

**MOBILISING ERP IN A GBS COMPANY IN  
MALAYSIA: AN INTERPRETIVE CASE STUDY**

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**2024**

**MOBILISING ERP IN A GBS COMPANY IN  
MALAYSIA: AN INTERPRETIVE CASE STUDY**

by

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**Thesis submitted in fulfilment of the requirements  
for the degree of  
Doctor of Philosophy**

**August 2024**

## ACKNOWLEDGEMENT

I would like to express my deepest appreciation to the multitude of people who aided me during my work on this thesis.

First and foremost, I want to thank God, who makes everything possible. I would like to thank my parents, who supported and encouraged me in spite of all the time it took me away from them.

I would like to thank my main supervisor, Dr Zubir Azhar, for providing me with supervision on the thesis. I would also like to thank my co-supervisor, Dr Kishan A/L Krishnen.

I would also like to extend thanks to the Dean of my school and two of my beloved lecturers for giving me the opportunity to further my studies in the accounting field. Next, I would like to thank my examiners and reviewers for providing feedback throughout the process of producing this thesis.

Last and not least, I beg forgiveness of all those who have been with me over the years and whose names I have failed to mention.

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## LIST OF ABBREVIATION

ANT	Actor-Network Theory
COA	Chart of Accounts
CERP	Cloud Enterprise Resource Planning
EMTP	ERP Modular Transitioning Project
ERP	Enterprise Resource Planning
Extend ERP	Extended Enterprise Resource Planning
FAM	Fixed Assets Management
GBS	Global Business Service
ISS	Integrated Information Systems
IT	Information Technology
IMC	Inventory Management and Control
KTS	Knowledge Transfer Session
MRP	Material Requirement Planning
MRPII	Manufacturing Resource Planning
MNC	Multinational Company
OPPs	Obligatory Passage Points
O2C	Order-to-Cash
P2P	Procure-to-Payment
SSC	Shared Service Centre

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- Appendix A      Transcript Summary
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# **MOBILISASI ERP DALAM SEBUAH SYARIKAT GBS DI MALAYSIA:**

## **KAJIAN KES INTERPRETIF**

### **ABSTRAK**

Dalam lanskap perniagaan global yang dinamik pada hari ini, mobilisasi sistem Perancangan Sumber Perusahaan (ERP) telah menjadi cabaran organisasi yang kritikal terutamanya dalam konteks Perkhidmatan Perniagaan Global (GBS). Kajian kes interpretif ini membincangkan dinamik pergerakan ERP dalam syarikat pembuatan multinasional yang berpangkalan di Malaysia dari 2019 hingga 2023. Melalui penerokaan komprehensif sebuah kajian kes, penyelidikan ini akan memberi penerangan berkaitan dengan interaksi kompleks antara integrasi teknologi, perubahan organisasi, dan tindak balas pelakon utama, khususnya pekerja yang terlibat dalam mobilisasi sistem ERP. Berpandukan kepada Teori Pelakon-Rangkaian (ANT) sebagai rangka kerja teori utama, kajian ini menyiasat bagaimana sistem ERP menjadi pelakon aktif dalam rangkaian organisasi. Ia melangkaui tanggapan tradisional penggunaan teknologi dan menonjolkan peranan yang dimainkan oleh kedua-dua pelakon iaitu manusia dan bukan manusia dalam membentuk proses mobilisasi. Penyelidikan ini mendedahkan perkembangan mobilisasi sistem ERP dalam kes syarikat yang bernama MOLECULE yang mempunyai tetapan GBS yang bernama MOLECULE's GBS. Terkini, syarikat tersebut menjalani perjanjian pergabungan dan pemerolehan (M&A). Syarikat ini telah mengalami satu siri mobilisasi sistem ERP yang didorong oleh struktur perniagaan yang berkembang, beralih dari sebuah entiti ke entiti

seterusnya. Justeru, MOLECULE's GBS menjalani proses penterjemahan untuk menyesuaikan sistem ERP agar selari dengan struktur organisasinya yang semakin berkembang. Kajian ini menekankan kepentingan untuk menyelaraskan sistem maklumat dengan proses organisasi. Ia menjelaskan peranan penterjemahan dalam memastikan operasi sistem ini cekap dan berkesan. Kesimpulannya, penyelidikan ini memperkayakan pemahaman literatur tentang subjek mobilisasi ERP dalam konteks GBS, menggunakan lensa ANT untuk memeriksa proses mobilisasi ini. Ia menekankan sifat penting hubungkait antara pelakon sistem dengan proses dan menyerlahkan peranan objek sempadan dalam memastikan fungsi optimum sistem ERP.

*Kata kunci: ERP, GBS, Mobilisasi, dan ANT*



# **MOBILISING ERP IN A GBS COMPANY IN MALAYSIA: AN INTERPRETIVE CASE STUDY**

## **ABSTRACT**

In today's dynamic global business landscape, the mobilisation of Enterprise Resource Planning (ERP) systems has become a critical organisational challenge, particularly in Global Business Services (GBS) setting. This interpretive case study delves into the complex dynamics of ERP mobilisation within a multinational manufacturing company based in Malaysia from 2019 to 2023. Through a comprehensive exploration of the case, this study aims to shed light on the complex interplay between technological integration, organisational change, and the responses of key actors, specifically employees involved in the ERP system mobilisation. Drawing on Actor-Network Theory (ANT) as the primary theoretical framework, this study investigates how ERP systems become active actors within the network of the organisation. It goes beyond traditional notions of technology adoption and highlights the roles played by both human and non-human elements of actors in shaping the mobilisation process. The study unveils the progression of ERP system mobilisation within the case company disguised as MOLECULE which has MOLECULE's GBS as its GBS centre. Recently, this company went through a merger and acquisition agreement. Thus, the company has undergone a series of ERP system mobilisations driven by the evolving business structure, transitioning from one company to another. Consequently, MOLECULE's GBS undergone a translation process to adapt its ERP

