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**THE IMPACT OF EMPLOYEE MOTIVATION AND JOB  
PERFORMANCE: THE MEDIATING ROLE OF ACCOUNTING-  
RELATED DIGITAL SYSTEMS (ARDS)**

**SUBHALOSHINI SHANMUGAM**

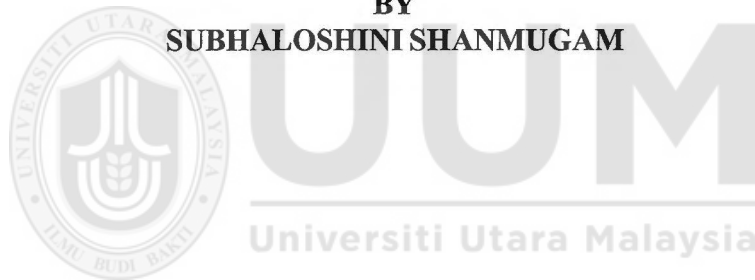


**MASTER OF HUMAN RESOURCE MANAGEMENT  
UNIVERSITI UTARA MALAYSIA  
JANUARY 2025**

**THE IMPACT OF EMPLOYEE MOTIVATION AND JOB  
PERFORMANCE: THE MEDIATING ROLE OF ACCOUNTING-  
RELATED DIGITAL SYSTEMS (ARDS)**

**BY**

**SUBHALOSHINI SHANMUGAM**



**Thesis Submitted to  
School of Business Management (SBM),  
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In Partial Fulfillment of the Requirement for the Master of Human Resource  
(Management)**



**Pusat Pengajian Pengurusan  
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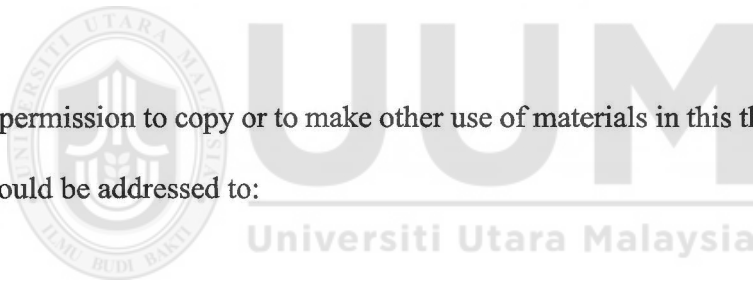
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## Abstrak

Kajian ini bertujuan untuk mengkaji hubungan antara motivasi pekerja dan prestasi kerja dengan memberi tumpuan kepada peranan perantaraan sistem digital berkaitan perakaunan di kalangan pekerja yang menggunakan perisian perakaunan. Dalam era transformasi digital kini, sistem perakaunan berasaskan teknologi seperti Sistem Maklumat Perakaunan (AIS) dan Perancangan Sumber Perusahaan (ERP) telah merevolusikan cara organisasi menguruskan data kewangan dan operasi harian. Walau bagaimanapun, pelaksanaan sistem ini tidak selalu menjamin peningkatan prestasi kerja tanpa tahap motivasi pekerja yang tinggi. Kajian ini menggunakan pendekatan kuantitatif dengan mengedarkan soal selidik kepada pekerja yang menggunakan perisian perakaunan dalam industri perkhidmatan kewangan dan perakaunan di Malaysia. Dapatan kajian menunjukkan bahawa motivasi pekerja mempunyai hubungan yang signifikan dengan prestasi kerja, dan sistem digital berkaitan perakaunan memainkan peranan perantaraan yang penting antara kedua-dua pemboleh ubah ini. Dapatan ini memberikan implikasi penting kepada pengurus sumber manusia dalam membangunkan strategi latihan dan pembangunan yang meningkatkan penerimaan teknologi dan prestasi organisasi secara keseluruhan.

**Kata kunci:** Motivasi pekerja, prestasi kerja, sistem digital perakaunan, sektor swasta

## **Abstract**

This study aims to examine the impact of employee motivation and job performance by focusing on the mediating role of accounting-related digital systems among employees using accounting software. In today's era of digital transformation, technology-based accounting systems such as Accounting Information Systems (AIS) and Enterprise Resource Planning (ERP) have revolutionized the way organisations manage financial data and daily operations. However, the implementation of these systems does not always guarantee improved job performance without a high level of employee motivation. This study adopts a quantitative approach by distributing questionnaires to employees using accounting software in the financial and accounting service industry in Malaysia. The findings indicate that employee motivation has a significant impact on job performance, and accounting-related digital systems play a crucial mediating role between these two variables. These findings offer important implications for human resource managers in developing training and development strategies that enhance technology adoption and overall organisational performance.

**Keywords:** Job performance, employee motivation, accounting-related digital systems

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### **List of Abbreviations**

<b>UUM</b>	University Utara Malaysia
<b>SPSS</b>	Statistical Product and Service Solution
<b>JDR</b>	Job Demand Resources
<b>ISS</b>	Information System Success
<b>ARDS</b>	Accounting - Related Digital System
<b>KMO</b>	Kaiser - Meyer Oikin



## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the Study

Organizational effectiveness, productivity, and long-term sustainability are significantly influenced by employee job performance, particularly for those using accounting software within the organization. In accounting contexts, employee job performance influences the precision of financial reporting and the adherence to the rules and regulations, quality of audits, and the reliability of information for managerial decision-making (Diamantidis & Chatzoglou, 2019; Alase & Akinbo, 2021). Employees who perform their jobs well enhance competitive advantage, whereas, on the contrary, substandard job performance puts organisations at risk financially, damages the firm's reputation, and creates operational inefficiencies.

Prior studies show that factors causing declines in job performance are more likely to be of a human nature than a technical one. In this regard, employee motivation has been noted as a crucial factor affecting job performance in a variety of organisations (Diamantidis & Chatzoglou, 2019; Kuvaas et al., 2020). Motivated employees are more likely to be constructive, persistent, and take the initiative as well as be flexible, all of which are conducive to attaining the performance goals in an accounting position. On the contrary, low motivation results in high disengagement, low effort, and a decline in both task and contextual performance (Al-Kharabsheh et al., 2023).

Employees using accounting software may be adversely affected by job monotony, long hours, insufficient recognition, and unreasonably high expectations. Perceptions of monotony and of a lack of enough support lead to lower motivation, and as a result, lower productivity and even lower quality of work (Wahet et al., 2020; Wege et al., 2019). Traditionally, firms would use financial incentives and promotion as motivators; however, in more recent studies, these extrinsic motivating factors have been viewed as inadequate to maintain high levels of job performance in a rapidly digitizing workplace (Hartoko & Fitri, 2023).

In the face of performance problems, numerous employees using accounting software are integrated with Accounting Information Systems (AIS), Enterprise Resource Planning (ERP) Systems, Cloud Accounting, Artificial Intelligence (AI), and automated reporting tools. Accounting Related Digital System (ARDS) are intended to increase the productivity, precision, and rapidness of accounting functions by streamlining repetitive tasks, decreasing potential mistakes, and providing real-time financial data (Nassani et al, 2023; Davenport, 2019). The presence of digital accounting systems and their successful implementation can lead to organisational efficacy and performance (Alase & Akinbo, 2021; Zhang & Zhao, 2022).

Despite ARDS being integrated into organisational systems, it does not guarantee improved job performance outcomes. Numerous researchers, employees, and system implementers speak of the perplexing adaptability to digital systems because of inadequate training, rudimentary user interfaces, overcomplex systems, chronic resistance to change, and heightened cognitive loads (Al-Kharabsheh et al.,

2022; Rachman et al., 2024). When the accounting systems available to employees are highly perceived to be of low usability and poorly congruent with tasks assigned within their positions, motivation can become quite low, thus decreasing job performance. Conversely, ARDS can be motivating and enhance job performance by task simplification and reallocation of employee effort away from repetitive accounting tasks to more valuable activities (AlNasrallah & Saleem, 2022; DeLone & McLean, 2003).

This implies that digital systems related to accounting may facilitate the connection between employee motivation and job performance. Motivated employees can perform better and, in this context, ARDS can encourage that motivation by streamlining work processes and providing greater autonomy over tasks (Nassani et al., 2023).

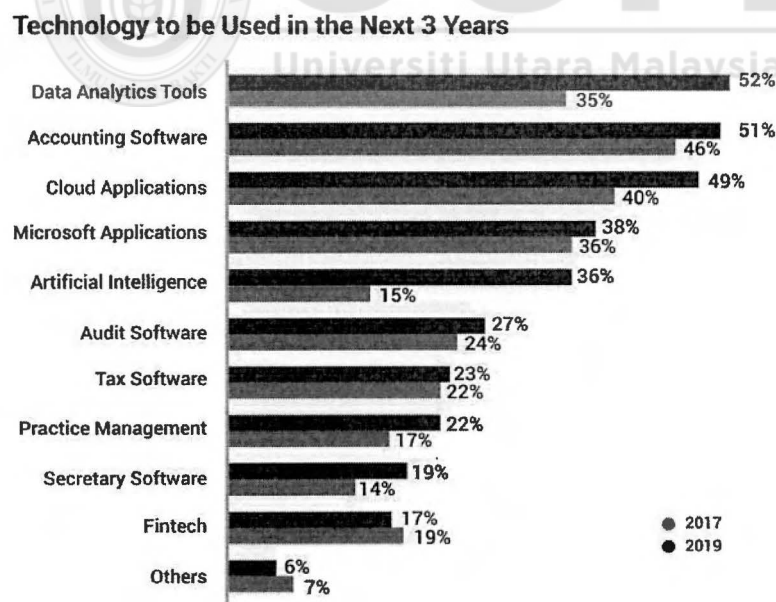


Figure 1.1 Technology to be used in the next 3 years  
Source: Malaysian Institute of Accountants (MIA) (2019)

Figure 1.1 shows that the Malaysian Institute of Accountants (MIA) conducted a survey in 2019, which showed that accounting professionals wanted to increase the use of more sophisticated digital tools. The results indicate that 52% of participants wanted to use data analytics, 51% planned to use accounting software, and 49% wanted to use cloud-based services. Data analytics tool interest is notable and increased by more than a third, from 35% in 2017 to 52% in 2019. Also, 36% of participants planned to use tools that incorporate Artificial Intelligence (AI). Overall, the data demonstrates that there is a strong positive sentiment in the accounting field in utilizing technology to improve their efficiency, performance, and efficacy in their roles.

