



# Evaluating the Enterprise Resource Planning (ERP) System of a Bread Manufacturing Organisation from the Perspectives of Stakeholders

Yvonne Chan<sup>1</sup>, Shy Wei Chin<sup>1\*</sup>

<sup>1</sup>University of Bolton, A676 Deane Rd, Bolton BL3 5AB, UNITED KINGDOM

<sup>2</sup>Universiti Tenaga Nasional, Jalan Ikram-Uniten, 43000 Kajang, Selangor, MALAYSIA

\*Corresponding Author

DOI: <https://doi.org/10.30880/jts.2022.13.02.005>

Received 12 June 2021; Accepted 8 December 2021; Available online 10 January 2022

**Abstract:** Enterprise Resource Planning (ERP) framework integration is an important and foundational business process preparation and knowledge sharing process. The ERP framework has in the past decade been regarded as a vital enabler for organisational performance and functions as an integral feature in today's diverse and competitive market climate. It normally needs considerable feedback in terms of commitment, time, and resources to incorporate an ERP method. In recent research, numerous contributing factors to the ERP's performance or failure were more specifically demonstrated; still, only the ERP's contributions in developed countries were illuminated. Moreover, many developing countries are interested in ERP deployment in their organizations. As Microsoft Dynamics 365 has not been thoroughly researched to date, this study seeks to penetrate an unexplored territory for Malaysia by concentrating on Malaysia-specific results. The importance of this analysis is a detailed review of the spectrum of Microsoft Dynamics 365 operations in supply chain management. Additionally, this analysis aims to help specific sectors and enterprises further grasp the value of Microsoft Dynamics 365 as an enterprise resource planning (ERP) solution. A reasonable amount of evidence would be supplied that addresses the feasibility, usefulness, and practicality of Microsoft Dynamics 365. This research aimed to discover variables that impact ERP users in an ERP environment, with the intention of gaining a more detailed understanding of the end-user ERP output through a qualitative case study. It is important to recognise all of the influences on the stakeholders in the ERP management and in this study, the Microsoft Dynamic 365 (D365) was the target system. The study utilized a qualitative research framework that combines computational techniques and mathematical estimation for data collection and interpretation. The ERP data obtained are the data required for answering the study questions. The findings of this study show the importance of stakeholders and ERP Framework as well as ERP system such as D365 in promoting individual ERP successes. The researcher also looked at the views of stakeholders on the impact of system quality. This relationship was investigated from the viewpoints of the end-users, stakeholders. Understanding the relative value of the information system factors places an emphasis on the vital performance factors perceived by end consumers by organisations and suppliers. In general, the conclusion from the analysis is that the management of the supply chain in extended companies should not expect too much of an ERP system as eventually still needs various customization within certain industries. This study has helped to reduce the discrepancy in the theory of stakeholders regarding the criteria for the selection of systems and methods for bread production in Malaysia, although some of the criteria and methods provided for in the theories might not be prominent in the real world. Practitioners tend to respect and comply with the requirements of the organisation over the more sophisticated ERP scheme.

**Keywords:** ERP framework, stakeholder's perspective, ERP end-users, Microsoft Dynamic 365, supply chain management and system quality

## 1. Introduction

The supply side of a supply chain is more about buying and procuring control and physical inventories which rely on the demand of the supply chain. Logistics are an extension of the physical administration of the delivery of goods and the transition of expertise from an organisation to its clients. The handling of the content and transition of information into the immediate supply chain is the subject of resource management. According to Davenport and Brooks (2004), SCM is applicable to the management of all supply chain participants, such as the vendors, suppliers, and manufacturers who are engaged in the supply of goods to end customers from producers. It should be emphasized that supply chain is not a modern logistics concept alone (Kauffman, 2002; Lummus et al., 2001) which then SCM evolved from all the underlying concepts.

Every SCM's performance depends on how well the machine operations are handled. In recent years, knowledge of the efficiency of the supply chain of an organisation has played an important role. Growth, estimation, and demand estimate can be done. Raw materials can be made available at manufacturing points and, where appropriate, the business structure can be reorganized. The company's ability to process details and make decisions efficiently but accurately is made possible. The framework of ICTs serves as an aid in the management of information and activities among networks. A company with this framework can facilitate decision-making, provide access to, and execute information. The means of converging experience, the flow of material, and new technologies must be carried forward as well.

There has been a strategic edge between companies, which has evolved from time to time and new concepts and values have emerged. The company itself has an important role to play in managing the supply chain because of the large number of actors in it. Competition now occurs within the supply chains themselves and not just between rival individual firms. A big network of independent businesses would be the supply chain, the supply chain with the greatest benefit for consumers at the lowest expense of the chain. As the market diversifies and competition intensifies, businesses spread internationally, and companies are keener to continue to stay within the competition and to increase their profile.

Business process planning and knowledge sharing within and outside the organisation are important in keeping up with the industry's progress. Pertaining to ICT, ERP framework integration is an important and foundational business process preparation and knowledge sharing process. It helps to carry out and monitor deployed premises at various locations as well (Ince, et al., 2013). The ERP structure has a centralised database with details and knowledge that is stored for all operating units, and integrated functionality is executed on that platform. This framework encourages staff from multiple business divisions to have direct access to knowledge.

Information distortions and delays may be minimized because the ERP framework allows information flows more visible (Akkermans, et al., 2003). As a consequence, it is anticipated that introducing ERP would contribute to effectiveness across the supply chain, and this would enable companies to further meet different goals (Vakilifard, et al., 2013). ERP schemes can be used in several different groups, for different objectives. While ERP is increasingly common, the usefulness of each system differs, and some dubious systems are still in use. The thesis in this analysis concentrates on the ERP method, its use in supply chain management, and Malaysia.

According to Tsai et al. (2010), ERP is the most competitive and the largest enterprise framework, providing cost efficiency, enhanced logistics, industry expansion, and support for corporate business processes. The ERP scheme is a resource management technique; therefore, companies can use this mechanism to manage operations inside the organisation (Petter, DeLone & McLean, 2008). Al-Turki (2011) suggested that the increasing technical production is making it possible for a big contribution to the accomplishment of an ERP structure that was initially aimed at more developed countries, thanks to technological and cultural pressures. ERP is an important tool for industry development, combining different business functions and promoting effortless purchases and productions.

### 1.1 Problem Statement

The ERP framework has in the past decade been regarded as a vital enabler for organisational performance and functions as an integral feature in today's diverse and competitive market climate. It normally needs considerable feedback in terms of commitment, time, and resources to incorporate an ERP method. It is challenging for SMEs since they have less time, money, expertise, and budget than big corporations. While this is real, the ERP framework may be customized to suit the company's business needs.

Despite this, ERP systems are often sold to small and medium-sized enterprises (SMEs) by ERP vendors due to financial restrictions. These pre-configured systems are usually configured with specifications that are specific to any SME sector. Additional parts and devices will be bought in the future for a higher price. Thus, SMEs could face problems around integration with ERP solutions, because the pre-configured ERP framework and their business processes don't match up (Venkatraman and Fahd, 2016). Having stated that, the core aim of this study is to analyse the ERP's application on supply chain management.