systems to align with its evolving organisational structure. This study underscores the critical significance of aligning ERP systems with organisational processes. It elucidates the role of translation process in ensuring the efficient and effective operation of these systems. In conclusion, this study enriches the literature comprehension of ERP systems mobilisation within a GBS settings employing the lens of ANT to examine this mobilisation process. It underscores the imperative nature of synchronising systems with processes and highlights the pivotal role of translation process in ensuring the systems' optimal functionality.

*Keywords: ERP, GBS, Mobilising, and ANT*

# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 Research Background and Issues**

In the domain of Accounting Information Systems (AIS), ERP systems have emerged as a subject of considerable attention, mainly due to the pivotal role they play in managing the organisational resources. However, this subject is notably complex, demanding comprehensive research, particularly with the surge in emerging technology, increasing complexity in organisational processes, and social-techno interactions within a specific setting of study. Thus, this section presents the research background, the identification of research gaps and provides relevant information regarding the Malaysian context (i.e., the focal country of this study).

#### **1.1.1 Research Background**

In today's corporate landscape, the efficient and effective management and processing of information across diverse business functions are crucial for organisational success (Ali, Maelah, Meerani, & Jantan, 2022; Godbole, 2023; Hug & Zhang, 2024). In particular, functions like accounting and human resources demand attention. These functions assume importance, requiring strategic focus and oversight for effective management and operational excellence. However, organisations often grapple with balancing these vital support activities alongside their core functions to maintain competitiveness (Albanese, 2023; Elbanna & Newman, 2022; Plugge, Nikou, Robben, & Kievit, 2024). This problem has led to a search for more cost-effective ways to manage support services, particularly for large companies (Plugge et al., 2024).

The Shared Service Centre (SSC) model is an organisational approach aimed at centralising support services to achieve greater efficiency and effectiveness (Klimkeit, Wang, & Zhang, 2024; Niittumaa, 2022; Sztorc & Milek, 2022). It operates by standardising, streamlining, and consolidating functions across different business units within an organisation. The SSC serves as both a business model and an organisational structure, offering a centralised hub for shared services such as finance, HR, IT, and procurement. What sets SSC apart is its ability to optimise resources, reduce duplication, and enhance service delivery through economies of scale and best practices (Ulatowska, Wainio, & Pierzchała, 2023; Zaporowska & Szczepański, 2023). Organisations seeking to streamline operations, improve service quality, and realise cost savings often adopt the SSC model. It works by establishing a dedicated centre that provides specialised services to multiple business units, ensuring consistency, and allowing units to focus on core functions (Ali et al., 2022). The unique aspect of SSC lies in its ability to balance centralised control with localised needs, tailoring services to meet the specific requirements of each business unit. Typically, large organisations with multiple divisions or subsidiaries benefit most from implementing SSC, as it enables them to leverage shared resources and expertise effectively.

However, SSCs often focused on specific functions such as accounting or human resources, leading to disintegrated support services (Hug & Zhang, 2024; Šipikal & Rafaj, 2020). With the growing demand for comprehensive support services (i.e., driven by increasing complexity in organisational processes) organisations with SSCs recognised the necessity of adopting a more comprehensive approach. Consequently, businesses often adopt more sophisticated operational frameworks such as Global Business Services (GBS). GBS, in contrast to SSC, focuses on delivering

comprehensive end-to-end support services and continually improving their quality and efficiency (Białynicki-Birula, Głowacki, Kopyciński, Mamica, & Mazur-Bubak, 2022; Plugge & Nikou, 2024; Yousufi, Palwishah, & Chappra, 2022). On one hand, end-to-end support services encompass the entire spectrum of support functions, from initial request to final delivery, ensuring seamless and integrated service provision. On the other hand, the enhancement of support services involves ongoing efforts to improve service quality, efficiency, and effectiveness through innovation, process optimisation, and technology integration (Klimkeit et al., 2024; Lampinen, 2023).

To achieve centralised support services (i.e., GBS), organisations must implement information systems to facilitate effective and efficient management and processing of corporate information (Klimkeit et al., 2024; Sztorc & Miłek, 2022). One widely adopted type of information system is the Enterprise Resource Planning (ERP) system. ERP systems involve integrating various business processes and functions, such as finance, human resources, and supply chain management, into a unified system, enabling seamless data flow and coordination across departments (van Roekel & van der Steen, 2019).

With advancement in technology, particularly the emergence of cloud computing, a new iteration of ERP systems has emerged, known as cloud-based ERP (CERP) systems (Alsharari, 2021, 2022; Gessa, Jiménez, & Sancha, 2023). Unlike traditional ERP systems, which are typically deployed on local servers or devices such as laptops, CERP systems leverage cloud infrastructure. This allows users to access the system remotely via the internet, offering unparalleled accessibility and flexibility. Additionally, CERP systems often feature enhanced scalability and cost-effectiveness, as they eliminate the need for on-premises hardware maintenance and provide

seamless updates and upgrades (Molina-Castillo, Rodríguez, López-Nicolas, & Bouwman, 2022; Nakayama, Hustad, Sutcliffe, & Beckfield, 2024). Overall, CERP systems represent a significant advancement in ERP technology, offering organisations improved agility and efficiency in managing their operations.