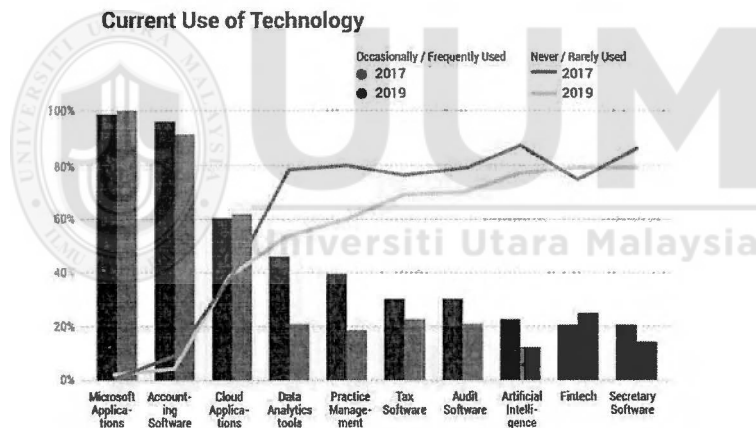


Figure 1.2 Current use of technology  
Source: Malaysian Institute of Accountants (MIA) (2019)

Figure 1.2 shows that MIA surveys there is a table which depicts the different technologies employed within the profession. The most used technologies in the profession include Cloud Applications, Accounting software, and Microsoft Applications. 100% of the participants use Microsoft Applications and 90% use accounting software, however, the use of data analytics tools increased by 20% (from

20% in 2017 to 2019) which indicates that the profession is moving in the correct direction and adopting a more data oriented approach. The use of data analytics tools in this profession is a tier higher from previous uses of data and is more attributed to data, aided by technology, to improve accuracy, decision-making, and performance. It also increases the staff motivation, performance, and workflow, which is the directive of the increased use of technology within the profession.

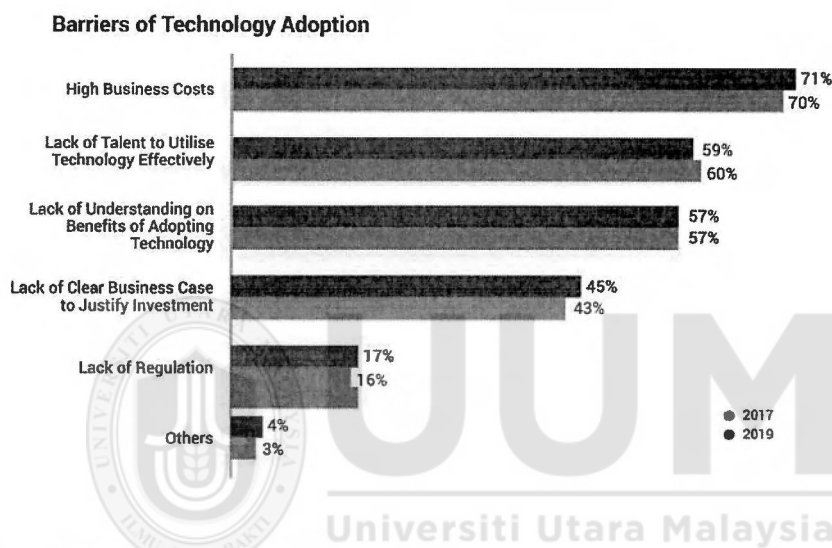


Figure 1.3 Barriers of technology adoption  
Source: Malaysian Institute of Accountants (MIA) (2019)

The barriers to technology described in Figure 1.3 shows respondents ranking the barriers as, 71% costly technology; 59% insufficient tech utilization; 57% lack of understanding of tech benefits) show the critical barriers that accounting firms need to overcome to realize the benefits of ARDS. MIA survey results highlighted the need to invest in training and education to overcome the critical barriers to effective utilization of ARDS in accounting practice.

In Malaysia, where digital accounting systems have great potential, some accounting firms still experience the performance barriers of staff motivation, acceptance of the

system, and ARDS underutilisation. These issues highlight the need for more research in the Malaysian accounting field concerning the interplay between job performance, digital systems, and employee motivation. According to the MIA survey, there is an increasing reliance of accounting firms on technology, particularly cloud systems, data analytics, and AI, to improve performance. However, there is still a need to enhance the adoption and use of these technologies (Malaysian Institute of Accountants. (2025).

This gap warrants attention, as declining employee engagement and job performance, as well as the potential long-term viability of employees using accounting software, are directly linked to the effective use of digital systems, particularly ARDS.

Therefore, this study seeks to examine performance-related issues among employees using accounting software, as they pertain to employee motivation and the intermediary position of digital systems specific to accounting. With the closure of this gap, the study offers empirical insights into the motivational potential of employee digital accounting systems and performance improvement, thereby promoting sustained organisational performance in Malaysia's financial and accounting service industry.

## **1.2 Problem Statement**

### **Theoretical Gap**

Although ARDS has helped the accounting profession manage financial data, the impacts of ARDS on accounting employee motivation and job performance remain largely unstudied. Even though the DeLone and McLean Information System Success (ISS) Model and the Job Demands-Resources (JD-R) Model capture the intersection of technology and organizational performance, the models have, in the case of ARDS, empirical and unassessed employee performance through motivation (Senin & Rashid,

2025). In particular, the associations between motivation and performance and the dimensions of system quality, information quality, and user satisfaction are virtually non-existent in the case of the Malaysian accounting field (Alase & Akinbo, 2021; Hartoko & Fitri, 2023).

Even though the JD-R model analyzes how particular job resources help motivate performance, it does not explain how tools, such as ARDS, are job resources that can help improve employee engagement and performance in accounting jobs (Kuvaas et al., 2020). In addition, motivational theories, such as Self-Determination Theory (SDT), have not been incorporated into studies examining ARDS and the socio-psychological dimensions of the user in the case of rapidly evolving digital environments, such as Malaysian SMEs (Nasar et al., 2021). With ARDS now integral to accounting, it is important to analyze the various dimensions of influence that ARDS has on employee motivation and job performance. Therefore, this study is designed to address this gap theoretically by examining the context of Malaysian accounting firms and the mediating effect of ARDS on employee motivation and job performance.

### **Practical Gap**

Currently, Malaysian organizations have ARDS implemented for most accounting streamlining processes; however, they are still facing motivational and performance result issues. Integrated ARDS systems are designed frustrate user employees, and constant resistance to system utilization is documented. (Al-kharabsheh et al., 2022; Resende, 2024). System user interface, design, and insufficient training negatively affect resistance and overall utilization. Malaysian organizations face significant dilemmas concerning the underutilization of ARDS systems. Given the sustained and

constant pressure placed upon employees to achieve organizational deadlines and remain compliant with mandates (Nassani et al., 2023).

In addition to the investment in digital equipment, there are still numerous accounting specialists who report experiencing system malfunctions, overly complicated processes, and mental overload, which reduce their efficiency and satisfaction (Hartoko & Fitri, 2023; Al-kharabsheh et al., 2023). These problems are worsened by the absence of individual coaching, where employees receive training that is overly generalized, misaligned to their specific job functions, and tips about problems are not addressed at all (Kurniasih et al., 2023). As a result, motivational factors of competence, autonomy, and /or relatedness are unmet, and job performance is reduced while turnover intentions are increased (Najeeb et al., 2021; Kuvaas et al., 2020).

Practical gaps outlined in the research may include the issues most organizations face with ensuring ARDS systems not only work, but also fit with the employee's tasks and are psychologically. The implementation of ARDS needs to be approached from different angles, such as ensuring technical assistance, training concerning specific tasks, and regular adjustments of the systems in line with the demands of the industry (Resende, 2024; Alase & Akinbo, 2021). This research aims to provide empirical evidence to organizations in Malaysia on how to best integrate ARDS to enhance employee motivation, decrease work overload, and improve job performance. This help to bridge the gap between the theory and practice of the digital transformation of the accounting profession.

### **1.3 Research Questions**

1. What is the influence of motivation on job performance among employees using accounting software?
2. What is the influence of motivation on ARDS among employees using accounting software?
3. What is the influence of ARDS on job performance among employees using accounting software?
4. What is the ARDS function as a mediator to employee motivation and job performance among employees using accounting software?

### **1.4 Research Objectives**

1. To examine the influence of motivation on job performance among employees using accounting software.
2. To examine the influence of motivation on ARDS among employees using accounting software.
3. To examine the influence of ARDS on job performance among employees using accounting software.
4. To determine the mediating influence of ARDS between employee motivation and job performance among employees using accounting software.

### 1.5 Significance of the Study

The rapid pace of technological adoption and digital accounting systems has strengthened the impact on employee motivation and job performance, highlighting its importance for successful organisations (Al-kharabsheh et al., 2022). Digital accounting tools such as cloud-based accounting, artificial intelligence, automation, and enterprise resource planning tools are increasingly used for improving the effectiveness and precision of accounting functions, as well as overall business decision-making (Lutfi et al., 2022; Victolia et al., 2023; Rachman et al., 2024). Most research on these systems has focused on the technical aspects and performance implications of digital accounting tools, leaving the primary concern of employee motivation and job performance relatively neglected. This is particularly the case in developing economies such as Malaysia, where the accounting-related digital systems still have little empirical evidence regarding their impact on the workforce (Al-Hattami & Almaqtari, 2023; Nurain et al., 2024).

Previous studies indicate that workers' motivation leads to successful performance at the individual level, as well as at the organizational level (Al-kharabsheh et al., 2022; Hartoko & Fitri, 2023). However, the majority of studies that examine the intersection of motivation and digital technologies are concerned either with digital human resource management systems or with general information technologies, and not with digital systems in accounting (Al-kharabsheh et al., 2022). Consequently, the understanding of how ARDS affects motivating factors and, subsequently, how motivators affect the level of performance of accounting professionals, is limited. By theorizing ARDS as a mediating variable, this research attempts to reposition motivation–performance theory

within the context of digital accounting and, thus, provide a better understanding of the impact of accounting technologies on employees' attitudes and performance.

