about the connection between the elements that influence the utilization of user engagement and user involvement in CBIS, and the success of the CBIS as a whole. They concluded that contingency theory was a useful tool for investigating the impact of user participation on system achievement. In a similar vein, Ifinedo and Nahar (2009) examined the impact of two determinants (organizational structure and size) on the performance of an enterprise resource planning system. They continued to argue, on the basis of the contingency theory, that management in organizations might achieve more success with their ERP systems by aligning organizational aspects with associated situations. In keeping with the contingency theory established by Otley (1980) and Ittner and Larcker (1998), Abdel-Maksoud et al. (2005) constructed a model. They argued that performance assessment systems should take into account exogenous aspects such as the environment, management, technology, and organizational structure. The theoretical viewpoint of Abdel-Maksoud et al. (2005) highlighted the impact of these contingencies on the structure and operation of businesses. In line with previous research and the literature reviewed, this study intends to use a contingency theory-based framework to investigate the connection between ERP system adoption and firm performance across six contingency factors (user satisfaction, complexity, training, user involvement, top management support, and compatibility), as depicted in Figure 1.

A group of behavioral theories, the contingency theories, contend that there is no one, optimal approach to organization or management (Fiedler, 1964). This is due to the fact that different situations call for different leadership styles. According to Donaldson (2001), a framework for the study of organizational design can be developed with the aid of the contingency theory of organizational structure. In order to close this knowledge gap, it is crucial to investigate some of the contextual variables that could affect ERP implementation.

Therefore, we investigate the connection between ERP system adoption by SMEs in Pakistan and six potential moderators: user happiness, complexity, training, user involvement, top management support, and compatibility. These variables were chosen because they have been shown to be important moderators of the basic link between ERP adoption and other variables in the literature (Costa et al., 2016; Ruivo et al., 2012; Bokhari, 2005; Boroudi, 1996). We also take a look at how using an ERP system has altered our firm. The conceptual framework for this study is shown in Figure 1, and its description is provided below.

Contingency Factors

As can be seen in Figure 1, there are two main categories into which the study's elements fall: organizational factors, such as support from upper management, and characteristics linked to ERP usage, such as complexity, compatibility, user happiness, user involvement, and training. Previous literature, covered in earlier sections, and the above considerations form the basis for this classification. In the exploratory study, the significance of these elements is examined. This research adds two more considerations to the mix: knowledge exchange and vendor. The next section shows how the exploratory study's findings helped shape the rest of the research.

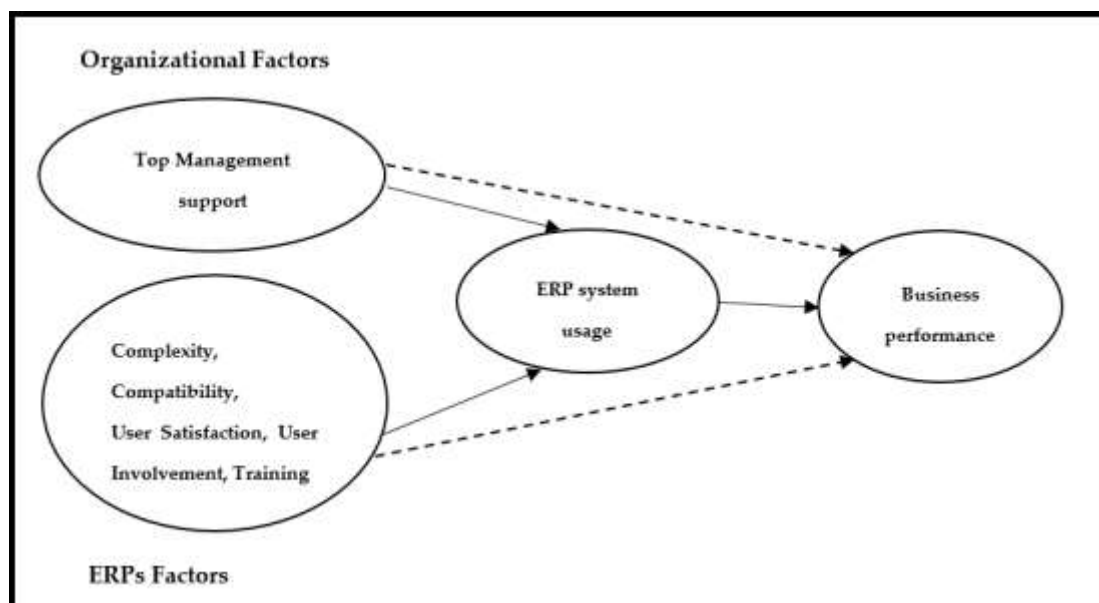


Figure 1. The proposed theoretical framework.