New technologies are considered a tedious task, particularly when the technology is planned to replace a heritage structure. When the new technology was launched, Salim, Suleiman and Salisu (2015) asserted that problems are frequently connected to insufficient criteria, end-user aversion to new technology adoption, and the lack of assistance in handling. Ramdani (2012) pointed out that in many organisations, the question of the importance of the ERP method to end-users was a core issue. ERP users may affect the performance or contribute to the failure of the ERP system, according to Koch (2011). Peslak and Boyle (2010) proposed that, in an ERP environment, users play an important part in its performance. Despite the broad literature available on the ERP systems, the performance of the ERP system needs to be investigated from the point of view of end-users (Kwak et al., 2012).

In recent research, numerous contributing factors to the ERP's performance or failure were more specifically demonstrated; still, only the ERP's contributions in developed countries were illuminated. Moreover, many developing countries are interested in ERP deployment in their organizations. An ERP system used successfully in one area could struggle in other regions (Zhu et al., 2010). The ERP in industrialized regions must be examined in the sense of developing countries. Zhu et al. (2010) mentioned that ERP schemes have been adopted globally, but the anticipated benefits have not yet been realized in many regions.

This research aimed to discover variables that impact ERP users in an ERP environment, with the intention of gaining a more detailed understanding of the end-user ERP output through an observational study. It is important to recognize all of the influences on the end-users in the ERP sense when executing ERP. Various developing countries, like Germany, Italy, and Japan, have all dedicated funding to a research program in order to determine the role and importance of ICT in their economic climate, which may also have an effect on the SCM. Technological usage has progressed above Malaysia since the technologies are more advanced.

In addition, developed countries have also used ICT effectively. Utilising the experience and idea about ICT, they have enhanced the activity of their SCM as ICT plays a prerequisite role (Salim, Suleiman & Salisu, 2015). This means that ICT is allocated to the supply chain network as a prerequisite. These thereby increase the efficiency of their companies in terms of their SCM and optimise their profits and benefits. Malaysian organisations are right to make a concerted attempt to recognise the functions of ICT, and the decision is more crucial than ever.

## 1.2 Purpose of the study

As Microsoft Dynamics 365 has not been thoroughly researched to date, this study seeks to penetrate an unexplored territory for Malaysia by concentrating on Malaysia-specific results. The importance of this analysis is a detailed review of the spectrum of Microsoft Dynamics 365 operations in supply chain management. Additionally, this analysis aims to help specific sectors and enterprises further grasp the value of Microsoft Dynamics 365 as an enterprise resource planning (ERP) solution. A reasonable amount of evidence would be supplied that addresses the feasibility, usefulness, and practicality of Microsoft Dynamics 365.

To remain competitive, businesses also introduce new approaches to build companies and make efficiencies available to their consumers. Some companies, although have many years of experience in managing ERP systems, are still in the process of adopting ERP systems. Lin, Singer and Ha (2010) demonstrated that convergence of technology is necessary for organizations to satisfy public mandates, strengthens procedures and increases efficiency. However, Iskanius (2010) projected the failure rate of ERP system to be 70 percent. Researchers reported that many organizations have not been able to expand and use their ERP programmes effectively (Zhu et al., 2010).

It is essential to identify and factor in variables that impact users in an ERP device context. Caruso (2009) argued that employees are important to the optimal success of a company. Nah, Tan and Beethe (2005) find that it mostly depends on how the end-user program is used to assist with ERP implementation. IT managers would be able to focus their energies on challenges that end users encounter if they properly grasp the relative value of the output drivers for the ERP systems (Hsu, Lai, & Weng, 2008). Based on these results, companies would have a greater view of the influence end-users experience in an ERP setting. In short, the following research questions are addressed:

1. To study the relationship between the application of Microsoft Dynamics 365 and the supply chain management performance in a bread manufacturing company in Malaysia.
2. To identify the major constraints of Microsoft Dynamics 365.

## 2. Literature Review

The introduction of the ERP framework would have a huge effect on the company, helping to improve operations. The ERP has three stages: the pre-build process, the build stage, and the post-build phase, as reported by Velcu (2010). However, with regard to Soja and Paliwoda-Pękosz (2013), they remember that the ERP framework's lifecycle consists of four phases, the charter phase, the project phase, the shoo-down time, and the progressive stages. The chartering of the project is subject to business considerations about the scale of the project, budgeting and selection of the framework.

The key project is the development process to only start the framework and the customers. The information system is steady and assimilated for regular operations throughout the shakedown process. The last step is the upstream one,

which helps to assess the advantages of the ERP method. After an ERP framework has been deployed, the post-implementation period for ERP systems starts. To assist organizations and stop device failures is the post-implementation process ongoing support such as updates, repairs, and preparation. The structure needs relentless help from senior management, to prevent an information system (IS) disintegration (McGinnis & Huang, 2007; Salmeron & Lopez, 2010). The ERP framework could maintain the long-term output benefit and capacities of what Nicolaou and Bhataania (2008) stated on the maintenance of the post-implementation process.

Many organizations adopt and intend to operate their ERP systems after the deployment to avoid any threats to their daily business activities (Ng, Gable, & Chan, 2002). According to Willis and Willis-Brown (2002), there are many problems regarding the post-implementation process, as go-live represents a fresh start. To address existing and future consumer demands, the system must be questioned. an expansion of the device is necessary (Muscatello & Chen, 2008; Wei, Liou, & Lee, 2008). other studies have shown that ERP systems' high running and repair costs are a perennial issue (Law, Chen, & Wu, 2010; Salmeron & Lopez, 2010). In the past, recent studies suggest that consumers must be qualified and ready for them. It is advised that organizations undertake training for end-users on ERP applications over the life cycle of the product (Amoako-Gyampah & Salam, 2004; Woo, 2007).

This stakeholder principle by Freeman (1984) advocated a deviation from the corporate obligation to shareholders (business parties that have economic involvement in the company's achievements), to duty to all stakeholders. This philosophy is designed to accommodate the spectrum of responsibility of the corporation of those who personally benefit, who have the power to affect, or who are affected by the success of the organisation (Miles, 2012; Billgren and Holmen, 2008; Laplume et al., 2008). in order to advance long-term competitive goals for companies (decision-making processes) while still remaining socially accountable to the society, stakeholder philosophy was viewed as imperative to incorporate (Laplume et al., 2008; Reed, 2008; Freeman, 1984).

It has become concentrated due to the conceptualization of business management, especially in supply chain management, of the persons and groups linked to the corporation (business unit), which results in classifications of consumers, vendors, workers, shareholders, and even the general public (McVea and Freeman, 2005). Clarkson (1995) states that stakeholders important to the discussion include developers, governmental agencies which provide infrastructures, and regulatory bodies, as well as staff, suppliers, and communities. Additionally, Rowley and Moldoveanu (2003) note that critical stakeholders or entities that are strongly important to an organisation should be regarded as stakeholders. Thus, the social structure of a corporation can be decomposed into a collection of social categories, with the company's social relationships with the society acting as an example, or a business discourse. The key aim of the research is to investigate the connection between the individuals' identities and their contributions to the company.