This study's significance aligns even more with the focus on Malaysia as an emerging digital economy with swiftly adopted technologies. Most literature on digitalised accounting systems and the motivation of employees comes from the West or developed countries, which draws a lot of the motivation literature to a lack of applicability in developing countries with different institutional, cultural, and technological settings (Al-Hattami & Almaqtari, 2023; Victolia et al., 2023). This research study focuses on employees who actively engage with accounting software in Malaysia and attempts to fill this gap by providing context-specific empirical evidence in relation to the literature on the development of human capital and digital transformation in developing countries (Nurain et al., 2024; Rachman et al., 2024).

The practical perspective of this study's findings provides the basis for value-added contribution to the leaders of the organisations, managers of accounts, and professionals who implement any digital accounting systems. Malaysian organisations are still at the basic level of the digital transformation and, at times, focus on technological investments, leaving the employees' motivation, engagement, and change readiness unaddressed (Lutfi et al. 2022). Addressing the gaps in relational aspects of ARDS and employee motivation, performance, and productivity would assist Malaysian organisations in developing effective employee-oriented digital strategies, training, and change management frameworks (Hartoko & Fitri, 2023; Al-kharabsheh et al., 2022).

This study also carries implications for digital transformation stakeholders among Malaysian policymakers and regulators, given the importance of such studies to the nation's digital economy. Current policy efforts stress the importance of technological

adoption and operational improvements; however, there is still insufficient understanding regarding the implications of digital technologies on employee behaviors and work outcomes (Nurain et al., 2024). This study's outcomes can serve to inform policymaking relating to the need to integrate digitalisation and human resource management to improve organisational outcomes, individual employee outcomes, and quality of work life.

This research also adds to emergent scholarship in constructing a viable empirical and conceptual basis for subsequent work that explores the dynamics between digital instruments and human capital. In empirically verifying the mediating effect of ARDS, the study has offered a construct that can be applied to other organisational roles, sectors, and geographical contexts. Subsequent researchers may augment this construct by the incorporation of other mediating and/or moderating variables such as digital competence, organisational culture, or leadership support, which contribute to the ongoing dialogue regarding digital transformation and the outcomes for employees (Al-kharabsheh et al., 2022; Lutfi et al., 2022; Victolia et al., 2023).

### **1.6 Scope of the Study**

This research aims to examine the impact on employee motivation and job performance, specifically investigating the role of Accounting-Related Digital Systems (ARDS) as a mediator in the financial and accounting service industry within the private sector in Malaysia. The study targets employees in positions such as Top Management, Senior Management, Managerial Level, and Executive Level who use accounting software as a core component of their job functions. The study excludes employees who do not use accounting software and those outside the accounting functions.

Within this research, ARDS is specifically considered a mediating construct and not as a direct independent variable. ARDS encompasses digital technologies in accounting, such as cloud accounting systems, automation, and AI accounting applications, and other tools that assist in accounting processes. The study does not analyze the different digital accounting tools individually, as it is intended to study ARDS as a system, and how it affects the motivation of employees in relation to job performance.

The study is primarily focused on Malaysia as its geographical scope. This is because most Malaysian organisations have adopted digital accounting systems, and the majority of research is focused on emerging digital economies; there is little research on the human-related outcomes of this technology. Therefore, results cannot be extended to developed economies or countries that are at a different digital transformation stage.

From an organisational perspective, the focus is restricted only to organisations based in Malaysia that have implemented some form of accounting-related digital systems. Organisations that are in the early stages of digitalisation, or those that have not implemented accounting software, are excluded. Variances in organisational size, type of industry, level of digital maturity, and culture are considered as contextual factors that could have an impact on employees' motivation, ARDS usage, and performance, but are not explored as moderating factors in this study.

## **1.7 Definition of Key Terms**

### **1.7.1 Job Performance**

Job performance is a central issue in organizational behavior and encompasses both the in-role and the innovative components. In-role job performance encompasses all the tasks described in an employee's job description and is the basis the organization uses to evaluate and reward performance. This performance type captures work behaviors that are instrumental in helping the unit achieve its objectives. Conversely, innovative job performance is the development and execution of original ideas for the improvement of the organization. It is assessed based on the articulation and implementation of consequential ideas and activities that transcend the functional responsibilities of the position (Chen et al, 2019).

### **1.7.2 Employee Motivation**

Employee motivation refers to the different internal or external stimuli that explain, guide, or maintain an individual's commitment to perform work-related activities. It determines the way and approach in which employees perform their duties and the goals of the organization. When employees are motivated, they demonstrate a higher level of productivity, creativity, and commitment to the organization (Abdulkareem, 2025).

### **1.7.3 Accounting-Related Digital Systems (ARDS)**

Accounts Related Digital Systems (ARDS) refer to digital tools and technologies tailored to assist the financial activities of companies, mostly small and medium enterprises (SMEs). These systems include digital services such as cloud accounting,

as well as automation and AI-based applications that enhance and streamline accounting and financial management services (Mediaty et al., 2025).

### **1.8 The Organisation of the Study**

The study is organized into five chapters. This material serves as the introductory section of the project paper. This chapter explains the context of the research topic and the rest of the study's components, starting with the Background of the Study and the Problem Statement, which pinpoints the gaps in the literature. It also contains the Study Questions and the Objectives of the Research that steer the research, and the Study Significance, which describes the contribution of the research to the field and practice. Also included are the Scope of the Study and Definition of Key Terms to outline the boundaries of the study and the key components.

Chapter 2 about Literature Review. This chapter analyses the previous research conducted on employee motivation, job performance, and accounting-related digital systems, especially Accounting Information Systems (AIS). The chapter explains the major motivation theories and their position towards job performance and their relations to each of Vroom's Expectancy Theory and Herzberg's Two-Factor Theory. The chapter also assesses the impact of ARDS on organisational performance and the possible influence on employee motivation and job performance.

Chapter 3 about Research Methodology. This chapter describes the research design, including the methods for data collection and analysis. It explains the Population and Unit of Analysis, Sample Size and Sampling Technique, and the Instrumentation (e.g., questionnaires). It also describes the Data Collection Procedures and the Methods used for Data Analysis in hypothesis testing.

Chapter 4 about Results and Findings. This chapter describes the analysis carried out on the data, including the descriptive statistics, correlation analysis, and regression results. It addresses the findings in relation to the research questions and hypotheses, discussing the most important impact and the patterns identified in the data.

Chapter 5 about Conclusion and Recommendations. This chapter presents the study's key findings and their implications. It discusses the recommendations for employees using accounting software in organisations on the use of ARDS to improve employee motivation and job performance. This chapter also presents the Research Implications, Limitations, and Recommendations for Future Research.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter dives into the foundational aspects of employee job performance, motivation, and the positive influence of Accounting-Related Digital Systems (ARDS) on both. Job performance is a multifaceted construct, defined here as primary, contextual, and adaptive performance. While primary performance is described as accomplishing essential core tasks, contextual performance is characterized by behaviors that facilitate a better workplace, and adaptive performance relates to the ability to work flexibly and respond to new and varied challenges.

#### **2.2 Job Performance**

Job performance is a central issue in organizational behavior and encompasses both the in-role and the innovative components. In-role job performance encompasses all the tasks described in an employee's job description and is the basis the organization uses to evaluate and reward performance. This performance type captures work behaviors that are instrumental in helping the unit achieve its objectives. Conversely, innovative job performance is the development and execution of original ideas for the improvement of the organization. It is assessed based on the articulation and implementation of consequential ideas and activities that transcend the functional responsibilities of the position (Chen et al, 2019).

The literature agrees that job performance is a multidimensional construct, most commonly defined as task, contextual, and adaptive performance (Guzmán-Ortiz et al., 2020). Task performance is the behavioral dimension that relates to the achievement of

the fundamental job role, the provision of goods and services, and other related functions. In contrast, contextual performance includes extra-role discretionary and cooperative behaviors that enhance the organizational, social, and psychological climate of work. Adaptive performance has received considerable scholarly focus and refers to the behavioral flexibility of the employee to the various changes in job tasks, technology, and work arrangements (Bravo-Duarte et al., 2025). Adaptive performance is especially relevant for organizations undergoing digital transformation and operating in rapidly changing market environments. It helps workers develop constructive skills, learn new processes, and cope with new challenges (Raed et al., 2023). This includes adaptable problem-solving, new-approach advocacy, and perseverance in the face of change or uncertainty (Bravo-Duarte et al., 2025). Adaptive performance is a cornerstone for the continued effectiveness of employees as work environments become increasingly reliant on technology.

Because job performance is personal, it must be evaluated through behavioral indicators rather than mere observation. It combines results with observed behaviors, and hence, a performance evaluation must be multidimensional (Nangoy et al., 2019). Job performance is best characterized by work quality, output quantity, deadlines, effectiveness, commitment, and adaptiveness, as these define the extent to which employees contribute to the organization (Rachman et al., 2024).

The recently expanded understanding of job performance is in stark contrast to previous definitional, conceptual, and empirical understandings of performance that focused solely on the volume of output produced in a given period. Recent studies reflect a more balanced consideration of the definitional components of job performance that include

not only the completion of assigned tasks, but also the performance of activities that are constructive, proactive, and adjust to the overall strategic direction of the organization (Alase & Akinbo, 2021; Ramos-Villagrasa et al., 2019). Additionally, factors such as employee motivation, digital human resource management, and organizational support the increasingly influencing employee performance in digitally enabled environments (Alase & Akinbo, 2021; Al-Kharabsheh et al., 2022).

The continued evolution of job roles and the processes that underpin work, driven by the application of digital tools and platforms, means the criteria for performance must be continually reviewed to ensure they remain appropriate. Adaptive performance, complemented by appropriate knowledge management and decision-making processes, is vital for helping employees manage technological and organizational change (Fogoroş et al., 2020). Therefore, organizations that develop adaptive, digitally enabled performance management systems are likely to be the ones that are best able to support employee performance, organizational improvement, and organizational sustainability (Cosa & Torelli, 2024).