The Exploratory Study

Research hypotheses can be developed from the three primary relationships using an exploratory study, which is similar to what has been done in earlier studies (Huang and Chen, 2018). In order to accomplish this, ERP users in a variety of roles (such as IT manager and ERP division head) across companies with and without ERP systems have been requested to take part in the study. SMEs in both manufacturing and services were selected to evaluate different enterprise resource planning (ERP) systems (e.g., SAP, Oracle, etc.). SME contact information has been gathered from a variety of sources. The data came primarily from Rawalpindi and Islamabad-based employees who worked for software firms and had previously helped small and medium-sized enterprises adopt enterprise resource planning (ERP) systems. The questionnaire was developed and administered to a sample of five ERP system end-users, with questions aimed at eliciting feedback on the relevance of the factors (top management support, compatibility, complexity, user satisfaction, user involvement, and training) selected by the researcher during the literature review. The researcher also included an open-ended question asking for participants to share their thoughts on what else is most important for ERP implementation success, based on their own personal experiences.

Knowledge Sharing

In a business setting, knowledge sharing is defined by Lin (2007) as "a social interaction culture, referring to individuals exchanging knowledge, experiences, and skills within organizations." Organizational culture has been the subject of numerous discussions in the ERP system literature. People's work habits, technological aptitude, and interpersonal skills can all be influenced by the company's culture, as Krumbholz and Maiden (2001) point out. According to Park et al. (2015), effective knowledge sharing amongst individuals who possess relevant competences and information is crucial to the smooth operation of any business. When employees share what they've learned with one another, the company benefits in a number of ways. Knowledge sharing has been linked to a number of favorable outcomes in the past, including accelerated new product advance developments, improved group performance, enhanced firm innovation capabilities, and improved business success (Li, 2007; Cummings, 2004). Several research projects have examined the relationship between ERP systems and the exchange of expert knowledge. Users need training on the ERP system's in-built procedures and policies, as pointed out by Lee and Lee (2008). Indirectly linked to the success of the ERP system, tacit knowledge sharing is mediated by explicit knowledge sharing, as stated by Shao et al. (2012). Park et al. (2007) conducted research in Korea that looked at how employees' ability to absorb information affected their ability to use enterprise resource planning (ERP) systems. The researchers concluded that ERP system effectiveness is significantly impacted by employees' absorptive capacity for applying knowledge.

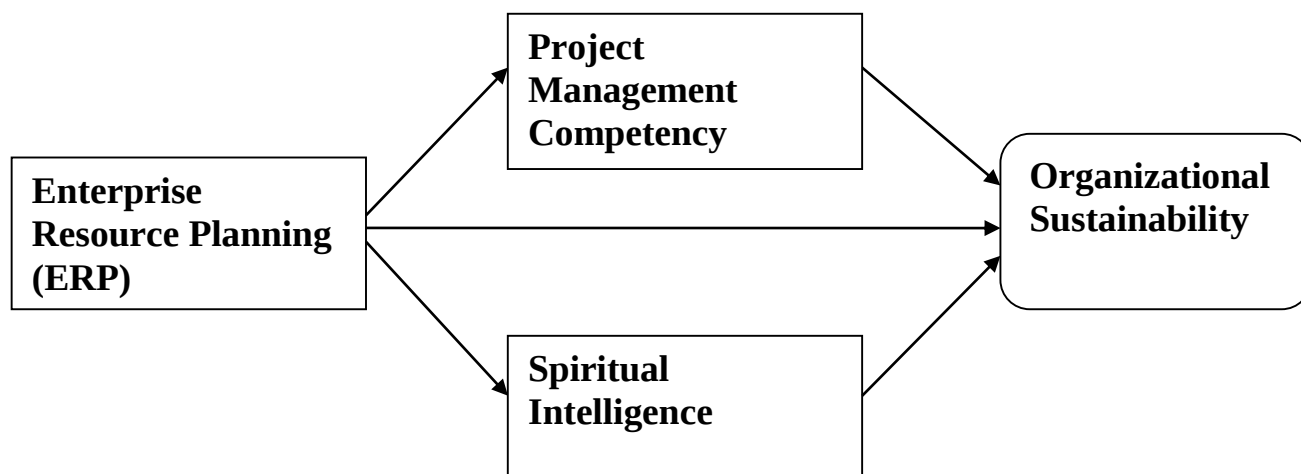
In addition, Chou et al. (2014) created a conceptual model to investigate the impact of knowledge sharing on an enterprise resource planning system. The ERP system's impact on employees' propensity to share what they've learned has also been investigated. Using an ERP system was discovered to improve with the introduction of knowledge exchange.