McVea and Freeman (2005) hold that "Stakeholders are not treated as important individuals, but are merely characterized by their roles" (p.60). Crane and Ruebottom (2011) maintain that by having a firm-centric framework in an organisation, the word "stakeholder" may lose its significance, as the importance of their presence would be diluted if their positions were perceived purely from the firm's viewpoint. considering these different arguments, stakeholders must be described in various ways and must be understood based on stakeholders' differing roles (Miles, 2012; 2017). This adheres to the business theory of calculating linkages (typically representing economic trade or regulatory control) among the actions of the company and the stakeholders and their impact on the outcomes of any decisions. the research concluded (Mitchell et al., 1997) Concerns have been voiced regarding different procedures and principle adaptation that have deemed these objections, but stakeholder research is still valid and significant in business management (Miles, 2017).

Stakeholder philosophy argues that the secret to business is value generation (e.g., McVea and Freeman, 2005). From a sustainability point of view, this poses the issue of catching and deteriorating all elements of value creation, including environmental or social capital loss, and the development of sustainable solutions. The theory of stakeholders may help to capture these market and stakeholder parameters as it provides a structure for identifying planetary borders for a given organisation, and a reference point for social and environmental sustainability considerations that are not relevant, but relevant to the stakeholders. The focus on the organisation and its stakeholders is being enhanced to include industry, its stakeholders and all other facets of the environment. Whereas traditional organisation is specifically based on performance, the resulting collection of stakeholders and management issues is not subjective, since it is related to stakeholders' material needs. This strategy provides a wider variety of environmental issues to be included than if the emphasis is just on the main impacts of a particular firm's operations.

According to Kalling (1999; 2003), the three distinct phases of the IT Resource Management (ITRM) Framework process involve the recognition, creation, and security of capital. There are two main phases in finding a resource: looking for it, then making a choice about it. Problems linked to recognition activities include there is uncertainty as to what resource is needed and how to improve it. Strategic orientation, management of information, and top management engagement both allow complexity and confusion to be handled. The activities under construction attempt to build the resource and mirror the research, design, and realization processes. This is used as a learning mechanism that includes exchanging information and organisational processes. Resolving learning problems involves obtaining new information from an external source, such as a research company that improves the resource. The corporate culture, including norms and principles, is crucial to cultivating learning. Strategic vision acts as a control and support mechanism for the

project and management teams that are responsible for the growth. Plan community structure and cooperation with external advisors were crucial in the planning process.

In addition, this research adapts the systems, principles underlying the much improved or Enhanced ERP Control System (see Hedman, 2010). There are two notable distinctions between the ITRM paradigm and the improved ERP design tools (Hedman, 2010). The resource analyzed during the development of the ITRM framework is a special resource, while ERP systems are standardized services that can be obtained from external suppliers. The introduction of ERP systems and the development of an IT asset are instances of "buying versus building" (Davis, 1989). Deciding between buying information systems is simply a matter of selecting between solutions. This triggers a difference in vocabulary and the usage of the word 'selection' instead of 'identification. The option of ERP systems includes numerous other forms of complexity and confusion, such as the recognition of a resource requirement, owing to ERP systems including the most functionality and being trained, contributing to ambiguity as to which framework to use (Hedman, 2010).

Using the ITRM and Improved ERP Framework, many interrelated elements have been integrated, for example, preparation, project and system management top management commitment/involvement, community, coordination, time, and assessment models, set up in one language, and administration models. The Enhanced ERP integrates elements from Hedman (2010) including collection, growth, internal delivery, and use of tasks as well as the linkages between tasks, problems, and CSFs. With the inclusion of the Stakeholder Theory (Freeman, 1984), the theoretical framework of the study is represented in Figure 2.1.