### **2.3 Employee Motivation**

Employee motivation is defined as the enthusiasm, energy and lasting dedication employees demonstrate towards their tasks, which in turn affects their performance, attitude, and engagement in the organization (Wahet et al., 2020; Hartoko & Fitri, 2023). Motivation is the reason behind employees' exerted effort and persistence over tasks, and their performance at the high levels required for the organization to hit its target (Muliati et al., 2022). Motivation as a psychological factor plays a role in shaping

behavior by driving people towards the attainment of personal and organizational goals (Nasar et al., 2021; Njeje et al., 2018).

Motivation of employees is usually described as intrinsic and extrinsic motivation. As Mosuin et al. (2019) and Elamalki et al (2024) indicate, intrinsic motivation, empowered by internal factors, is a result of personal accomplishment, interest in the work, professional development, and personal values congruent with the values of the organization. Employees with intrinsic motivation show high engagement, creativity, and long-term commitment because their motivation is due to personal satisfaction and self-fulfillment (Hartoko & Fitri, 2023; Widjaja et al., 2025). On the contrary, extrinsic motivation, as described by Lifang & Ali (2024) and Akerele (2023), is the result of external factors which include organizational rewards such as salary, organizational recognition, promotion, and job security, as well as good work environment. Although extrinsic motivation is effective in stimulating employees' short-term performances, its effect is maximized and the environment of motivation becomes imbalanced when intrinsic factors are involved (Al-kharabsheh et al., 2022).

The effective fostering of employee motivation requires organizations to identify and embed both intrinsic and extrinsic motivators into their people and performance management strategies (Mohammed, 2024). Motivation is defined as the set of beliefs, values, and expectations that guide individuals toward goal attainment (Njeje et al., 2018; Muliati et al., 2022). These motivational drivers, albeit intangible, serve as critical catalysts that drive employees to perform specific tasks and to high levels of performance (Nasar et al., 2021).

In addition to the drivers of motivation, the organization's ability to motivate employees is itself an important organizational competency, and is instrumental in attaining

positive organizational performance (Wege et al., 2019; Winarno et al., 2015). Wahet et al. (2020) differentiate positive motivation from welding motivation. Positive motivation is the offering of incentives and rewards for the attainment of specific targets, and in turn, results in enhanced employee morale, motivation, and operational effectiveness (Wege et al., 2019; Winarno et al., 2015). In contrast, welding motivation focuses on punishment and coercion to drive behavioral change. While this tactic may result in compliance, it is damaging to employee morale and their motivation in the long term (Wahet et al., 2020).

Enthusiasm and motivational energy tend to correlate highly with employee motivation and performance (Hartoko & Fitri, 2023). Motivation focused on goals and task completion derives from participation, managerial backing, recognition, workplace stress, and appreciation (Hartoko & Fitri, 2023). Employees tend to exert even more effort and persist longer on assigned tasks when they expect intrinsic and extrinsic meaningful rewards and recognition (Akerele, 2023; Mohammed, 2024).

In most contemporary digital transforming organizations, employee motivation has increasingly been based on the adoption and perceived relevance of IT systems (AlNasrallah & Saleem, 2022; Al-kharabsheh et al., 2022). When employees perceive digital and e-accounting systems as necessary for their work, supportive of their performance, and beneficial, they tend to adopt and use them more (AlNasrallah & Saleem, 2022). Motivation is increased when training encourages the use of the systems and when employees are assisted with their roles (Junaidi, 2022).

The motivational impact of digitalization, as highlighted in some recent studies, is mainly attributable to the fact that it enables employees to spend less time on repetitive tasks, as they can now concentrate on value generating activities (Resende, 2024;

Kuvaas et al., 2020). This reduces the monotonous nature of tasks and leads to greater job satisfaction, engagement, and motivational levels (Berghaus & Back, 2016; Gonçalves et al., 2022; Kaya et al., 2019). Increased feelings of control, contribution, and achievement, resulting from the use of automation and digital tools, have been documented in the accounting profession and other fields (Taib et al., 2022; Rahman et al., 2023).

Junaidi (2022) also mentions employee involvement in the design and implementation of accounting information systems as a strong motivational factor. Employees often experience an increase in motivation and job performance when they feel a sense of ownership, which is often the case when they take part in system design and implementation (Junaidi, 2022; Kuvaas et al., 2020).

Despite technological advancement, motivation the issues related to the disparity of rewards, lack of recognition, and inefficient systems. Rachman et al. (2024) demonstrated that while the quality of accounting information systems was satisfactory, the performance of the systems was greatly affected by data inaccuracies, the costs of the systems, and errors made by humans. In addition, employees indicated that lack of recognition of the outstanding achievers was a motivation suppressor and in this regard, the need for recognition as an indicator was appreciated and reinforced the need for reward systems to be simple and understandable to employees (Rachman et al., 2024; Al-kharabsheh et al., 2022).

Most research agrees that motivation and achievement enhance performance and productivity in the workplace, especially in the new digital work settings (Kuvaas et al., 2020; Alkhawaja et al., 2022). Great motivation is created and greatest system quality, superb client (user) satisfaction, and recognition and empowering employees

provides motivation (Alkhawaja et al., 2022; Widjaja et al., 2025). For this reason, having a grasp of the motivational factors in order to enhance an individual's performance and creating a conducive environment for an organization to thrive is paramount (Akerlele, 2023).

#### **2.4 Accounting- Related Digital System**

Throughout the years, the academic community has pointed out the close relationships between Accounting-Related Digital Systems (ARDS) and Accounting Information Systems (AIS), as well as Digital Accounting, both of which are well-documented. An Accounting Information System is a people-centered system that, among other constituents such as procedures, data, software, and company resources, collects, processes, stores, and disseminates financial and other transactional data (i.e. operational data) to support planning, control, and managerial decision making (Hartoko & Fitri, 2023; Nassani et al., 2023). In the same vein, digital accounting describes the application of computer-based technologies and software applications to support accounting tasks and financial data management, which allows immediate access to the information, greater accuracy, and less the possibility of human errors (Hartoko & Fitri, 2023; Marr, 2018).

According to Marr (2018), automation, intelligent systems, and autonomous decision-making through advanced digital technologies describe the characteristics of the Fourth Industrial Revolution. These characteristics are the primary reason driving the development of ARDS. In this light, accounting digitization is a defining change in the accounting profession as it ushers in the movement away from tedious, manual, and paper-based bookkeeping to systems that integrates real-time data to support advanced, predictive financial management (Hartoko & Fitri, 2023). Digital accounting systems

not only enhance the speed and accuracy of information and the accessibility of accounting information but also minimize the risk of errors that are usually associated with traditional accounting practices (Hartoko & Fitri, 2023).

The range of ARDS includes various types of digital technologies and tools. For example, Enterprise Resource Planning (ERP) systems merge an organization's accounting modules with other functions such as procurement, inventory, and human resource management to enhance process integration and centralized data management (Kieso et al., 2016). Furthermore, accounting software, like QuickBooks, Xero, and Sage, streamlines other accounting activities including invoicing, accounts receivables and payable, and financial report generation (Nassani et al., 2023). Also, cloud-based accounting systems provide real-time and remote accessibility to financial data, thus fostering collaborative work and timely decision-making (Zhang & Zhao, 2022; Kieso et al., 2016). More sophisticated ARDS utilizes artificial intelligence, big data analytics, and automation to evaluate financial data, identify missing transactions, and automate predictions to decrease the extent of manual work and improve the accuracy of analyses (Lee et al., 2023).

Improved organizational productivity has been attributable to the implementation of ARDS. These systems help achieve better operational productivity, internal control, and managerial decision quality by streamlining processes and providing real-time and more precise data (Tran, 2023). Routine accounting processes, such as data entry and reconciliation, can be automated, which frees up organizational resources that can be redirected to more valuable activities such as analysis, planning, and risk assessment (Taib et al., 2022). From the evidence available in the United States, firms that fully implement accounting information systems observe increased productivity and

operational efficiencies (Davenport, 2019). In the same way, European studies cite cloud accounting systems to foster decision-making more quickly and accurately while enhancing the transparency and confidence of stakeholders (Kieso et al., 2016; Hidayat, 2023).

The successful implementation of Automated Reporting and Data Systems (ARDS) rests considerably on the human and organizational roles involved. When employees take part in collaboration when designing and implementing accounting information systems, they foster a sense of ownership, which subsequently increases motivation and improves job performance (Junaidi, 2022). Motivated and adequately skilled employees have a positive impact on organizational performance, and this has been documented with systems of high-quality accounting information (Yazdifar & Askarany, 2023; Khan & Ali, 2023). Employee engagement and productivity in accounting digitization are positively influenced, particularly in small and medium-sized enterprises where IT capabilities are critical (Bounfour & Golembiewski, 2023; Kuo & Yang, 2023).

The most recent literature outlines the use of emerging technologies such as artificial intelligence, big data, blockchain, and cloud computing in ARDS as transformational. From a rudimentary design and recording of transactions, AI systems have evolved to complex and sophisticated systems capable of supporting predictive analytics, performance management, and strategy (Lee et al., 2023) have shown the improvement of timeliness and accuracy of financial reporting as a result of big data analytics, whereas artificial intelligence offers intelligent automation, forecasting, and decision support. Transaction recording that is resistant to modification improves the security,

transparency, and integrity of data. This is a description of how blockchain technology strengthens (Al-Okaily et al., 2025).

The use of ARDS in banking and finance in Malaysia is also practical. As noted in several studies, Malaysia's banking and finance sector is gaining some competitive and managerial advantages, stemming from enhanced financial reporting and improved management from computerized accounting information systems (Daoud & Triki, 2013; Al-Okaily et al., 2025). While the integration of cloud and AI (Artificial Intelligence) helps enhance the productivity of employees in the use of accounting software, the financial and digital divide challenges of SMEs (Shamsudin et al., 2024). In an effort to stimulate the digital divide in Malaysia, digital reporting efficiency at MIA (Malaysian Institute of Accountants) explained how XBRL (eXtensible Business Reporting Language) does to reduce fraud and improves transparency in reporting (MIA, 2023). In the case of Malaysia, the accounting blockchain also improves the fraud and integrity of financial records

The studies show that Accounting-Related Digital Systems, defined in the context of digital accounting and accounting information systems, offer benefits in increasing efficiency, transparency, decision-making, and productivity. However, these benefits are correlated to the level of advancement in technology, organizational structure, and employee commitment; therefore, continuous training or upskilling is necessary to remain competitive in the increasingly digitalized environment.