Vendor Support

After deciding to switch to an ERP system, businesses start looking for a reliable vendor. It is extremely important for small and medium-sized businesses to be selective when choosing their vendors (Zhang et al., 2005). This is because the quality of ERP products may be improved with the help of the correct supplier, increasing the likelihood that users will be informed and engaged. Supplier consultants and other outside facilitators play a role in ERP systems' effectiveness, as stated by Wu and Wang (2007). The vendors involved in the ERP system implementation process have been the primary focus of most prior research. In 2009, Dezdar and Sulaiman investigated what makes an ERP rollout successful. The researchers set out to determine which aspects of the system environment, such as vendor support and system quality, were most important to the success of ERP deployment in Iranian businesses. Their findings showed that vendor support has a role in ERP adoption success. Thong et al. (1993) compared the levels of success in implementing information systems between two groups of businesses: the first group consisted of small businesses whose vendors also provided consultancy service, while the second group consisted of businesses who used independent consultants and vendors. In terms of organizational impact, user satisfaction, and overall information system effectiveness, they discovered that the first set of businesses fared better than the second. Previous research has highlighted the significance of vendor support in the context of ERP deployment, and this study confirms that it has a direct, positive effect on both total information system efficacy and user happiness. Literature reviews show that studies on vendor support and its effect on the adoption of enterprise resource planning (ERP) systems are rare, especially in the Saudi Arabian setting. This research agrees with earlier research that there is a dearth of studies examining the significance of vendor assistance on ERP system utilization. However, as was previously indicated, the interviewee viewed vendor support as one of the most crucial aspects of ERP implementation. Therefore, determining how vendor support affects ERP implementation is crucial.

Research Framework and Hypothesis

The study's goal is to investigate the elements that influence enterprise resource planning (ERP) usage as well as the link between ERP system usage and organizational sustainability with mediating role of project management competency and spiritual intelligence. By aligning organizational aspects with associated eventualities, managers in organizations can achieve greater performance with their ERP systems. Based on the above literature following hypotheses are made.



Hypotheses

H1: Enterprise resource planning has a significant positive impact on organizational sustainability.

H2: Project management competency mediates the relationship between Enterprise resource planning and organizational sustainability.

H3: Spiritual intelligence mediates the relationship between Enterprise resource planning and organizational sustainability.

In summary, the theoretical framework for the present study is based on the Contingency Theory and highlights how it has been utilized in the Information Systems literature to explore the relationship between factors influencing user engagement and participation in CBIS and the ultimate success of the system. The framework emphasizes the importance of aligning organizational aspects with relevant contingencies for improved performance with ERP systems.

Methodology

The survey method/research methodology was used in this exploration. As the name implies, it is a method of research that places a strong emphasis on obtaining a representative sample from the study's population. This was a major survey-based primary research initiative involving SME personnel.

The study design determines the procedures and strategies utilized to conduct research. Therefore, a grand plan that outlines the research basis was produced. The purpose of this research was to look at hypotheses concerning how ERP affects the business sustainability of SMEs and mediating role of project management competency and spiritual intelligence between ERP and organizational sustainability. To build hypotheses based on existing literature and ideas, the current study used a deductive reasoning approach.

The sample size for this study was 190, and the participants were employees of the SMEs sector in Islamabad and Rawalpindi cities of Pakistan. Males and females were represented in the demography. Purposive sampling, which is a form of non-probability sampling approach, was used to collect data. Because data were obtained at random from employees of the SME sector, a purposeful sampling strategy was adopted. Questionnaires were filled out by executives, managers, and staff who are currently employed in the SME sector in Pakistan. The survey used a five-point Likert scale, with answers ranging from "strongly disagree" to "strongly agree." This information pertains to managers' and employees' input on the organizations related to leadership methods. I have visited with some of the organizations' leaders and employees in person to obtain their honest thoughts and opinions. The hypothesis is then tested using statistical methods to see if the stated links either accepted or rejected data that has been collected.