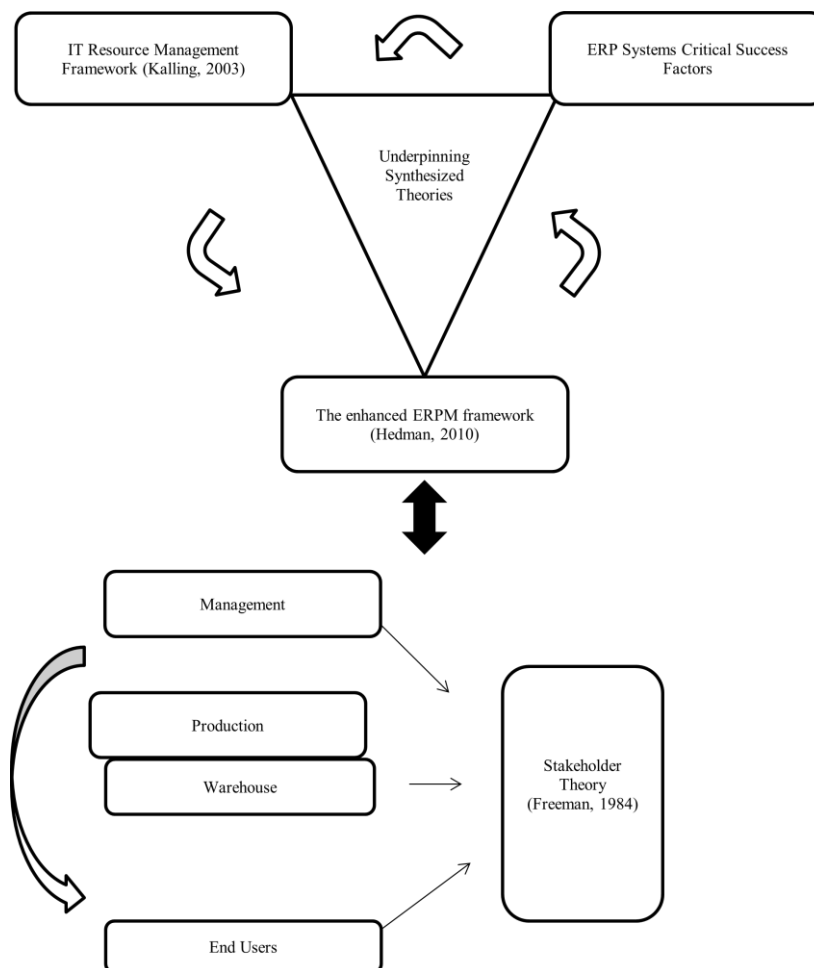


Fig. 2.1 - Theoretical ERP framework of the study

### 3. Methodology

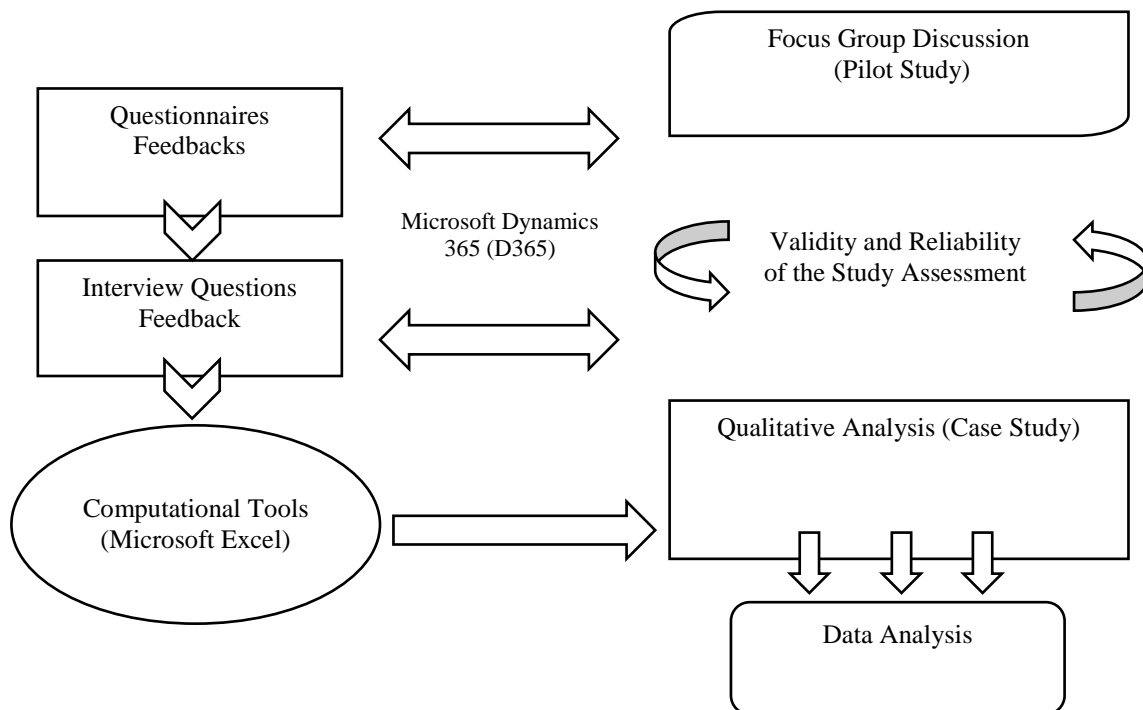
The study utilized a qualitative research framework that combines computational techniques and mathematical estimation for data collection and interpretation. The ERP data obtained are the data required for answering the study questions. Previous analysis techniques and questionnaires were used to further grasp the subject matter. By adapting

questionnaires used commonly in previous studies, the survey instrument was created (Batada & Rahman, 2012; Vakilifard, et al., 2013).

Qualitative research design is coupled with certain numerical data to form a clearer interpretation of a research subject, which is accomplished by the creation of a case study. Qualitative research interviews and questionnaires are excellent for collecting detailed context details on this subject. Survey-based qualitative analysis is able to identify components and design templates in order to clarify what is found. In addition, although this study is qualitative research in nature, it also applies a quantitative method in deciphering data using a questionnaire survey method approach. Thus, descriptive analysis in findings such as mean, and percentage of data were described. This study aims to find the answer to the link between ERP system integration and supply chain management efficiency. The answer could be provided in the interview questions. In addition, the researcher designs the instruments in such a matter to discover the extent the ERP System studied, Microsoft Dynamic 365 could improve purchasing operation, product planning operation, inventory management operation as well finding out the major operational constraints encountered by the stakeholders of the company or organisation.

The research targets to discover the outputs required to realize positive ERP impacts, thus creating a new adaptive model framework. This study aims to find the answer to the link between ERP system integration and supply chain management efficiency or performance. The answer could be provided in the interview questions. In addition, the researcher designs the instruments in such a matter to discover the extent the ERP System studied, Microsoft Dynamic 365 could improve purchasing operation, product planning operation, inventory management operation as well finding out the major operational constraints encountered by the stakeholders of the company or organisation. As yet, there is not a lot of analysis on Microsoft Dynamics 365, which is why this study is exploring the subject in the nation of Malaysia. The findings of this study would include a more complete investigation into Microsoft Dynamics 365's supply chain management capability. Also, this research aims to extend its results to other organisations and sectors that could benefit from the use of Microsoft Dynamics 365 as an enhanced ERP solution for business processes. The efficiency, efficacy, and shortcomings of Microsoft Dynamics 365 will be detailed. More knowledge about the basic testing approach is given in the data review portion.

The compiled and summarized methods that were used in this study are shown in Figure 3.1. Taking into consideration of various factors, as well as underpinning theories and research design, the researcher reckons that the methodological framework implemented in this study suffices to obtain meaningful data which further contribute to the development of the field of ERP.



**Fig. 3.1 - Methodological framework of the study**

#### 4. Results and Discussion

The discussion of the results revolves around the following research questions.

1. To study the relationship between the application of Microsoft Dynamics 365 and the supply chain management performance in a bread manufacturing company in Malaysia.

## 2. To identify the major constraints of Microsoft Dynamics 365.

The researchers target to answer the essence of the research questions which relate closely to the relationship between the integration of the ERP system and the supply chain management performance. Incorporating the Enhanced ERP Framework (Hedman, 2010), Freeman's (1984) Stakeholder Theory was adapted to answer the extent to which the ERP system could improve purchasing, product planning and inventory management operation in various levels of the organisation. In other words, the impact of the ERP system, D365 could have on the organisation (management), procurement, production and warehouse (including IT and finance) departments were discussed at length using data collected from the research questionnaires. Lastly, the end-user's major operational constraints encountered were tackled using the interview questions. The questionnaires and interview questions are attached in Appendix A.

The data was collected, through emails of questionnaires, and semi-structured interviews with the stakeholders from the bread manufacturing company. The first section presents the descriptive demographic statistics of the users of the ERP System. The second section presents a pilot survey analysis, which targeted internal stakeholders: Overall management personnel, procurement, production, warehouse (including IT and finance) department. The third section presents semi-structured interviews conducted to gather detailed information and gain an in-depth understanding of participant's perspectives on the ERP system. Demographic data is collected to identify characteristics variables of the stakeholders, such as gender, age, years of experience in using ERP system and length of service, provided a better understanding of stakeholders' perceptions and expectation, also insights of challenges and success factors of ERP implementation in the new organisation.

**Table 4.1 - Descriptive statistics demographic information**

	Items	Frequency	Percentage (%)
Gender	Male	6	60
	Female	4	40
Age	30 years old and below	3	30
	30-40 years old	4	40
	41-50 years old	3	30
	51 years old and above	0	0
Years of experience in using the ERP system	Less than 1 year	1	10
	1-5 years	4	40
	6- 10 years	4	40
	More than 11 years	1	10
Highest level of education	Certificate/ Diploma	0	0
	Degree	7	70
	Master	3	30
	PhD	0	0
Length of service with the company	Less than 1 year	0	0
	1 – 5 years	10	100
	6- 10 years	0	0
	>11 years	0	0

There were ten responses obtained for analysis, the surveys were completed by 60 percent males and 40 percent were completed by females. Analysis of the age of the respondents shows that 30 percent were under the age of 30 years, 40 percent were under the age range of 30-40 years old, and 30 percent were under the age of 41-50 years old. The analysis of experience in using ERP system indicated that respondents with 1-5 years and 6-10 years' experience presented 40 percent respectively. While respondents with less than 1 year and more than 11 years recorded at 10 percent respectively. The analysis of education revealed the majority of the respondents, 70 percent were bachelor's degree holders and 30 percent were master's degree holders. All respondents declared they have 1-5 years' service length with the company.

First, to evaluate the application of ERP system contributed integrity and connectivity. It improved the organisation's collaborations and interdepartmental relationships, also enhanced communications and responsiveness between the departments. Second, to assess stakeholders' perspectives, which the ERP system benefited the organisation's overall operational efficiency and reduced cycle time. Third to measure stakeholders' satisfaction that the ERP system is useful and met their daily tasks needs and enabled business decision making.