## **2.5 Underpinning Theories**

The last few years have seen digital technologies rapidly becoming part of the accounting equation. This has created a multifaceted impact on employee motivation

and job performance. Work-related digital accounting systems (Accounting-related Digital Systems (ARDS), such as Accounting Information Systems (AIS), Enterprise Resource Planning (ERP) systems, cloud accounting, and artificial intelligence (AI) tools), have changed the relationship accounting professionals have with their job. ARDS are designed to streamline processes, decrease the likelihood of error, and increase the quality of organisational decisions. However, the impact of these systems to the motivation and performance of employees continues to be under-researched. This chapter examine the effect of ARDS on motivation and performance using the Job Demands-Resource (JD-R) Model and Information Systems Success (ISS) Model.

The JD-R model emphasizes the effect of job resources on employee motivation and performance. Considering ARDS, these systems act as essential job resources by streamlining repetitive activities, delivering information in a timely and accurate fashion, and enhancing decision-making, thus improving performance on the job. The ISS model extends this by analyzing the effectiveness of ARDS in terms of system, information, and service quality, which in turn impacts employee satisfaction and performance. This research analyzes the impact of ARDS as a job resource, in relation to motivation and performance, on employees working with accounting software in Malaysia, using the aforementioned theories to analyze digital systems as resources that yield constructive outcomes for employees.

### 2.5.1 Job Demands-Resources (JD-R) Model

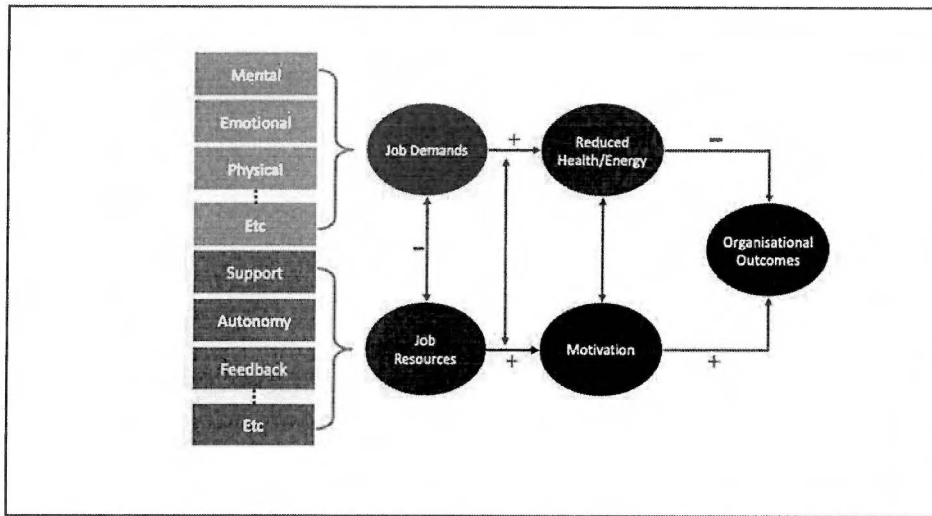


Figure 2.1  
Job Demands-Resources (JD-R) Model  
Source: Demerouti, Bakker, Nachreiner, and Schaufeli (2001).

Figure 2.1 shows the Job Demands-Resources (JD-R) Model by Demerouti, Bakker, Nachreiner, and Schaufeli (2001). The JD-R model has been applied in many Western studies to examine how the interaction between job demands and job resources affects employee engagement and motivation, as well as employee well-being. Research in non-Western contexts is equally important in establishing the JD-R model's cross-cultural validation. Hossan, Mansor, and Jaharuddin (2023) studied the JD-R model in a Malaysian context, adding workaholism as a personal demand and examining the effect of both job and personal demands and resources on employee work engagement. Their study showed that the JD-R theory is valid for Malaysian employees, in that resources (both job and personal) are positively related to work engagement, and demands (both job and personal) are negatively related to work engagement.

The theoretical concept of motivation related to resources is drawn from the Job Demands-Resources (JD-R) model by Demerouti et al. (2001) and is applied to

understand the role of resources in improving employee performance through motivation. Job resources such as autonomy, constructive feedback, and employee management technologies facilitate the balancing of disruptive job demands like stress, high workload, or time pressure. Thus, when employees are faced with disruptive job demands, motivating job resources facilitate coping through motivated performance. Demerouti et al. (2001) and Bakker and Demerouti (2014) posit that resources lessen the psychological and physical burdens associated with job demands and are aimed at personal deficiencies and foster development. This, in turn, improves performance.

Developments in technology have given rise to systems like Accounting-Related Digital Systems (ARDS) that provide needed support to employees as essential job resources. By automating repetitive and mundane tasks, ARDS systems reduce tasks employees have to think about so that they can direct their efforts and attention to more valuable activities. By doing so, employees experience job gratification and motivational boosts, which have a positive impact on their productivity. Cloud technology and AI accounting systems, for instance, provide instantaneous and relevant data that aid in making decisions and speeding up activities, thereby improving efficiency (Al-Kharabsheh et al., 2023). Such tools perform the dual provision of improving job performance and increasing efficiency while decreasing the occurrence of mistakes.

Moreover, ARDS as Tools to Enhance Employee Performance. The assimilation of ARDS into an organizational setup enhances employee performance by providing such systems as useful resources. ARDS, in the context of the JD-R framework, embody the job resources that assist employees in confronting job challenges more effectively and performing better. Numerous studies indicate that ARDS, such as the automated

accounting system and AI tools, alleviate the challenges associated with data entry, invoicing, and reporting. In so doing, employees can concentrate on high-level tasks that are strategic and possess high degrees of complexity and entail creativity and critical thinking (Resende, 2024).

Scholze and Hecker (2023) showed that job-related stress can be alleviated and task efficiency increased with the use of new technologies in the workplace, such as ARDS. ARDS can offset the stress caused by job demands, such as workload pressure, and enhance motivating job characteristics, resulting in increased employee performance and engagement. Automated systems that streamline routine procedures and furnish employees with timely, correct information enhance employee performance and enable workforce members to engage in more value-added activities (Scholze & Hecker, 2023).

Furthermore, Al-Kharabsheh et al. (2023) stressed the importance of digital HRM tools, such as online training and digital performance appraisal, in boosting employee performance and motivating employees. Employees with digital tools and resources can meet performance criteria more successfully, resulting in a higher level of productivity at the organizational level (Al-Kharabsheh et al., 2023).

Finally, Sufficient Resources Heighten Motivation and Performance. The JD-R model states that the presence of sufficient resources improves employee motivation and performance. When employees have sufficient resources, especially digital tools such as the Automated Receipt Data Systems (ARDS), they are most likely to achieve their job goals and manage their job demands. Digital resources serve as buffers to job demands, helping employees accomplish their tasks, experience lower levels of stress, and foster greater motivation and improved performance.

Lusia Victolia et al. (2023) argue that the intersection of motivation, digital accounting systems, and adequate resources positively impacts employee performance. The researchers discovered that employees with adequate digital tools, such as ARDS, in conjunction with high motivation, positively impacted their own productivity (Victolia et al., 2023).

Scholze and Hecker (2023) strengthen this notion by stating that when workers have digital tools, they experience lowered stress levels and are better able to accomplish performance targets. This, in turn, boosts motivation and improves performance outcomes. Consistent with the JD-R model, having adequate resources is performance motivating and leads to better employee outcomes (Scholze & Hecker, 2023).

### 2.5.2 Information System Success Model

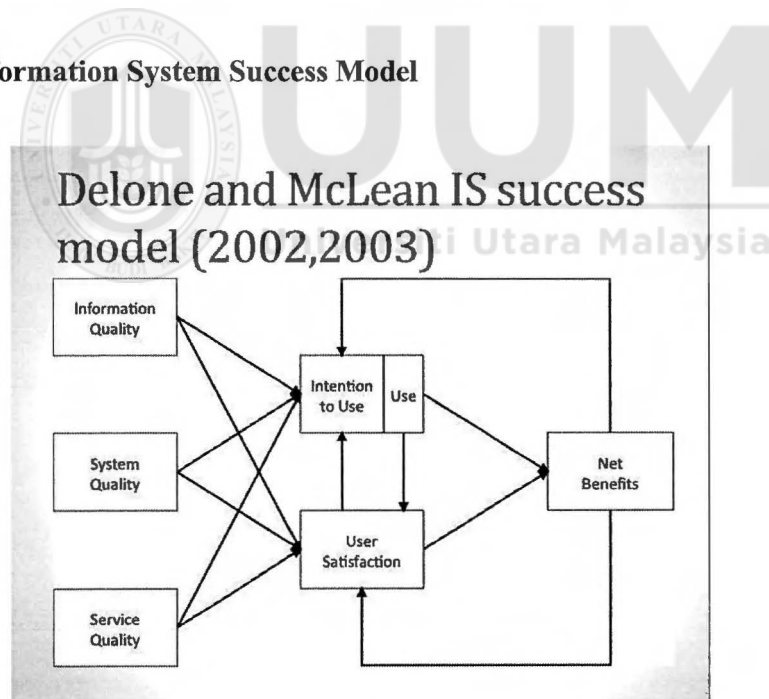


Figure 2.2  
Information System Success Modal  
Source: DeLone and McLean (1992)

Figure 2.2 shows that one of the models that best evaluates the success of an information system is DeLone and McLean's (1992) Information Systems Success (ISS) Model. The model comprises six components, which are system quality, information quality, service quality, use, user satisfaction, and net benefits. All six components are critical for evaluating how ARDS assists the performance, motivation, and organizational outcomes of employees.