### **1.1.2 Research Issues**

ERP systems (regardless of its version) developed by renowned global providers like SAP or Oracle, typically come with predefined best practices for processing information (Hemling, Plesner Rossing, & Hoffjan, 2022; Li, Lowry, & Lai, 2024; Terminanto, Hidayanto, & Maulana, 2019). These best practices are embedded within the systems' architecture. However, organisations usually face significant challenges when opting to implement ERP systems from these providers (Banafo Akrong, Yunfei, & Owusu, 2022; Gessa et al., 2023; Molina-Castillo et al., 2022). This challenge results from the inherent difficulty in aligning systems with the implementing organisations' distinctive processes (Almajali et al., 2022; Gavidia, Junglas, & Chou, 2023).

Consequently, in the literature (El-Sayed, Ammar, & Mardini, 2021; Mullins & Cronan, 2021; Rouissi, 2020), scholars mostly focus on ERP systems mobilisation issues during the planning and assessment stage. ERP systems mobilisation refers to the process of implementing and integrating ERP systems within an organisation's operational framework (Dechow & Mouritsen, 2005; Janssens, Kusters, & Martin, 2020). It involves deploying an integrated software to streamline business processes, improve efficiency, and enhance data management capabilities. While the literature has identified several issues in the ERP systems mobilisation process from a general perspective, such as [1] divergent usages of the system with organisational practices;

[2] transformation of information processing to an integrated format; [3] adaptation challenges for employees; and [4] employee responses to change (Bialas, Bechtsis, Aivazidou, Achillas, & Aidonis, 2023; Olaniyi & Omubo, 2023; Olutola, Balen, Lotisa, Johnima, & Browndi, 2023).

Mobilising ERP systems bring about significant changes within the organisations that implement them (Alsharari, 2021; Bawa, 2023; Bialas et al., 2023). The implementation of ERP systems initiates a transformation in information processing, transitioning from a functional basis (focuses on individual departments such as sales and marketing, advertising, accounting and finance) to a process basis (focuses on business processes such as revenue cycles, expenditure cycles and finance cycles) (Godbole, 2023). This shift entails reorganising how data is managed and utilised, moving away from siloed functional structures towards integrated processes that span across different departments and functions within the organisation. These changes have important implications for employees across different roles in that the systems' streamlining operation may potentially eliminate certain tasks such as number crunching tasks and replaced with more managerial roles such as interpreting and making decisions based on the outputs generated by the systems (Jayasuriya & Sims, 2023; Kunduru & Kandepu, 2023). This transformation affects various aspects of their work, including roles and skill requirements. In this study, recognising and addressing these implications is crucial for comprehensively assessing the impact of ERP system implementation on organisational dynamics and employee well-being.

The process of mobilising ERP systems often elicits various responses from the implementing organisations (Abobakr, Abdel-Kader, & Elbayoumi, 2022; Carlsson-Wall, Goretzki, Hofstedt, Kraus, & Nilsson, 2022). These responses are

crucial to understanding the overall effectiveness and efficiency of the ERP systems within the organisational setting. The extant literature has highlighted that employees may respond differently when faced with the challenges posed by ERP systems mobilisation (Jayasuriya & Sims, 2023; Mahmood, Khan, & Bokhari, 2020; Razzaq & Mohammed, 2020). Some employees may resist these changes, perceiving a misfit between the systems and the organisation's existing processes (Alzahrani, Mahmud, Thurasamy, Alfarraj, & Alwadain, 2021; Schmidt, Riley, & Swanson Church, 2020). Conversely, others may respond by utilising the systems for alternative purposes, deviating from its original intended use (Albanese, 2023; Gavidia et al., 2023). These diverse employee responses to ERP systems mobilisation represent a significant research issue, as they can impact how effectively and efficiently the system operates within the organisation.

By investigating these issues relating to ERP systems mobilisation (including responses and implications), this study seeks to contribute valuable insights into optimising ERP systems performance to align with the organisational practices (e.g., in the context of GBS).

### **1.1.3 Research on ERP**

The extant literature commonly delineates research pertaining to the ERP systems mobilisation from two strands: determinant-oriented and process-oriented. This categorisation represents a fundamental dichotomy that underpins the scholarly discourse surrounding ERP systems mobilisation (Albanese, 2023; Kiran & Reddy, 2019; Natu & Aparicio, 2022).



The first strand, commonly referred to as determinant-oriented, is characterised by its explicit focus on identifying and delineating the determinants or factors that contribute to the efficacious implementation of ERP systems. This orientation asserts that the successful mobilisation of ERP systems can be attributed to a discernible set of factors, which substantiate the achievement of desired outcomes. The determinant-oriented approach engages in an empirical exploration of these factors, seeking to establish causal relationships between them and the attainment of successful mobilisation (Alrabba & Ahmad, 2017; Barth & Koch, 2019; Elbanna & Newman, 2022; Natu & Aparicio, 2022; Ulatowska et al., 2023).