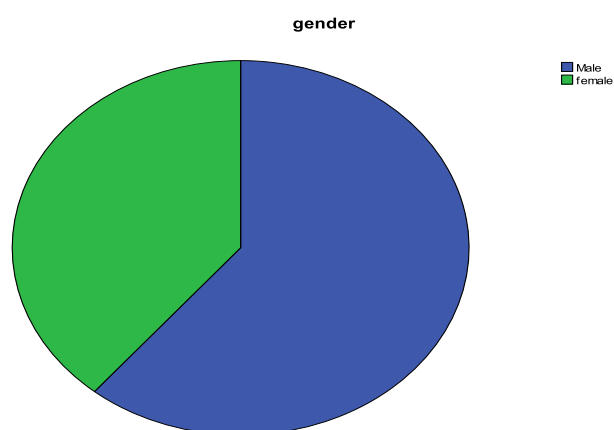
Empirical Results

The data were analyzed using SPSS (Statistical Package for Social Sciences) software Version 21. The questionnaire's scale reliability was determined by using scale analyses in SPSS to calculate the Cronbach's alpha value. Gender and age were among the demographic factors studied, as were variables. The influence of independent factors on the dependent variable was verified using regression analysis, and the link between independent and dependent variables was verified using correlation analysis.

Frequency Distribution
Table 4.2.1

Gender

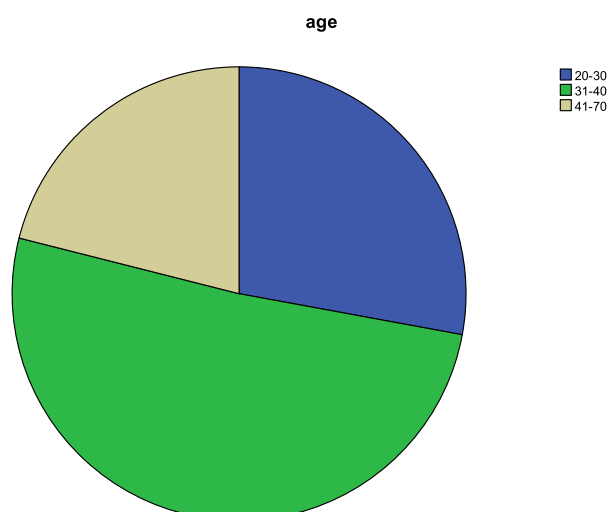
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	116	61.1	61.1	61.1
	female	74	38.9	38.9	100.0
	Total	190	100.0	100.0	

**Interpretation:**

The recurrence circulation of candidates with respect to their sexual orientation appears in the table above. The female candidates number up to 74 of the aggregate 190 candidates. The rest of the 116 candidates are guys and they constitute 61.1% of the information. The outcome unmistakably portrays the support of males on a more elevated amount.

Table 4.2.2**Age**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-30	53	27.9	27.9	27.9
	31-40	97	51.1	51.1	78.9
	41-70	40	21.1	21.1	100.0
	Total	190	100.0	100.0	



Interpretation:

Table 4.2.2 and the going with pie outline give the recurrence division of the candidates as indicated by their age. This table exhibits that out of 190 candidates 40 candidates shape a part of the gathering with ages 41-70, 97 lie in the scope of age gatherings 31 to 40 and 53 candidates lie in the age aggregate 20-30. The most astounding segment of candidates is possessed by candidates in age gather 31 to 40 years.