The first dimension in the ISS model refers to system quality, which pertains to the ARDS system itself, including some of its attributes such as functionality, reliability, and usability. Navigable, stable ERP systems that are tailored to support employee tasks and processes bolster job performance and allow employees to avoid disruptions in their work. Employees experiencing poor quality systems become frustrated, leading to productivity and ultimately motivation to plummet (Nassani et al., 2023).

Information quality refers to the degree of accuracy, relevance, timeliness, and completeness of information that ARDS possesses. In accounting, the financial data must be precise and reliable to facilitate good decision-making. Accurate and timely ARDS provide employees with the information they need to make appropriate decisions in the execution of their work roles and responsibilities. The perception of employees in their roles is also enhanced by the information quality, fueling their motivation to work (Goi, 2006).

An example of the service quality dimension of the ISS Model is the support and training given to employees on the ARDS. Well-structured training initiatives are vital in helping employees master the systems. They help employees contribute to their enhanced job performance. Quality service support, which includes and is not limited to troubleshooting and ongoing support, is the quality-of-service employees receive

from their office systems. Service support shields employees from possible breakdowns, and they can continue to perform their tasks. Quality service support enhances the perception of employee support. The support also enhances the perception of competence and autonomy. This impacts the intrinsic motivation of the employees positively (Alkhawaja et al., 2022).

In the ISS Model, use and user satisfaction are two sides of the same coin. The relation is two-way when it comes to the employees' use of ARDS. The systems would most positively impact their motivation and performance when they use and are adequately satisfied with the systems. The systems are easy to operate and provide substantial value to the completion of the employee's work, coupled with the accomplishment of the employee's job tasks, and the systems are welcomed. The system's user satisfaction positively impacts the motivation and performance of the employees, as the employees feel that the system enhances their performance (Purwanto et al., 2020).

The last of the four dimensions of the ISS Model, net benefits, relates to the effect ARDS has on the organization as a whole. Positively motivating and performing ARDS, which are able to assist the employees in the performance of their tasks, lead, among others, to enhanced productivity, more favorable financial statements, and improved quality of decisions. ARDS assists employees in surpassing performance standards, thereby positively affecting all organizational goals. The net benefits of employee motivation and ARDS are organizational success (Hossin et al. 2021).

The ISS Model applied in the context of ARDS shows that the success of these systems cannot be attributed to the technology alone; it is also dependent on how the system fulfills employees' motivational concerns. A positive ARDS system that meets system

quality, information quality, and service quality standards likely improves intrinsic motivation, performance, and organizational success.

## **2.6 Hypothesis Development**

This section discusses several research hypotheses that have developed based on the research model as shown in Figure 3.1. In regard to the variables developed for this study, several research hypotheses were formed to support the previous study that affirm there is an impact on both variables in an organization. Hypotheses are critical in guiding the direction of research. Sekaran (2003) outlines the importance of developing hypotheses that are based on theoretical frameworks and prior research. Hypotheses provide a structured, testable statement that links the independent and dependent variables. Well-constructed hypotheses help to focus the research and determine the appropriate statistical techniques for analysis (Sekaran, 2003). The following hypotheses were tested in this study:

### **H1: Employee motivation has a significant impact on job performance**

Motivation aids in the completion of individual employees' job responsibilities. It helps to describe the energy, effort, and willpower employees exert to complete their work. Motivation can be broken down into two categories. With respect to job performance, these are the motivational attributes that either draw the employee to perform at standard or above expectation, or the demotivational attributes that draw the employee away from performing at standard or above expectation. Motivation is known to play a key role in the level and quality of job performance in every field; this is especially true in employment fields such as accounting, which require a high level of precision and detail (Hartoko & Fitri, 2023; Alase & Akinbo, 2021; Nassani et al., 2023).

An example of a type of motivation is known as intrinsic motivation. This is the motivational drive employees feel when performing work that is meaningful to them. It has been demonstrated that this type of motivation directly improves job performance. An example of an employee with this type of motivation completes a work task at a high level of accomplishment, including doing the work themselves and showcasing their skills, because of the satisfaction that is achieved from being able to perform the work. Employees with this type of motivation may feel a sense of achievement from overcoming work challenges or gaining new skills, which in turn improves their job performance. On the contrary, paying someone for their work, such as providing bonuses, promotions, or other commendations, and recognition for their work are all examples of extrinsic motivation and are designed for external purposes. In any case, while extrinsic motivation has the potential to increase job performance improvement, most especially when people are motivated to do their jobs by other external factors, such as offering them incentives to achieve certain goals, it is also less likely to be effective than intrinsic motivation over the long term. Eventually, other employees who rely only on external incentives are likely to become less motivated when such extrinsic incentives do not meet their expectations, or when the incentives become less important to them (Deci et al, 1999).

There is a distinct linkage of motivation to job performance in the most demanding positions, among employees using accounting software. As the accounting field has many jobs that entail a high degree of precision, concentration, and expeditiousness, not to mention the time commitment that is required of them, motivated employees, either by intrinsic or extrinsic factors, are likely to perform at their peak in reference to the completion of a financial statement, audits, and other compliance-related tasks. On

the contrary, for unmotivated employees, other tasks are likely difficult to perform, which in turn has a damaging effect on the overall performance of the organization.

There are several performance-influencing factors besides motivation, such as workload, job satisfaction, and work environment, among employees using accounting software. Employees unsupported or overwhelmed are at risk of burnout, therefore, performing poorly. Additionally, high stress and repetitive tasks lead to a drop in both employee morale and productivity (Kuvaas et al., 2020). Hence, the importance of motivation in the workplace is crucial for both job performance and the overall achievement of the organization.

## **H2: Employee motivation has a significant impact on the accounting-related digital system (ARDS)**

AI tools, big data, blockchain, and cloud computing all fall under the umbrella of Accounting-related Digital Systems (ARDS). These tools can improve the efficiency and accuracy of an employee's work, thus improving job performance. Motivation and ARDS are correlated because ARDS makes employees feel more proficient and in control of their work processes. Digital tools and systems streamline the workflow and remove repetitive processes, allowing employees to concentrate on more important, strategic, and high-level tasks, which increases their motivation on an internal level (Kuvaas et al., 2020). Motivation and employee engagement are correlated according to Najeeb et al. (2021). Employees who are motivated because of the system's relevance and usefulness are more likely to use the system, and this, in turn, enhances their performance. Increased job satisfaction and perceived competencies on the part of the employee are significant motivational benefits of ARDS that improve work performance and commitment.

### **H3: The Accounting-Related Digital System (ARDS) has a significant impact on job performance**

The most direct effect of ARDS among employees using accounting software is the impact of streamlining workflows, improving data accuracy, and reducing human error. Digital systems and services being employed offer workers more efficient tools, which positively affect productivity and enhance the quality of the results. Hidayat (2023) demonstrate how ARDS, more specifically, is one of the areas of AI and Big Data, enhancing the quality of choices and the effectiveness of operations. Employees using accounting software operating ARDS are equipped with the most current software. Ramsey (2023) cites facilitating timely shifts as a means of enhancing greater accuracy, as well as increasing the use of the most current software to assist employees in improving their performance.

Routine accounting tasks such as data entry, reconciliation, and categorization of accounting transactions can free ARDS tools (e.g., AI) from manual tasks. ARDS employees improve their performance in financial analysis, strategic planning, and client advising, which are all highly important tasks. Furthermore, ARDS as Blockchain increases the employees' job performance by enhancing their trust in the data to which they are (Davenport, 2019; Hossain et al., 2021). With the integration of ARDS, employees using accounting software can achieve greater operational accuracy, timeliness, and efficiency. Incorporating AI-driven tools, as cited in Husain et al. (2022), led to marked improvements in the performance of employees in Malaysian financial institutions, as employees were able to make decisions more quickly and based on better data.

#### **H4: ARDS mediates the significant impact on employee motivation and job performance**

The involvement of ARDS in explaining the significant impact between employee motivation and job performance is critical. The Information Systems Success Model (DeLone & McLean, 1992) indicates that job performance is the result of digital systems (for example, system, information, and service quality) user satisfaction. ARDS addresses the motivational needs of employees, which are competence, autonomy, and relatedness, and subsequently drives performance. As Kuvaas et al. (2020) posit, employees' motivation and performance are influenced when they perceive ARDS to assist in enhancing their work performance. Moreover, ARDS can provide a sense of ownership and competence, making employees more engaged with their work. This is particularly true in contexts when ARDS considerably lessens the level 1 tasks (Alkhawaja et al., 2022). In such contexts, employees are able to self-initiate work, particularly in more value-adding strategic tasks. Alase and Akinbo (2021) provide similar views, highlighting that motivated employees perform better when advanced digital systems are incorporated into their daily tasks.

#### **2.7 Summary of the Chapter**

This chapter analyzed the key concepts, relevant empirical studies, and the theoretical framework explaining the impact on job performance and employee motivation by using Accounting-Related Digital Systems (ARDS). Literature on job performance has been comprehensive and conceptualized it as a three-dimensional construct consisting of primary (task) performance, contextual performance, and adaptive performance. In the past studies that were reviewed, employee performance is shown to be the result of a combination of a number of personal factors and a number of organizational factors.

From the individual perspective, the influencing factors are skills, competence, and motivation. From the organizational, influencing factors are leadership, training, the work (technological) environment, and tools.

Both forms of motivation (intrinsic and extrinsic) of the employee are some of the most relevant factors influencing the performance of the job. In general, intrinsic motivation is especially good in holding people to do the job and do it well, and it is driven by enjoyment, personal growth, and meaningful work. Extrinsic motivation is also important and is rewarded with recognition, and it reinforces inward (intrinsic) motivating factors. The studies that were reviewed in the literature demonstrated that motivated employees increase productivity, increase the quality of work, increase organizational citizenship behavior, and are adaptive, especially in demanding and precision-oriented fields like accounting.