The process-oriented strand, distinct from the deterministic approach, explores ERP systems mobilisation within the organisational context, rejecting simplistic cause-and-effect notions. In alignment with this perspective, this study follows scholars (Al-Amin, Hossain, Islam, & Biwas, 2023; Albanese, 2023; Plugge et al., 2024; van Roekel & van der Steen, 2019), who explore the complex interplay between ERP systems and key actors. They usually draw on Actor-Network Theory (ANT) for insights, viewing ERP systems as active participants in networks that both shape and are shaped by the social realm. This sheds light on the crucial role of the social aspect in adapting ERP systems to organisational practices and context. Importantly, the research issues highlighted (above) regarding ERP systems mobilisation, implications, and responses from the related key actors can be further enriched from this standpoint. Nevertheless, despite shedding light on this interplay, some gaps remain unaddressed within the literature. These gaps existed due to the rapid advancement of emerging technology (i.e., cloud computing in ERP systems) and the increasing complexity of organisational processes (i.e., merged business structure that caused the mobilisation of multiple ERP

systems driven by top management preference) within today's business support services context (i.e., GBS).

To explore identified gaps, a case study was conducted to identify and understand the issues of ERP system mobilisation during the planning and assessment stage. A Malaysian multinational company named MOLECULE, which operates a GBS centre located in Penang, was chosen. The case company comprises both a headquarter (referred to as MOLECULE) and a GBS centre (referred to as MOLECULE's GBS). This GBS centre operates partly autonomously to provide support services to the headquarters. Throughout the planning and assessment stage, MOLECULE's GBS encountered various challenges in ERP systems mobilisation, including adapting to emerging technologies and navigating complex business structures. The selection of MOLECULE was mainly based on the criteria of being global company with GBS setting that engaged in emerging technology such as CERP system and mobilising multiple ERP systems simultaneously. As a result, this case study provides insights into the broader dynamics of ERP systems mobilisation within the GBS setting. The following section offers a brief overview of Malaysia and the study of ERP systems in the Malaysian context.

#### **1.1.4 Context in Malaysia**

Malaysia has emerged as a country with a strong recovery after the world pandemic, characterised by a diverse landscape of companies in various forms and structures (Sanusi, 2022). This includes small and medium-sized enterprises, MNCs, public limited companies, private limited companies, and government-linked companies. Notably, some companies in Malaysia operate not only at a local scale but also globally, exemplified by the presence of MNCs.

In Malaysia, GBS has gained significant commercialisation and support from various organisations due to strategic location and availability of resources. Notable among these are the not-for-profit organisation Persatuan Industri Komputer dan Multimedia Malaysia (PIKOM), InvestPenang, and the government organisation Malaysia Digital Economy Corporation (MDEC). PIKOM, in collaboration with MDEC, established the Digital Global Business Services Council Malaysia, abbreviated as GBS Malaysia, aimed at promoting the GBS sector within Malaysia. Malaysia holds a strategic advantage due to its seamless business environment, a highly talented workforce, abundant resources and skills, world-class infrastructure, and recognition as a global leader in Islamic financial services. Consequently, GBS Malaysia asserted in their report titled “Global Business Services Strategy Report 2022-2027” that Malaysia is among the leading nations in establishing GBS operations, attracting numerous MNCs worldwide to establish their GBS centres in the country (see also Fernandez & Aman, 2018, 2021).

The context of GBS in Malaysia underscores the relevance of this study within the Malaysian context—providing a deeper and more comprehensive understanding of the ERP systems mobilisation within the GBS setting. In Malaysia, there are various ERP systems providers, including global providers like Oracle and SAP, as well as local providers like SmartLab and Onnet. Despite a considerable amount of research conducted in Malaysia on the topic of ERP systems (Razzaq & Mohammed, 2020; Shukor, Sheikhi, & Nashir, 2020), most of these studies did not address the specific context of GBS.

The following sections outline the problem statement, research objectives, research questions, the scope of the study, the significance of the study, the definition of key terms, and the structure of the thesis.

## **1.2 Problem Statement**

GBS centres play a pivotal role within multinational corporations, serving as crucial hubs in standardising and enhancing end-to-end support services (Klimkeit et al., 2024; Lampinen, 2023). These centres operate with a dual mandate: to optimise operational efficiency by reducing costs while simultaneously elevating service quality to meet the evolving demands of the global business landscape (Daub, Ess, Silver, & Singh, 2020; Sanusi, 2022). The successful achievement of GBS objectives relies on the effective mobilisation of ERP systems. However, the main challenge of mobilising ERP systems arises when these systems are used within complex setting such as GBS which concerns implementing and integrating bits and pieces of system components (made up of software and data) together to reflect certain business objectives does not seamlessly align with established organisational practices in processing the organisational information to aid support services (Almajali et al., 2022; Gavidia et al., 2023). This challenge can be reflected during planning and assessment stage of the ERP systems mobilisation process. The misalignment between ERP systems and established organisational practices in information processing often manifests due to divergent usages and policies, creating friction points that impede the seamless integration of ERP functionalities into existing workflows (Almajali et al., 2022; Gavidia et al., 2023). Consequently, this necessitates organisations to embark on ERP systems mobilisation efforts, involving diverse stakeholders, each with their own agendas and priorities, to ensure the optimal functionality and efficacy of the systems.