Based on overall feedback results, the respondents slightly agreed that the D365 system improved coordination between the departments. The system provided visibility and traceability of the operational process. The system is efficient to fulfill the respondents' department operational needs. However, the respondents disagreed that the D365 system reduced cycle time. D365 system improved interdepartmental relationship and communication, the testing result indicated undecided. ERP system enabled centralised purchasing and overall cost saving for the organisation. Also, the

system improved the consistency of procurement job and process workflow. The system allowed modification and provided flexibility to meet the constant change of user’s requirements and supply chain’s requests.

**Table 4.2 - Impact on organisation using D365 system**

No	Impact on Organisation	Mean
1	D365 system improves coordination between the departments	3.4
2	D365 system improves interdepartmental relationships and communication	3.0
3	D365 system processes visibility operational process	3.3
4	D365 system reduces cycle time	2.6
5	D365 system is efficient to fulfill department operational needs	3.2

*Note:* All the variables were measured based on a 5-point Likert scale.

**Table 4.3 - Impact on purchase department using D365 system**

	Impact on Procurement Department	Mean
6	It provides accurate and timely information	3.4
7	It provides transparency to improve information flow	3.3
8	It enables centralized purchasing to reduce the unnecessary purchase	3.3
9	It improves service level agreement and speeds up the ordering process	3.2
10	It provides flexibility for modification to reduce information system maintenance.	3.1

*Note:* All the variables were measured based on a 5-point Likert scale.

The feedback result presents the respondents slightly agreed D365 system provided accurate and timely information, also transparency that improved information flows. It assisted in effective decision-making on all purchase needs. Also, it enabled centralised purchasing and avoided duplications/wastages. The respondents replied ERP system encouraged standardisation. It expedited the ordering process, which led to cost and time-saving. The system provided flexibility for modification to deal with changes, such as prices, delivery dates, vendors and purchased quantities. However, it is restricted to change of procurement category, complaints from the respondents. By having ERP system assisted on process standardisation and enabled strategic operational controls. These led to overall cost-efficiency, increased productivity, and decreased production variations or wastages.

**Table 4.4 - Impact on purchase department using D365 system**

	Impact on Production Department	Mean
11	It provides easy and real-time access	3.4
12	It provides more dominance of production planning	3.2
13	It provides integrated data for effective control of production, procurement, and warehouse unit	2.9
14	It provides easy data acquisitions and increases material cost-efficiency and productivity	3.2
15	It provides visibility of production factors to decrease production deviations	2.8

*Note:* All the variables were measured based on a 5-point Likert scale.

The results indicate the respondents slightly agreed D365 system provided real-time access. The system allowed easy data acquisition for effective governance of production planning. It improved material cost-efficiency and productivity. However, the respondents provided their feedback that the data is not integrated to support production operational control. It was insufficient to enhance demand planning, customer order management and inventory management. The respondents disagreed that the retrieved data did meet the department reporting requirements, for example, the factors of production losses are not accountable. Manual tracking and personnel involvements are required still in operation and production management.

Based on Table 4.5, it provided rapid access to inventory status. Also, it contributed to effective inventory management and reduced operational cost. The results show the respondents slightly agreed that the D365 system contributed operational speed and efficiency. The respondents acknowledged that the stock movement status is



accessible and retrievable in a rapid way. The system supported the First in First Out (FIFO) stocks deployment method, and it improved stocks aging and accumulated issues. The respondents replied the system assisted on time spent on the stock count and reduced overhead cost. However, it required manpower involvements for physical counts and accuracy verifications.

**Table 4.5 - Impact on warehouse department using D365 system**

	<b>Impact on Warehouse Department</b>	<b>Mean</b>
16	It increases operational speed and efficiency	3.4
17	It provides rapid access to stock movement	3.8
18	It decreases time spent for stock-count	3.2
19	It decreases aging stocks/ stagnant goods in the warehouse	3.3
20	It decreases operational overhead	3.2

*Note:* All the variables were measured based on a 5-point Likert scale.

Every stakeholder has a different attitude and perception towards the newly implemented system. Factors such as length of service and years of experience in using ERP systems could influence stakeholders' acceptance of challenges and the success of the project. This section presents summarised empirical findings by identifying the stakeholders' reporting requirements, limitations encountered, and improvements suggested for the D365 system. Data collected from semi-structured interviews, all conducted through phone calls & Microsoft Team audio calls. The main questions asked to the respondents are as follows:

1. What are the modules you access on the D365 system you use to perform your daily operation tasks?
2. To what extent do you think the D365 system assists you in your daily operation tasks?
3. Can you tell me more about your reporting requirements?
4. What are the limitations you have encountered when using the D365 system?
5. In your opinion, what are the improvements required on the D365 system to fulfill your daily operation tasks?
6. Besides the D365 system, what other ERP system you have used before? How does the system perform better than the D365?

The overall results gathered from the interviews were simplified and presented in Appendix B, showing the categorised overview of stakeholders' feedback on the application of the D365 system. Based on the findings, it shows that D365 contributes to insignificant improvement in coordination and communication between the departments. Stakeholders' emphasis on simplicity and visibility of the operational process. D365 system should serve the function to increase overall efficiency and decrease cycle times. However, the finding indicates D365 system is complicated. The system has a lot of functionality, but it is difficult to find the exact one that the users are looking for. It is not user-friendly it is a learning curve to new users.

Data entering could be tedious for the users. It requires multiple steps to complete a simple task. For example, when price discrepancy is found during the invoice receiving stage, it involves various departments to fix the issue, by having the warehouse reverse receiving and then procurement to revise the purchase order for re-approvals. Due to difficulties to make changes in the system, it caused long delays and an increase in cost to the company. In the next question, thirdly, the findings show D365 is limiting the effectiveness of the supply chain process. It shows further integration activities required across the entire supply chain, between internal and external stakeholders - production, procurement, warehouse, logistics, suppliers, and customer. It needs continuous IT supports and flexibility to meet frequent changes in the supply chain's operations and stakeholders' requirements. Fourthly, the finding emphasises D365 system is rigid.

The system cannot handle huge data sets, generally, the system's performance is limited, and the reporting is a constraint. In order to manage module access and fulfill user's needs, it requires complex customisation. While customisation incurred additional costs to the company. Lastly, it is not automated. Users are required to update data/perform transactions from time to time to obtain accurate information in the system. Some of the respondents could provide comprehensive feedback on the use of D365 because they have used some other ERP systems like those of Systems Applications and Products in Data Processing (SAP), JD Edwards EnterpriseOne (JDE) ERP and Sage Intact, to name a few, with SAP being the most common ERP system they had used before prior to the D365. The respondents are qualified to provide their insights to the current ERP system engaged by the institutions as 90 percent of them had prior experiences of at least one year with any ERP system and they were considered the 'seniors' in the company with up to 5 years of service in the organisation.

Nonetheless, according to the respondents, the ERP is an efficient way for organisations to facilitate SCM. Rather, the ERP system was established to integrate all of the functional areas of a company and the supply chain into one whole. All relevant data and information on SCM will be stored in one location. The simple ability to access one

system from various functional units has created a high level of performance of SCM. In its view, ERP has contributed positively to increased product and service customisation; more streamlined information and processes; the need for global IT systems; and increased market transparency. From the results, the concerning stakeholders proposed various constructive measures to be incorporated. The stakeholders suggest further integration activities required between internal stakeholders: distribution, finance and administration, and external stakeholders: suppliers and customers, for seamless coordination in the supply chain. Secondly, the organisation needs to improve the IT infrastructure such as investment in I-cloud, and hire external ERP consultants, to enhance quality, accuracy, reliability, and responsiveness of ERP system. Besides that, the departments have to improve technical competency by providing comprehensive training to internal stakeholders, such as ICT support personnel and ERP system users.