The chapter has investigated more Accounting-Related Digital Systems (ARDS), such as ERP Systems, Accounting Software, Artificial Intelligence (AI), Big Data Analytics, Blockchain, Cloud Computing, etc. Studies indicate that ARDS improves job performance through the automation of repetitive and mundane tasks, increased accuracy, more timely reporting, and better and quicker decision-making. Further, job motivation is positively impacted by ARDS due to the decrease of monotony fatigue, greater perceived competence, and the ability to concentrate on more important and strategic activities. Whether the context is international or Malaysia, the literature is conspicuously clear on the fact that the positive effects of ARDS are felt by all the stakeholders, including employees and organizations as a whole.

This study examines the impact of Accounting-Related Digital Systems (ARDS) on employee motivation and job performance using the Job Demands-Resources (JD-R)

Model and the Information Systems (IS) Success Model. Motivational and performance-enhancing job resources, such as ARDS, assist employees in coping with job demands by optimizing processes, providing timely and accurate information, and minimizing stress. Employees' stress levels and motivation to perform are diversified by the ARDS Job Resource Model. Stress, motivation, and job performance in the ARDS Job Resource Model are influenced by the Quality of ISS Model. Employees are motivated to perform when ARDS service quality, user satisfaction, and benefits surpass the required performance. In the Malaysian accounting sector, the primary aim is to examine ARDS as a job resource and assess its function as a motivation and job performance driver and contributor to business success using the JD-R Model and ISS Model.

Finally, based on the reviewed literature and theories, four hypotheses were developed:

(1) Employee motivation has a significant impact on job performance, (2) Employee motivation has a significant impact on the accounting-related digital system (ARDS), (3) The Accounting-Related Digital System (ARDS) has a significant impact on job performance. (4) ARDS mediates the significant impact on employee motivation and job performance. Collectively, this chapter establishes a strong conceptual and empirical foundation for examining how ARDS influences employee motivation and job performance among employees using accounting software, particularly within the Malaysian context.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter seeks further explain the method to be used in this study. This chapter is essential to discuss because it describes the specific method for analysing the data to achieve the research problem by assessing validity and reliability (Kallet, 2004). The following sections explain the research frameworks, the study model, the hypothesis, the research design, the population and sample, and the sampling procedure. Moreover, the data collection procedure and measurement of the research instruments for every variable are explained in this chapter. The final section of this chapter discusses the methods for analysing data.

#### **3.2 Research Framework**

The model in this study is described in Figure 3.1. This model assumes that employee motivation, which is the independent variable, has a positive effect on employee performance, which is the dependent variable. In addition, digital systems in accounting act as a mediating variable, implying that they help bridge the gap between motivation and performance.

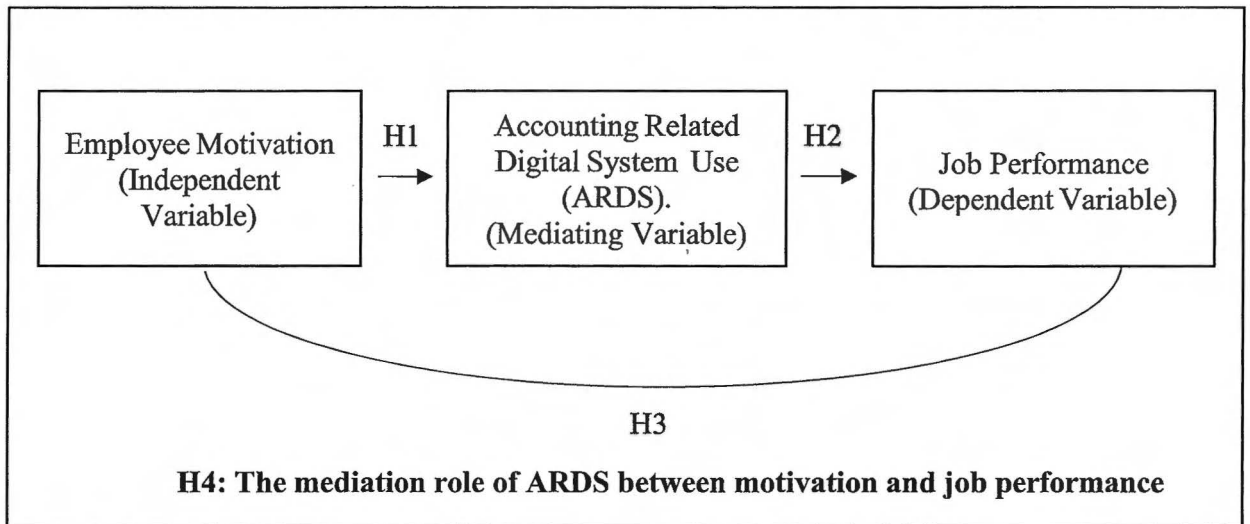


Figure 3.1  
*Research Framework*

### 3.3 Research Design

According to Sekaran (2003), research design is a time-based part that includes several stages of a rational decision-making process where the selections relating to decisions regarding the purpose of this study, which consist of exploratory, descriptive, location, hypothesis testing, type of investigation, and the level at which data is used or measured by the researcher. Hair et al. (2015) define research design as the fundamental techniques of conducting research. The blueprint shows the strategy and structure for the collection and analysis of data and shows how the study was executed for the best results and quality research. The better the research design, the fewer mistakes/errors, the better the quality of the research, the better the research accuracy, and the effective utilization of time and resources (Sileyew, 2019).

The study examines the impact of employee motivation and their job performance, the mediating effect of Accounting-Related Digital Systems (ARDS) among employees using accounting software in Malaysia, through the adoption of quantitative and survey

designs. Also, the descriptive-correlational design seeks to draw the relationship that exists between the variables.

The study employs surveys as a means of data collection to achieve quantitative data to meet the study objectives and aims. The employee motivation and job performance, ARDS use, and the sociodemographic section of the questionnaires were disaggregated to ensure that the data were collected in a heterogeneous manner. The technique allow many employees' motivation, job performance, and ARDS use heterogeneous responses to be collected while providing details to the research study.

The objectivity and reliability of the data collected by means of questionnaires, their design and structuring, largely improve the quality of the study, since it could provide a great deal of quantitative data and, to some extent, qualitative data by means of the employees' experiences on ARDS through observations made by the researcher.

#### **3.4 Unit Analysis**

The unit of analysis for this study is the individual employee. Each respondent represents a single unit of analysis, as the study focuses on individual-level perceptions, attitudes, and experiences related to employee motivation, job performance, and the use of accounting-related digital systems.

#### **3.5 Population**

The population of this study includes end-users of accounting software who are working within the financial and accounting service industry in the private sector in the state of Perlis, Malaysia. These individuals are employed as Top Management, Senior Management, Managerial Level, and Executive Level.

According to Sekaran (2009), a study population refers to a large group of individuals or objects that a researcher intends to investigate. Employees who use accounting software in the daily execution of their tasks are part of the study population. This group includes users of a variety of accounting-related digital systems (ARDS) in accounting departments such as accounting information systems (AIS), enterprise resource planning (ERP) systems, and other digital accounting tools essential to the finance function of the accounting departments.

A total of 88 members of the Malaysian Institute of Accountants (MIA) have registered in the state of Perlis. These individuals represent the target population for this study, which aims to assess the impact of ARDS on the motivational levels and job performance of employees who utilize accounting software in Perlis, the financial and accounting service industry.

Perlis was chosen for this study because of the distinctively small population of state-based accounting professionals cultivated, in part, by the membership documentation of the Malaysian Institute of Accountants (MIA). Compared to other states, the number of MIA affiliates in Perlis is lower; however, this presents an opportunity to engage a more focused population of respondents who utilize the Accounting-Related Digital Systems (ARDS) in their work. The study's geospatial limitation enables the analysis of the stroke-localized effects of ARDS on employees' motivation and job performance within the financial and accounting service industry, within the region. Furthermore, the limited attention devoted to Perlis in academic study makes this area a suitable candidate for examining the effects of ARDS tools on employees in more micro and localized contexts within Malaysia.

A bar chart is illustrated below showing the MIA members' count across different states, with Perlis marked.

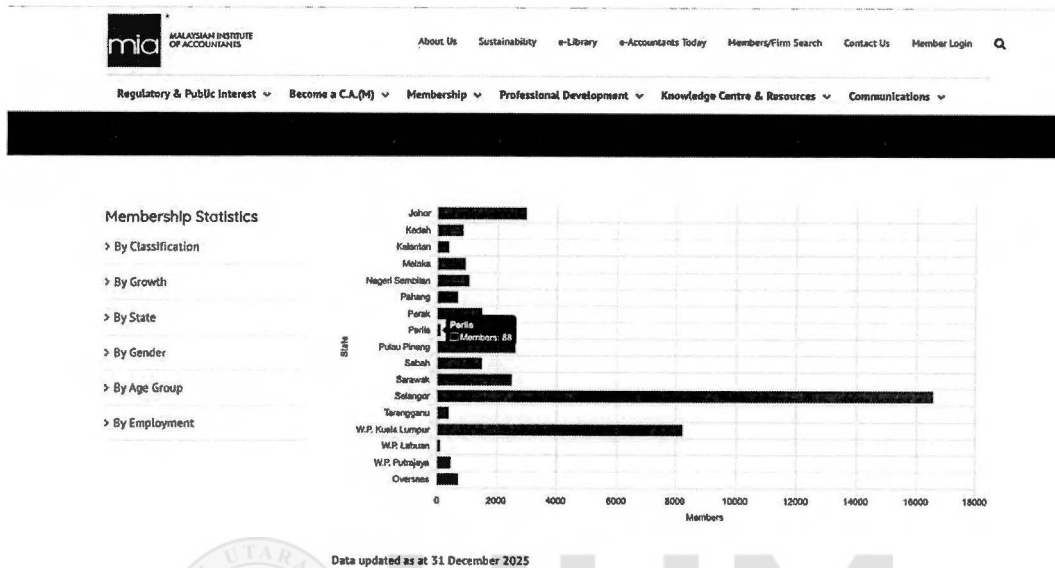


Figure 3.2 : MIA Registered Accountant  
Source: Sweetmag (2026)

### 3.6 Sampling Size

One of the important elements of research methodology is to determine the sample size. It is essential to choose the correct sample size as it can affect the result and the achievement in any research method. A sample has been defined as the subset of the population that comprises some members selected from it (Sekaran & Bougie, 2009). Selecting the right sample size is a very crucial part, as it is impossible to collect data on the whole population. Besides, using the right sample from the targeted population results in more consistent and highly reliable research results (Sekaran, 2003). For the sample selection, the sample size is determined based on the table produced by Krejcie and Morgan (1970). According to Cohen (1997), the larger the sample size, the lower the error and the more precise the results are. When calculating the sample size

necessary for a study design, the significance threshold may be defined, and the appropriate level of statistical power can be reached. Krejcie and Morgan (1970) devised a table that uses the sample size formula for limited populations to determine sample size.