While existing research in the Malaysian context has shed light on various aspects of ERP implementation and management, critical gaps persist in the understanding of ERP mobilisation within GBS environments. Firstly, there is a pressing need to explore the impact of emerging technologies, such as cloud computing, on ERP systems within GBS frameworks. The advent of these technologies has led a paradigm shift in how ERP systems are deployed and utilised, necessitating a re-evaluation of traditional approaches to ERP mobilisation (Al-Amin et al., 2023; Albanese, 2023; Ghobakhloo, Azar, & Tang, 2019). Secondly, shifts in business structures, including mergers, acquisitions, and strategic realignments, have profound implications for ERP mobilisation strategies. Understanding how these structural changes influence ERP deployment and usage patterns is paramount for ensuring the continued relevance and effectiveness of ERP systems within GBS environments. Lastly, the emerging contexts of organisational dynamics, particularly the GBS models, present a unique set of challenges and opportunities for ERP mobilisation. As organisations pivot towards more centralised and integrated service delivery models, the role of ERP systems becomes increasingly pivotal in driving operational synergies and fostering collaboration across disparate business units and functions. However, navigating this transition requires a deep understanding of the interplay between technological, organisational, and human factors, as well as a keen awareness of the cultural and structural nuances inherent in GBS environments.

To address the aforementioned critical research gaps and offer practical recommendations, this study has conducted a case study to understand the MOLECULE's GBS ERP systems mobilisation. Employing an interpretive case study methodology, the research delved deep into the intricate dynamics of ERP mobilisation

within the specific context of GBS operations. Grounded in ANT, the study leveraged network analysis techniques to untangle the multifaceted web of relationships and interactions that shape the mobilisation process. Through this comprehensive examination, the study aimed to achieve several key objectives. Primarily, it sought to provide a thorough exploration of the ERP systems mobilisation process within MOLECULE's GBS framework, shedding light on the various stages, challenges, and strategies involved. Furthermore, the study aimed to elucidate the implications of ERP systems mobilisation on key stakeholders within the organisational ecosystem. By closely examining the experiences, perceptions, and reactions of various actors involved in the mobilisation process (including top managements and accountants) the research aimed to uncover the complex ways in which ERP systems mobilisation shapes organisational dynamics and individual behaviours. Additionally, the study conducted a rigorous scrutiny of organisational responses to ERP mobilisation, seeking to identify patterns, trends, and best practices that emerge in response to mobilisation challenges.

Ultimately, the overarching goal of this study is to offer actionable insights and recommendations that could inform ERP systems mobilisation strategies not only within MOLECULE's GBS context but also across a broader spectrum of organisations operating in similar environments. By synthesising empirical findings with theoretical frameworks and practical expertise, the research contributed to the advancement of knowledge in this pivotal domain, facilitating more effective and efficient ERP systems mobilisation practices and driving continued innovation in GBS operations.

### **1.3 Research Questions**

In alignment with the problem statement and to comprehensively address them within the context of the MOLECULE's GBS case study, the following research questions are formulated:

Research question 1: How did MOLECULE's GBS mobilise ERP systems in its GBS setting?

Research question 2: What are the implications of ERP systems mobilisation on MOLECULE's GBS's key actors within its GBS setting?

Research question 3: How does MOLECULE's GBS respond to the mobilisation of ERP systems within its GBS setting?

### **1.4 Research Objectives**

This thesis outlines three main explanatory objectives closely tied to the empirical context of the MOLECULE's GBS centre—MOLECULE's GBS case study. These objectives blend practical research with robust theoretical underpinnings, aiming to offer a comprehensive and in-depth understanding of ERP systems mobilisation within the GBS setting at MOLECULE's GBS. Specifically, this study aims to explore and examine the following objectives.

#### **1.4.1 To Explore the ERP Systems Mobilisation in GBS Setting**

Within the study of ERP systems, it is essential to recognise that these systems possess their own inherent logic, often diverging from the organisations' established practices. The existing literature has highlighted that ERP systems are equipped with predefined best practices inscribed within their architecture (Alsharari, Al-Shboul, & Alteneiji, 2020; Jhurani, 2022; Olutola et al., 2023). Consequently, when organisations

opt for ERP systems from renowned global providers such as SAP or Oracle, they frequently encounter substantial challenges in aligning these systems with their unique business processes (Almajali et al., 2022; Gavidia et al., 2023). This misalignment can result in mobilisation issues, particularly within the complex organisational contexts of GBS.

In the current business landscape, characterised by the advent of GBS offering end-to-end support services in contrast to SSC, the studies on ERP systems mobilisation becomes crucial due to the complex setting of GBS (Daub et al., 2020; Fernandez & Aman, 2021). Additionally, the prevalence of complex business structures arising from M&A agreements underscores the importance of delving into ERP mobilisation processes. Furthermore, the impact of cloud computing on ERP systems (i.e., CERP systems) introduces a new dimension to this research area (Bawa, 2023; Godbole, 2023; Jhurani, 2022). Therefore, the research on mobilising ERP systems in a GBS setting is imperative.

#### **1.4.2 To Examine the Implications of ERP Systems Mobilisation on Key Actors**

The literature extensively discusses how ERP systems transform the roles and responsibilities of key actors, particularly accountants (Jayasuriya & Sims, 2023; Kunduru, 2023; Kunduru & Kandepu, 2023). These systems automate routine tasks, enabling accountants to shift towards more analytical and decision-making functions. This transformation, viewed through the lens of dynamic agency, emphasises accountants' adaptability to embrace new technology and changing roles, moving from mundane number-crunching to roles focused on analysis and interpretation (Anjaria, 2024; Kumar, 2023).



However, as ERP systems continue to evolve, especially with the integration of cloud computing in ERP systems (CERP systems), a significant gap remains in the literature. While prior research has predominantly focused on exploring the reasons behind companies adopting CERP systems (Hemling et al., 2022; Li et al., 2024; Nakayama et al., 2024) and the value these systems bring (Banafo Akrong et al., 2022; Gessa et al., 2023; Molina-Castillo et al., 2022), there has been limited exploration of the impact of these systems on the roles of accountants. This study aims to address this gap by conducting a comprehensive examination of the influence of CERP systems on the roles and responsibilities of both accountants and managers operating within GBS setting, or the absence thereof.