In addition, the stakeholders request for an increase of flexibility of ERP system to deal with the constant change of supply chain needs, this would assist in simplifying the workflow and improve operational process time. Moreover, the stakeholders request ERP system provides intelligence features such as trigger for low inventory items, send a request for quotation (RFQ) and purchase order to suppliers. Purchasing planning with intelligence features can inventory data and trigger purchase orders. Lastly, it is proposed that the organisation enable supplier and customer relationship management functionality. Supplier relationship management and customer satisfaction need to be strengthened. For instance, the reporting and vendor master within the D365 system shall include more details such as vendor's competencies on what materials or services being supplied, prices, transaction dates and delivery results, to know which supplier offers better pricing and ability to deliver on short notice. Besides, vendors' performance shall be accessible on the system, to ensure goods/service quality is assessed by the quality assurance (QA) department, the delivery results are evaluated by the warehouse team.

## 5. Conclusion and Implication

Management and academic experts have recently stated that the rise of the network economy in general and the management of the supply chain are evolving fundamentally (Aziz et al., 2018). The critical aspect of a company for evaluating the future success is no longer the single company, but the production and supply chain; the individual company is just one component of this network. The importance of supply chain management for the sustainability of companies is therefore greatly increased. The results of this analysis on the effect of existing ERP systems on these SCM patterns are far more exploratory.

The general conclusion from the analysis is that the management of the supply chain in extended companies should not be expected to be too much of ERP. In the industry, ERP systems are de facto normal because they replace a patchwork of traditional local systems. If ERP has been built, a process-based business transaction backbone exists that can sustain innovations in many business sectors, including SCM, within one single entity. However, ERP systems have never been configured to support SCM and certainly not multiple organisations. In this modern market worldview, where modular, open and scalable IT solutions are required, the architectural advantage of being completely integrated for a single company becomes a strategic disadvantage. Time is provided to know if such solutions are created over and above the existing ERP software vendors or other parties and are complementary to or are not ERP systems. However, only time can tell if the progress suffices. There is also a need for more research that can fill the existing gap in prompt academic research about ERP systems' market effect.

The findings of this analysis have some effects in Malaysia for ERP organisations. It also has a variety of ramifications for Malaysian literature. The findings of this study show the importance of stakeholders and ERP Framework as well as ERP system such as D365 in promoting individual ERP successes. The researcher also looked at the views of stakeholders on the impact of system quality. Thus, this relationship was investigated from the viewpoints of the end-users, stakeholders. Understanding the relative value of the information system factors places an emphasis on the vital performance factors perceived by end consumers by organisations and suppliers. Secondly, this study evaluated the information system impact level by multiple stakeholders to help ERP users develop better attitudes towards ERP Systems in an organisation that provides adequate training. Organisations should also adopt a systematic approach to evaluate the efficiency and productivity impacts of an information system or quality on ERP users. This will help to boost the efficiency, learning, understanding and decision-making of end-users.

In addition, it will allow companies to realise the moderating impact of users' characteristics to recruit the right workers. This research can be used by Malaysian organisations to better understand the ERP performance factors experienced by end-users. In addition, previous research on the role of stakeholders in the success of ERP management was taken into consideration (see Hedman, 2010). This will allow managers to adjust the management style and strategy for managing workers by recognising various influences and their impact on the growth of ERP's performance. Although the ERP management and stakeholders have researched extensively in different ways, this study is not carried out in Malaysia's bread factories and is thus an extension to the current ERP Management by incorporating the Stakeholder Theory. This study has helped to reduce the discrepancy in the theory of stakeholders regarding the criteria for the selection of systems and methods for bread production in Malaysia, although some of the criteria and methods provided for in the theories might not be prominent in the real world. Practitioners tend to respect and comply with the requirements of the organisation over the more sophisticated ERP scheme.

## 6. Recommendation

This study shows that this subjectivity cannot be generalised to a wider community. Based on the evidence presented, the researcher recommends the expansion of the survey design to all the bread manufacturing firms in Malaysia employing quantitative or even mixed-method research design. More is to be learned about the ERP system selection criteria in the bread industry and it can be obtained from this approach. Thus, incorporating the enhanced ERPM Framework (Hedman, 2010) and Stakeholder’s Theory (Freeman, 1984) in more studies would enable more researchers to emulate this type of study or research.

### APPENDIX A: Research Questionnaire

#### Section 1: Demographics of Respondent

1- Gender :  Male  Female

2- Age :  30 years old and below  30 - 40 years old  
 41 – 50 years old  >51 years old

3- Years of experience in using ERP System :  Less than 1 year  1 – 5 years  
 6- 10 years  >11 years

4- What is your highest level of education? :  Certificate/Diploma  Degree  
 Masters  PhD

5- Length of service with the company :  Less than 1 year  1 – 5 years  
 6- 10 years  >11 years

#### Section 2 - Regarding the statements below, state your preference or the extent to which you agree or disagree:

No.	Items	Strongly Disagree 1	Disagree 2	Undecided 3	Agree 4	Strongly Agree 5
<b>Impact on Organisation</b>						
1	D365 system improves coordination between the departments					
2	D365 system improves interdepartmental relationships and communication					
3	D365 system processes visibility operational process					
4	D365 system reduces cycle time					
5	D365 system is efficient to fulfill department operational needs					
<b>Impact on Purchase Unit</b>						
6	It provides accurate and timely					

	information					
7	It provides transparency to improve information flow					
8	It enables centralized purchasing to reduce the unnecessary purchase					
9	It improves service level agreement and speeds up the ordering process					
10	It provides flexibility for modification to reduce information system maintenance.					
No.	Items	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
		1	2	3	4	5
<b>Impact on Planning Unit</b>						
11	It provides easy and real-time access					
12	It provides more dominance of production planning					
13	It provides integrated data for effective control of production, procurement, and warehouse unit					
14	It provides easy data acquisitions and increases material cost-efficiency and productivity					
15	It provides visibility of production factors to decrease production deviations					
<b>Impact on Warehouse Unit</b>						
16	It increases operational speed and efficiency					
17	It provides rapid access to stock movement					
18	It decreases time spent for stock-count					
19	It decreases aging stocks/ stagnant goods in a warehouse					
20	It decreases operational overhead					

### **Section 3: Interview Questions**

1. What are the modules you access on the D365 system you use to perform your daily operation tasks?
2. To what extent do you think the D365 system assists you in your daily operation tasks?
3. Can you tell me more about your reporting requirements?
4. What are the limitations you have encountered when using the D365 system?
5. In your opinion, what are improvements required on the D365 system to fulfill your daily operation tasks?
6. Besides the D365 system, what other ERP system you have used before? How does the system perform better than the D365?