4.3 Correlation

Table 4.3.1

Correlations

		ENTERPRISE RESOURCE PLANNING MEAN	PROJECT MANAGEMENT COMPETENCY MEAN	SPIRITUAL INTELLIGENCE MEAN	ORGANIZATIONAL SUSTAINABILITY MEAN
ENTERPRISE RESOURCE PLANNING MEAN	Pearson Correlation Sig. (2-tailed) N	1 190	.486** .000 190	.701** .000 190	.787** .000 190
PROJECT MANAGEMENT COMPETENCY MEAN	Pearson Correlation Sig. (2-tailed) N	.486** .000 190	1 190	.653** .000 190	.705** .000 190
SPIRITUAL INTELLIGENCE MEAN	Pearson Correlation Sig. (2-tailed) N	.701** .000 190	.653** .000 190	1 190	.786** .000 190
ORGANIZATIONAL SUSTAINABILITY MEAN	Pearson Correlation Sig. (2-tailed) N	.787** .000 190	.705** .000 190	.786** .000 190	1 190

** . Correlation is significant at the 0.01 level (2-tailed).

Pearson connection was connected in the table above to decide the connection between the independent, mediating, and dependent variables. There is an imperative association appeared by the esteem ($p < 0.01$) between all factors. The numbers 0.787**, 0.705** and 0.786** give a confirmed significant positive relationship between the independent variable (Enterprise Resource Planning) mediating variables (project management competency) & (Spiritual intelligence), and the dependent variable (Organizational sustainability).

The implementation of an ERP system was supposed to solve the issues, which included some data discrepancies. This was a secondary goal because a strategic use to help new firms was only addressed later in the project (Christiansen et al., 2022). One of the most hotly debated topics is the necessity for an ERP-process fit, which necessitates some business and process adjustments. The link between effective ERP deployment and business process transformation is symbiotic: the benefits of ERP implementation frequently result in business change. However, the organizational and cultural antecedents that support or prevent the successful management of organizational changes are likely to have an impact on its consequences (Christiansen et al., 2022).

Despite numerous ERP implementation studies, the primary problem with ERP studies is that there are few analyses of its failure; this is likely due to enterprises' aversion to sharing their disappointment (Agaoglu et al., 2015). SMEs may also face challenges such as a lack of long-term planning and insufficient training. SMEs may be compelled to pay extravagant consultancy costs since complete training is frequently too expensive for them. For a variety of reasons, such as organizational transformation, process management design, integration, and user training, implementing an ERP system in a small firm involves extra work (Agaoglu et al., 2015).

Conclusion

This study primarily addresses the growing financial viability of incorporating Enterprise Resource Planning (ERP) systems within Small and Medium Enterprises (SMEs) in Pakistan. It highlights how ERP systems can enhance competitiveness, efficiency, and customer-centric approaches, especially in the face of increasing business challenges.

Furthermore, the research delves into the impact of ERP on organizational sustainability within the SME sector. It explores how ERP systems streamline operations, optimize resource utilization, and enable data-driven decision-making, thus contributing to sustainable practices and reduced ecological footprints.

Additionally, the study investigates the mediating roles played by project management competency and spiritual intelligence in the relationship between ERP and organizational sustainability, emphasizing the importance of skilled project management teams and a culture of environmental responsibility within organizations.

Besides, this research contributes to the academic field by establishing a positive relationship between ERP implementation and organizational sustainability within the SME sector. It provides insights into the mediating factors of project management competency and spiritual intelligence, enriching existing knowledge. Also, the study offers a valuable empirical perspective on ERP adoption challenges and opportunities in SMEs, a topic with limited research in the Pakistani context.

The findings of this study offer practical guidance to managers in SMEs, highlighting the potential of ERP systems to improve competitiveness and efficiency. It underscores the importance of investing in project management competency to ensure successful ERP implementation. Managers can also leverage the insights on the role of spiritual intelligence in fostering a culture of environmental responsibility within their organizations. Moreover, the policymakers can draw upon this research to develop informed policies and strategies that support SMEs in adopting ERP systems.

The study's insights into sustainability practices can inform policies aimed at promoting eco-friendly business approaches. By understanding the challenges faced by ERP providers and implementers in SMEs, policymakers can create an enabling environment for ERP adoption within small firms.

While this study provides valuable insights, it is not without limitations. These limitations include the sample size and the geographical focus on the Twin cities (Islamabad and Rawalpindi) of Pakistan. Future research could address these limitations by conducting larger-scale studies encompassing a broader geographical area. Additionally, exploring the role of other mediating variables or conducting longitudinal studies to assess the long-term impact of ERP on sustainability could be avenues for future research.

In conclusion, this study contributes to both academic knowledge and practical applications by highlighting the financial viability of ERP systems for SMEs in Pakistan, their impact on sustainability, and the mediating roles of project management competency and spiritual intelligence. It offers valuable insights for academicians, managers, and policymakers while suggesting areas for further research and development in this field.

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