Furthermore, this study also seeks to delve into the implications of complex scenarios—the mobilisation of ERP systems within complex business structures resulting from M&A in GBS setting (having multiple ERP systems)—on key actors, which have remained largely unexplored. Consequently, this study places a central focus on understanding the implications of multiple ERP systems on key actors, particularly accountants, as one of the research objectives.

#### **1.4.3 To Examine Organisational Responses Towards ERP Systems Mobilisation**

Mobilising ERP systems within organisations is a multifaceted task that elicits diverse responses (Abobakr et al., 2022; Carlsson-Wall et al., 2022). Studying these organisational responses is crucial to understand how they ensure that the systems function as intended. Existing literature has extensively explored these responses, shedding light on the challenges organisations face during ERP systems implementation (Anjaria, 2024; Mullins & Cronan, 2021). While some employees may

exhibit resistance at the operational level due to perceived misalignment with existing processes, it is imperative to acknowledge that resistance is not a universal occurrence, particularly in cases where ERP adoption is mandatory (Olaniyi & Omubo, 2023; Schmidt et al., 2020). In such instances, the literature recognises a phenomenon referred to as surface implementation, where employees adhere to system use at the strategic level without active resistance but may not fully embrace it or understand how to maximise its effectiveness.

In the context of GBS settings, where ERP systems play a vital role, there is a notable gap in the literature understanding of how organisations responded to more than one ERP systems mobilisation. This is particularly pertinent when organisations must simultaneously mobilise two different types of ERP systems, a scenario underrepresented in the literature. Therefore, this study delves into the complexity of managing ERP systems within GBS settings, focusing on organisational responses.

### **1.5 Scope of the Study**

This study is situated within the domain of AIS and centres on the complex relationship between ERP systems and AIS research. The primary focus is on the unique challenges and opportunities that emerge in the context of AIS. Geographically, the study is grounded in Malaysia, a dynamic business landscape with a growing presence in the GBS sector, offering a unique backdrop for examining ERP systems mobilisation.

The research scope encompasses the examination of ERP systems mobilisation in GBS setting, including changing ERP systems, CERP systems, and two different types of ERP systems. This comprehensive scope allows for a nuanced understanding of the respective mobilisation processes and impacts within the GBS setting. The study

also addresses the challenges posed by complex business structures resulting from M&A agreements, which often necessitate the mobilisation of multiple ERP systems.

This scope of case study primarily revolves around the mobilisation of ERP systems, encompassing the different issues that emerged within each system's mobilisation and its related story unfolds. Within the same mobilisation, the scope also includes an investigation of the implications of ERP system mobilisation on key actors within the GBS setting, including managers and accountants. Moreover, the research pays specific attention to the mobilisation and utilisation of a CERP system and two different types of ERP systems within the GBS setting.

## **1.6 Significance of the Study**

The significance of this study is rooted in its pertinence to the contemporary business landscape, particularly in Malaysia, where numerous GBS companies operate, often under the umbrella of MNCs. The recent global pandemic and economic instability have catalysed a significant shift in the business environment, prompting MNCs to engage in M&A at an unprecedented rate. This trend has become increasingly prevalent in recent years and holds profound implications for the business operations and technological landscapes of these organisations.

First and foremost, Malaysia's prominence as a hub for GBS companies within the Southeast Asian region cannot be overstated. The country has attracted numerous MNCs that have established GBS centres to leverage the skilled workforce, cost-effective operations, and favourable business environment. These GBS centres often serve as pivotal hubs for providing critical support services to the wider global operations of these MNCs. Therefore, any study that delves into the ERP systems

mobilisation within such GBS setting in Malaysia carries inherent importance due to its direct relevance to a substantial segment of the nation's economy.

The recent surge in M&A activities among MNCs is particularly noteworthy. M&A are complex processes that bring together organisations with distinct cultures, operational procedures, and, crucially, IT infrastructures. In the wake of these mergers, organisations must navigate the challenges of integrating disparate ERP systems, aligning support services, and ensuring operational efficiency. This is where the significance of this study becomes apparent.

By conducting an interpretive case study of a manufacturing MNC in Malaysia, the research contributes valuable insights into how this organisation mobilise and respond to ERP systems in the face of M&A activities. The study explores the challenges, decision-making processes, and implications of ERP systems mobilisation within this dynamic and evolving business context.

Furthermore, as the global economy grapples with unprecedented challenges and uncertainties, the ability of organisations to effectively harness and adapt their technological resources becomes paramount. The study's findings have the potential to inform not only GBS companies operating within Malaysia but also MNCs worldwide facing similar circumstances. It offers practical insights into how organisations can manage ERP systems in the context of M&A, thereby enhancing their resilience and competitiveness in an ever-changing business landscape.

Nevertheless, this study's significance is underscored by its alignment with the current business realities in Malaysia and the broader global landscape. It sheds light on the complex interplay between ERP systems and organisational dynamics within

the GBS setting, providing actionable insights for organisations navigating the challenges posed by M&A activities and economic uncertainties.

## **1.7 Definition of Key Terms**

This section provides clear definitions of key terms essential for understanding this study. While some definitions may be provided as footnotes throughout the study, this section offers a comprehensive overview of these terms for general comprehension.