**Appendix B: Categorized Stakeholders’ Feedback on the Application of D365 System**

Stakeholders	Modules	Benefits	Reporting Requirements	Limitations	Improvement Requirements	Other ERP Experience
ERP Consultant	- Production control - Master planning	- Smooth communication - Easy and simple to use - Real-time information - Flexibility for customisation - Reduce manual calculation	- Production output report - Demand vs supply report - MRP plan & ordering report	- Lack of reporting tools - System performance	- Standard tool for customisation - Increase features for operations’ needs	- None
ICT Support Specialist	- All modules	- Transparency of business operations’ transactions	- Accurate & precise report to cover all modules	- Additional cost incurred for customisation - Standard tool/feature does not cater to users’ needs	- Improve reporting functions - Simplify the accessing interface	- Systems Applications and Products in Data Processing (SAP)
Financial Controller	- Purchasing - Inventory - Financial	- Provides information from a single source - Provides user accountability, materials used acknowledged by productions & warehouse - Online approval workflows	- Purchasing report - Account receivable & payable report - Vendor performance report - Production performance report	- Standard reports provide limited information - Customisation incurred cost - Inaccurate information when stakeholders did not update transactions timely	- Flexibility on data acquiring to meet users’ reporting requests. - Accuracy of data, users need to update transaction timely	- Systems Applications and Products in Data Processing (SAP) - JD Edwards EnterpriseOne (JDE) ERP
Warehouse Manager	- Inventory management - Sales & marketing - Procurement & sourcing	- D365 is helpful in daily operations	- Daily receiving report - Detailed open PO report - Warehouse space & manpower utilization report - Detailed stock movements report - Long aging goods report	- Lack of vendor management features - Customisation required to meet daily operation needs	- More user friendly - More data analytic	- Sage 100 ERP - Sage Intact - Epicor ERP
Warehouse Supervisor	- Inventory management - Sales & marketing - Procurement & sourcing	- Assists on daily operation tasks - Improves the material and information flows	- Delivery updates report - Stocks movement reports	- Lack of user guides - Customisation required additional cost	- More user friendly	- Systems Applications and Products in Data Processing (SAP)

Procurement Manager	- Procurement & Sourcing - Production control - Inventory Management	- Reduce processing time - Improve communication and efficiency of procurement to pay (P2P) process. - Easy access	- Detailed purchasing & delivery report	- Complicated - Inflexibility of system set-up/maintenance - Customisation - Human Involvement	- Supplier's delivery updates - Real-time transactions updates	- Systems Applications and Products in Data Processing (SAP)
Procurement Executive	- Purchasing - Item & vendor master - Inventory movement - Master planning	- Paperless	- Detailed purchasing report - Detailed item master report - Detailed ingredient consumption report	- Foreign currency - Mass customisation - MRP generated PO - 3 months PO - Order duplication	- Users' needs fulfillment	- MrpEasy ERP - Systems Applications and Products in Data Processing (SAP)
Production Manager	- Production order management - Inventory management	- Better controls on production output - Raw material stock availability - Better control on production run time	- On-hand inventory report - Raw materials and packaging utilization report - Production yield and wastage report - Production output report	- Time-consuming for corrections of consumed raw materials or finished goods	- Auto mailing function. - Real-time updates of raw materials inventory & finished goods output	- Systems Applications and Products in Data Processing (SAP)
Production Executive	- Production control - Inventory Management	- Raw materials stock availability	- Up to date on-hand inventory report	- Long process lead time - Unstable system performance	- Simplify the operational process - Enable easy access	- Systems Applications and Products in Data Processing (SAP)
Production Planner	- Procurement & Sourcing - Production order management - Inventory management	- Quick access - Enable 3 months production planning	- Production daily usage report - Raw materials movements report includes shelf-life, rejected, consumptions	- Not user friendly - Time-consuming with multiple-steps to complete simple tasks - Customisation additional cost to the company	- Simplify the workflow - Improve on data accuracy - Improve visibility of production usage vs forecasted	- None

### Acknowledgement

The authors would like to acknowledge the University of Bolton, United Kingdom and Universiti Tenaga Nasional, Jalan Ikram-Uniten, 43000 Kajang, Selangor, MALAYSIA

## References

- Akkermans, H., Bogerd, P., Yucesan, E. & Wassebhove, L., 2003. The impact of ERP on supply chain management: exploratory findings from a European Delphi study. *European Journal of Operational Research*, 146(2), p. 284–301
- Al-Turki, U. M., 2011. An exploratory study of ERP implementation in Saudi Arabia. *Production Planning & Control*, 22(4), p. 403–413
- Aziz, M., Raghed, MA, M., Ragab, A. & Mokadem, M., 2018. The impact of enterprise resource planning on supply chain management practices. *The Business and Management Review*, 9(4), pp. 56-69
- Batada , I. & Rahman, A., 2012. Measuring System Performance & User Satisfaction after Implementation of ERP. Montreal, Informing Science & IT Education Conference (InSITE)
- Billgren, C. & Holmén, H., 2008. Approaching reality: Comparing stakeholder analysis and cultural theory in the context of natural resource management,. *Land Use Policy*, 25(4), pp. 550-562
- Caruso, D., 2009. Manufacturers: How ERP systems improve employee performance. [Online] Available at: <http://www.microsoft.com/dynamics/en/gulf/industries/erppperformance.aspx>
- Clarkson, M. B., 1995. A stakeholder framework for analyzing and evaluating corporate social performance. *The Academy of Management Review*, 20(1), pp. 92-117
- Crane, A. & Ruebottom, T., 2011. Stakeholder Theory and Social Identity: Rethinking Stakeholder Identification. *Journal of Business Ethics*, Volume 102, pp. 77-87
- Davenport, T. H. & Brooks, J. D., 2004. *Journal of Enterprise Information Management*. Enterprise systems and the supply chain, 17(1), pp. 8-19
- Davis, F. D., 1989. Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), p. 318–340
- Dery, K., Hall, R. & Wailes, N., 2006. ERPs as ‘technologies-in-practice’: social construction, materiality and the role of organizational factors. *New Technology, Work and Employment*, 21(3), p. 229–241
- Freeman, R. E., 1984. *Strategic Management: A Stakeholder Approach*. Boston: Pitman Publishing Inc.
- Hedman, J., 2010. *ERP Systems : Critical Factors in Theory and Practice*. Frederiksberg, Center for Applied ICT (CAICT Communications, No. 2010/2)
- Hsu, L., Lai, R. & Weng, Y., 2008. Understanding the critical effect user satisfaction and impact of ERP through innovation of diffusion theory. *International Journal of Technology Management*, 43(1), p. 30–47
- Ince, H. et al., 2013. The impact of ERP systems and supply chain management practices on firm performance: case of Turkish companies. *Procedia Social and Behavioral Sciences*, Volume 99, pp. 1124-1133
- Iskanius, P., 2010. Risk management of ERP projects in manufacturing SMEs.. *Information Resources Management Journal*, 23(3), p. 60–75
- Islam, R. & Rasad, S., 2005. Employee performance evaluation by AHP: A case study.. *Asia Pacific Management Review*, 11(3), p. 163–176
- Jones, S., 2008. Social dimension of IT/IS evaluation : Views from the public sector. In: Z. I. & P. Love, eds. *Evaluating information systems: Public and private sector*. Hungary: Butterworth-Heinemann., p. 236–256
- Kalling, T., 1999. *Gaining Competitive Advantage through Information Technology*. Lund: Lund University
- Kalling, T., 2003. ERP Systems a the Strategic Management Processes that Lead to Competitive Advantage. *Information Resources Management Journal*, 16(4), pp. 46-67
- Kauffman, R. G., 2002. Supply management: What’s in a name? Or, do we know who we are?. *Journal of Supply*