### **1.7.1 Global Business Service (GBS)**

The past literature defined GBS as an autonomous business unit with the primary objective of standardising, streamlining, and consolidating support activities across an organisation (Harritz, 2016; Richter & Brühl, 2017; Schulz & Brenner, 2010). In essence, GBS places greater emphasis on end-to-end support processes and improvising those processes (Fernandez & Aman, 2021; Wirtz et al., 2015).

### **1.7.2 ERP System: Mobilising Vs. Implementing**

Mobilising and implementing are both terms used in the context of deploying ERP systems within an organisation, but they have distinct meanings. The implementation of an ERP system involves setting up the software, while mobilisation focuses on integrating it into organisational workflows and realising its benefits.

## **1.8 Structure of the Thesis**

This PhD thesis comprises six chapters, each contributing to a comprehensive exploration of the mobilisation of ERP systems within the context of GBS. The literature is divided into two chapters: Chapter 2 and Chapter 3. The decision to separate the literature review into distinct Chapter 2 focuses on ERP and GBS, while

Chapter 3 meticulously reviews relevant theories and the theoretical framework applied to the case study. This deliberate separation enhances clarity and ensures an organised presentation of information. Below is a brief summary of the thesis structure:

Chapter 1 introduces the research background and issues, defines the problem statement, outlines research objectives, and formulates research questions. It also discusses the scope and significance of the study and defines key terms used throughout the research.

Chapter 2 reviews the literature on ERP systems and GBS, tracing the evolution of ERP systems, exploring the concept of SSC and GBS, and examining the relationship between ERP systems and GBS.

Chapter 3 elaborates on the ANT framework used in analysing the data of the study. It discusses key ANT concepts and their application to the study's empirical context.

Chapter 4 details the research design, explaining the interpretive case study approach, research paradigm, data collection methods, and ethical considerations.

Chapter 5 presents empirical findings from the case study conducted at MOLECULE's GBS. It explores ERP systems mobilisation, actor interactions, and implications, all analysed within the study's framework.

Chapter 6 synthesises research findings and explores their theoretical and practical implications. It highlights contributions to AIS and GBS research, discusses practical implications, acknowledges limitations, and concludes the study.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This study recognises the extensive literature on ERP systems within the domain of AIS. Chapter 2 undertakes a critical review of this literature as a precursor to developing this research and presenting the case study. The comprehensive body of ERP systems literature encompasses the system's evolution, related topics shaping research questions, and unaddressed gaps in the current study context. Simultaneously, the chapter explores the context of SSC and GBS, examining existing research and its intersection with ERP systems research.

The chapter commences with an examination of the ERP systems' evolution, outlining its various iterations. This is followed by an exploration of pertinent issues relating to the systems, including mobilisation, implications for key actors, and key actors' responses. Subsequently, the SSC and GBS concepts are also reviewed. Finally, the chapter identifies gaps between ERP systems literature and GBS research.

#### **2.2 ERP Systems**

ERP systems represent a paradigm shift in the realm of Integrated Information systems (IISs). The IISs introduced the concept of integrating data and information from diverse information systems within the implementing organisation into a cohesive, centralised database (Gavidia et al., 2023; Shajrawi & Aburub, 2023). This database serves as a nexus, allowing key actors within organisations to seamlessly access stored data. ERP systems empower these key actors to efficiently manage and process organisational data and information (Galliers & Leidner, 2014; Hald & Mouritsen, 2013).

However, the roots of information management and processing extend back to the mass production era, predating the advent of IISs (Al-Amin et al., 2023; Bialas et al., 2023; Jhurani, 2022). During the 1960s, the Inventory Management Control (IMC) system emerged as the earliest information system, designed primarily to facilitate inventory management (Al-Amin et al., 2023; Kunduru, 2023).

The true precursors to ERP systems were the Material Requirements Planning (MRP) and Manufacturing Resource Planning (MRPII) systems (Islam, Saha, Rahman, & Saifuddoha, 2013; Jhurani, 2022; Olutola et al., 2023). These systems primarily focused on enhancing manufacturing processes, ensuring the smooth production of goods, and providing systematic tracking of manufacturing activities (Kunduru, 2023; Kunduru & Kandepu, 2023; Olhager, 2013). However, MRP and MRPII systems had limitations, as they did not comprehensively integrate all facets of a company's operations (Al-Amin et al., 2023; Olhager, 2013). Notably, these systems were skewed towards manufacturing and did not encompass critical support functions such as finance and human resources.

The concept of enterprise from ERP systems, encapsulating the entire spectrum of company functions, was popularised by the Gartner Group (Al-Amin et al., 2023; Kunduru & Kandepu, 2023; Russell & Taylor, 2019). This broader approach of the systems aimed to integrate not only manufacturing but also all vital support functions, including finance and human resources, into a cohesive system. ERP systems were developed from this holistic perspective, becoming the backbone of modern organisations' information infrastructure, thus prompting the mobilisation of ERP systems (Peng & Gala, 2014; Salim, Sedera, Sawang, Alarifi, & Atapattu, 2015;



Ungureanu, 2022). Table 2.1 summarised the concept of the ERP systems from general aspects.

Table 2.1 The ERP Systems

<b>Aspect</b>	<b>Description</b>
Introduction of ERP	ERP systems mark a significant shift in IISs, integrating data from diverse sources into a centralised database (Gavidia et al., 2023).
Functionality	They empower key actors to efficiently manage and process organisational data and information (Galliers & Leidner, 2014; Hald & Mouritsen, 2013).
Historical Context	Information management predates IISs, with systems like Inventory Management Control (IMC) emerging in the mass production era (Al-Amin et al., 2023; Kunduru, 2023).
Predecessors to ERP	Material Requirements Planning (MRP) and Manufacturing Resource Planning (MRPII) systems focused on enhancing manufacturing processes (Bawa, 2023; Godbole, 2023).
Limitations of MRP	MRP and MRPII systems were limited in scope, primarily focusing on manufacturing and lacking integration of critical support functions (Gessa et al., 2023; Mullins & Cronan, 2021).
Evolution to ERP	The concept of ERP systems emerged from the broader approach of integrating all company functions, popularised by the Gartner Group (Molina-Castillo et al., 2022; Nakayama et al., 2024).
Holistic Integration	ERP systems encompass all vital support functions, including finance and human resources, becoming the backbone of modern organisations' information infrastructure (Peng & Gala, 2014; Salim et al., 2015).

### 2.2.1 Insight into ERP Systems

To review the issues surrounding ERP systems, including their mobilisation, implications, and organisational responses, a comprehensive understanding of their mechanisms is crucial. Thus, this section reviews the [1] infrastructure; and [2] evolutions of ERP systems.

#### 2.2.1(a) The Infrastructure of ERP Systems

Based on previous literature, ERP systems were typically installed on the computers or laptops of the implementing company, and these were referred to as on-premises ERP systems (Ippolito, Sorrentino, Guardato, Marcello, & Paolone, 2024).

Global providers such as SAP and Oracle made these systems readily available(Kunduru & Kandepu, 2023). These ERP systems comprised smaller systems called modules, each dedicated to a specific department (e.g., production, sales, purchases, human resources, and finance) (Ammar, 2017; Hassan & Mouakket, 2016; Terminanto et al., 2019). All the data and information generated by these modules were stored in a centralised shared database, as illustrated in Figure 2.1. The bidirectional arrows connecting each module to the centralised database indicate that relevant information could be stored and retrieved from various departments within and across organisations. This infrastructure facilitated real-time access, storage, and retrieval of data and information, facilitating timely decision-making.

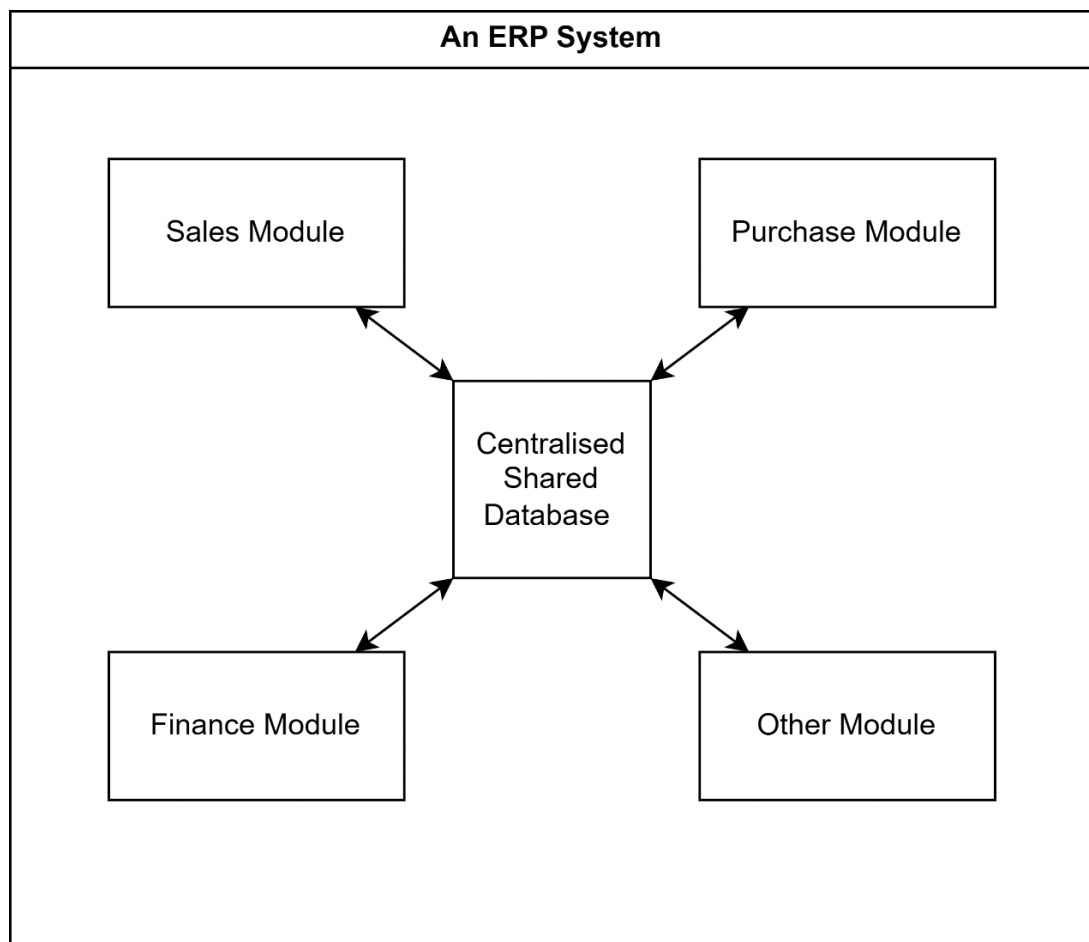


Figure 2.1 Typical Infrastructure of an ERP System  
Sources: Various literature as noted above