Chain Management, 38(4), p. 46–52

Koch, C., 2011. A status on enterprise resource planning (ERP) studies in information systems research. *s.l., s.n.*, p. 409–414

Kositanutrit, B., Ngwenyama, O. & Bryson, K. M., 2006. An exploration of factors that impact individual performance in an ERP environment: an analysis using multiple analytical techniques. *European Journal of Information Systems*, Volume 15, p. 556–568

Kwak, Y., Park, J., Chung, B. & Ghosh, S., 2012. Understanding end- users' acceptance of enterprise resource planning (ERP) system in project- based sector. *Engineering Management, IEEE Transactions*, 59(2), p. 266–277

Lambert, D. M. & Cooper, M. C., 2000. Issues in supply chain management. *Industrial Marketing Management*, Volume 29, pp. 65-83

Laplume, A. O., Sonpar, K. & Litz, R. A., 2008. Stakeholder theory: reviewing a theory that moves us. *Journal of Management*, Volume 34, pp. 1152-1189

Law, C., Chen, C. & Wu, B., 2010. Managing the full ERP life cycle: Considerations of maintenance and support requirements and IT governance practice as integral elements of the formula for successful ERP adoption. *Computers in Industry*, Volume 61, p. 297–308

Leidner, D. E. & Kayworth, T., 2006. Review: A review of culture in information systems research: Toward a theory of information technology culture conflict. *MIS Quarterly*, 30(2), p. 357–399

Levy, Y. & Ellis, T. J., 2006. A system approach to conduct an effective literature review in support of information systems research. *Informing Science*, Volume 9, p. 181– 212

Lin, C., Singer, R. & Ha, L., 2010. Why do university members use and resist technology? A structure enactment perspective. *Journal of Computing in Higher Education*, 22(1), p. 38–59

Lumms, R. R., Krumwiede, D. W. & Vokurka, R. J., 2001. The relationship of logistics to supply chain management: developing a common industry definition. *Industrial Management & Data Systems*, 101(8), p. 426 – 432

Maditinos, D., Chatzoudes, D. & Tsairidis, C., 2012. Factors affecting ERP system implementation effectiveness. *Journal of Enterprise Information Management*, 25(1), pp. 60-78

Mahmood, M., Burn, J., Gemoets, L. & Jacquez, C., 2000. Variables affecting information technology end user satisfaction: a meta-analysis of the empirical literature. *International Journal of Human-Computer Studies*, Volume 52, p. 751–771

Mayring, P., 2000. Qualitative content analysis. *Forum: Qualitative Social Research*, 1(2)

McCoy, S., Galletta, F. & King, R., 2007. Applying TAM across cultures: The need for caution.. *European Journal of Information Systems*, 16(1), p. 81–90

McGinnis, T. & Huang, Z., 2007. Rethinking ERP success: A new perspective from knowledge management and continuous improvement. *Information & Management*, Volume 44, p. 626–634

McVea, J. & Freeman, R., 2005. A names-and-faces approach to stakeholder management: how focusing on stakeholders as individuals can bring ethics and entrepreneurial strategy together. *Journal of Management Enquiry*, 14(1), pp. 57-69

Miles, S., 2012. Stakeholder: Essentially contested or just confused?. *Journal of Business Ethics*, Volume 108, pp. 285-298

Miles, S., 2017. Stakeholder theory classification: a theoretical and empirical evaluation of definitions.. *Journal of Business Ethics*, 142(3), pp. 437-459

Mitchell, R. K., Agle, B. R. & Wood, D. J., 1997. Toward a theory of stakeholder identification and salience: defining the principle of who and what really counts. *The Academy of Management Review*, 22(4), pp. 853-886



- Muscattello, J. & Chen, I., 2008. Enterprise resource planning (ERP) implementations: Theory and practice. *International Journal of Enterprise Information Systems*, Volume 4, p. 63–77
- Nah, F. F., Tan, X. & Beethe, M., 2005. An emergent model of end users' acceptance of enterprise resource planning systems: a grounded theory research. s.l., *Proceedings of the Americas Conference on Information Systems*, p. 2053–2057
- Ng, C., Gable, G. & Chan, T., 2002. An ERP-client benefit-oriented maintenance taxonomy. *The Journal of Systems and Software*, 64(2), p. 87–109
- Nicolaou, A. & Bhattacharya, S., 2008. Sustainability of ERPs performance outcomes: The role of postimplementation review quality. *International Journal of Accounting Information Systems*, Volume 9, p. 43–60
- Petter, S., DeLone, W. & McLean, E., 2008. Measuring information systems success: Models, dimensions, measures, and interrelationships. *European Journal of Information Systems*, Volume 17, p. 236–263
- Ramdani, B., 2012. Information technology and organisational performance: Reviewing the business value of IT literature. In: *Information Systems Theory*. New York, NY: Springer, p. 283–301
- Reed, M. S., 2008. Stakeholder participation for environmental management: a literature review. *Biological Conservation*, 141(10), p. 2417–2431
- Rowley, T. J. & Moldoveanu, M., 2003. When will stakeholder groups act? An interest- and identity-based model of stakeholder group mobilization. *The Academy of Management Review*, 28(2), p. 204–219
- Salim, A., Suleiman, I. & Salisu, G., 2015. Enterprise resource planning (ERP) systems in the banking industry: Implementations approaches, reasons for failures and how to avoid them.. *Journal of Computer Sciences and Applications*, 3(2), p. 29–32
- Salmeron, J. & Lopez, C., 2010. A multi-criteria approach for risks assessment in ERP maintenance. *Journal of Systems and Software*, Volume 83, p. 1941–1953
- Soja, P. & Paliwoda-Pękosz, G., 2013. Impediments to enterprise system implementation over the system lifecycle: contrasting transition and developed 127 economies. *The Electronic Journal of Information Systems in Developing Countries*, 57(1), p. 1–13
- Tsai, W. H., Chen, S. P., Hwang, E. T. & Hsu, J. L., 2010. A study of the impact of business process on the ERP system effectiveness. *International Journal of Business and Management*, 5(9), p. 26–37
- Vakilifard, H., Meinagh, S. A. & Khataee, M. R., 2013. Evaluating the Effects of ERP Systems on Performance and Management. *European Online Journal of Natural and Social Sciences*, 2(3), pp. 2412-2426
- Velcu, O., 2010. Strategic alignment of ERP implementation stages: An empirical investigation. *Information & Management*, 47(3), pp. 158-166
- Venkatraman, S. & Fahd, K., 2016. Challenges and success factors of ERP systems in Australian SMEs. *Systems*, 4(20), pp. 1-18
- Wei, C., Liou, T. & Lee, K., 2008. An ERP performance measurement framework using a fuzzy integral approach. *Journal of Manufacturing Technology Management*, Volume 19, p. 607–626
- Willis, T. & Willis-Brown, A., 2002. Extending the value of ERP. *Industrial Management & Data Systems*, Volume 102, p. 35–38
- Woo, S. H., 2007. Critical success factors for implementing ERP: the case of a Chinese electronics manufacturer. *Journal of Manufacturing Technology Management*, 18(4), p. 431–442
- Zhu, Y., Li, Y., Wang, W. & Chen, J., 2010. What leads to postimplementation success of ERP? An empirical study of the Chinese retail industry. *International Journal of Information Management*, 30(3), p. 265–276