Table 1: Krejcie and Morgan Table

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note.—*N* is population size. *S* is sample size.  
Source: Krejcie & Morgan, 1970

Figure 3.3  
Determining sample size of a known population Source:  
Krejcie & Morgan, (1970)

Figure 3.1 shows the Determining Sample Size of a Known Population from Krejcie & Morgan (1970). According to Krejcie and Morgan (1970), for a population of 88, the ideal sampling size would be 73. This population of 88 is based on the list of MIA registered accountants. Within the Krejcie and Morgan (1970) framework, populations of 85 to 90 can be sampled with a minimum of 73. Data collection and analysis are

feasible with this sample size, and the results of the study are statistically significant, making them applicable to the population.

With 73 participants, this study was able to assess the effects of ARDS on the employees' motivation and job performance at the individual level. Study participants are restricted to individuals who employ ARDS tools in their work; data collection is based on actual work scenarios with a focus on the real determining factors of productivity and behavioral shifts.

Among the sample population, the study assesses the outcomes of ARDS on employees, focusing on the study in Perlis financial and accounting service industry. Using this sample size, the study aims to provide outcomes that would enhance knowledge on the ARDS and employee performance relationship.

### **3.7 Sampling Technique**

The study proposes to use a simple random sampling and probability method, it ensure that every member of the population has an equal chance of being selected. This reduces bias and provides a more accurate representation of the population. Furthermore, simple random sampling is used because there is no bias in selecting an employee over another, and the selection of an employee doesn't bias the researcher against the selection of another (Sekaran & Bougie, 2016).

### **3.8 Operational Definition**

According to Sekaran (2003), operationalizing or operationally defining a concept to render it measurable is done by looking at the behavioral dimensions, facets, or properties denoted by the concept. These are then translated into observable and measurable elements so as to develop an index of measurement of the concept.

Table 3.1  
Operational Definition

No.	Variable	Operational Definition (OD)	Source
1	Employee Motivation (Independent Variable)	Employee motivation refers to the different internal or external stimuli that explain, guide, or maintain an individual's commitment to perform work-related activities. It determines the way and approach in which employees perform their duties and the goals of the organization. When employees are motivated, they demonstrate a higher level of productivity, creativity, and commitment to the organization.	Abdulkareem (2025)
2	Accounting-Related Digital Systems (Mediator)	Accounts Related Digital Systems (ARDS) refer to digital tools and technologies tailored to assist financial activities of companies, mostly small and medium enterprises (SMEs). These systems include digital services such as cloud accounting, as well as automation and AI-based applications that enhance and streamline accounting and financial management services.	(Mediaty et al., 2025)

No.	Variable	Operational Definition (OD)	Source
3	Job Performance (Dependent Variable)	<p>Job performance is a central issue in organizational behavior and encompasses both the in-role and the innovative components. In-role job performance encompasses all the tasks described in an employee's job description and is the basis the organization uses to evaluate and reward performance. This performance type captures work behaviors that are instrumental in helping the unit achieve its objectives. Conversely, innovative job performance is the development and execution of original ideas for the improvement of the organization. It is assessed based on the articulation and implementation of consequential ideas and activities that transcend the functional responsibilities of the position.</p>	Chen et al. (2019)

### 3.9 Measurement of Variables and Instrumentation

A structured questionnaire served as the primary instrument for data collection. This method was chosen for its practicality in obtaining standardized responses efficiently and within a relatively short timeframe (Sekaran & Bougie, 2020; Creswell & Poth, 2021). The process of measurement entails organizing and analysing the data that has

been collected in surveys. As Miller (1962) explains, measurement "means assigning numbers to things according to some specified rules in the system of measurement". These numbers indicate the different values of variables and further assist with the analysis. The variables working with are covered by the nominal and ordinal scales of measurement in this research. A sample of 103 individuals took part in the study, all of whom were employees using accounting-related software in Malaysian that have ARDS in their company.

The survey questionnaire was structured into four parts. In the first section the questionnaire was designed to capture demographic characteristics. The measurement used is "nominal" in the case where the variables have to be classified, and there is no existing order in any hierarchy. In this research, demographic data, including gender, and data concerning their section and educational background, are measured on a nominal scale. There are leader distinctions; as in categories, there are different functions, such as responding with Male and Female or position responses with Top management, Senior Management, Managerial Level, and Executive Level. The function of the nominal scale in this case is to classify respondents into specific categories without any order or hierarchy. As for the categories, they are exhaustive as they cover all the full options and they are mutually exclusive as only one can belong to the category.

In the second section, explored the independent variable, namely employee motivation, while the third section focused on the dependent variables: Job Performance. Finally, Mediating Variable which is, Accounting Related Digital System. Conversely, ordinal measurement is used in this section to sort and arrange the information in a particular order. This is useful in the case of variables in which the response options represent an

aggregated or differentiated degree of agreement or performance. In the thematic sections of this study, questions related to employee motivation and employee performance measure on a Likert scale of minimum ordinal response options such as, “Strongly Agree”, “Agree”, “Neutral”, “Disagree”, and “Strongly Disagree”. The Likert scale remains among the most utilized tools in quantitative research for measuring employee motivation and performance. It enables researchers to capture the degree of agreement or disagreement with specific statements that reflect underlying constructs (Alim et al., 2021). Hair et al. (2015) suggest that quantitative research is normally useful when a situation or features of a context need to be expressed in a numerical way. The measurement of the Likert scale can be referred in table 3.2.

Table 3.2  
Likert Scale Measurement

Scale	Description
1	Strongly Disagree
2	Disagree
3	Neutral
4	Agree
5	Strongly Agree

Miller (1962) defined measurement as ‘assigning numbers to things according to explicit rules’. Since this collect category data, such as demographics, and rank data, such as employee motivation and performance, the integration of both nominal and

ordinal measurement types allow researcher to maximize the breadth and depth of information draw from these measurements. Rather than looking at such data in isolation, nominal and ordinal scales draw from each other, providing the research with rich information to analyse. Identification and classification of data into nominal and ordinal scales is fundamental in investigating how ARDS (Accounting-Related Digital Systems) influence employees motivation and performance among employees using accounting software.

Table 3.3  
Measurement of Variables

Variable	No. of Items	Instrument Measures	Source/References
Demographics	5	Gender, Age, Years of Experience, Education Level, Current Job Position	Self-developed
Employee Motivation (Independent Variable)	4	1)I am motivated to put forth my best effort in my job. 2)I feel a strong sense of purpose in my work. 3)I am enthusiastic about the work I do. 4)I find my work personally meaningful.	The scale was adapted from the study by Abdulkareem (2025).

Accounting- Related Digital Systems (ARDS) (Mediator)	4	<p>1)Using digital accounting can meet my financial preparation service need</p> <p>2)Digital accounting services can save time.</p> <p>3)Digital accounting services can improve efficiency.</p> <p>4)Overall, digital accounting services</p>	The scale was adapted from the study by Mediaty et al (2025)
Job Performance (Dependent Variable)	3	<p>1)I consistently perform well on the core duties outlined in my job description.</p> <p>2) I regularly meet or exceed the formal performance targets set for my job.</p> <p>3) I am always proactive and responsible in completing all required tasks in my job.</p>	The scale was adapted from the study by Chen et al. (2019)

### **3.10 Data Collection**

To meet the objectives of the research, data collection utilizes the self-administered questionnaire, being the first tool the researcher employ exploring the area of study. It has been suggested that questionnaires are a crucial resource, as they assist the researcher in learning more about the area of study (Taherdoost, 2016). This questionnaire focuses on the collection of variables in the research framework, employee motivation, job performance, and use of ARDS, as well as the employees' demographics and attitudes. A Google Form was used to design and distribute the questionnaire. The survey was distributed through email and the Facebook page, specifically for MIA members residing in Perlis. The questionnaire was carefully crafted to ensure that it is clear, concise, and relevant to the accounting professionals in the Perlis region, ensuring that only Perlis-based MIA members are invited to participate. This method provides convenience for the respondents and makes data collection and processing more effective. The survey obtained the following information.

Demographic Data, which elicits information pertaining to the respondents' gender, age, years of experience in their current role, education level, and current job position. This information facilitates comprehension of the sample and aids in the analysis of the data.

The employee motivation section includes questions to evaluate intrinsic and extrinsic motivations concerning the respondents' workplace motivation. This section employs a 5-point Likert scale ranging from 'Strongly Disagree' to 'Strongly Agree.'

The job performance section focused on self-perception for the job performance of the target employee and assessed the qualitative and quantitative, timely, and teamwork

aspects of the job performed. Again, a Likert scale was used to analyze to what extent the respondents consider their self-performance to be a job overarching, and what standards of performance would be expected of such a job.

The use of ARDS was evaluated using several statements based on Mediaty et al. (2025) that capture the perception of employees regarding the usefulness and productivity of digital accounting systems in performing their work. Employing a 5-point Likert scale ranging from “Strongly Disagree” to “Strongly Agree” to assess. These items focus on the various ways ARDS provides services to employees, and the extent to which it assists them in achieving their service needs, improves efficiency, and saves time. Moreover, ARDS’s integration into everyday work and the extent to which employees perceive it as beneficial to their work are analyzed.

### **3.11 Data Collection Procedures**

This research aims to collect the data through the usage of online survey instruments, which made available to the target population, employees using accounting software in Malaysia that have ARDS (Accounting-Related Digital Systems) in their role. The objectives of the online survey include collecting responses for the research variables of employee motivation, job performance, and usage of ARDS tools, namely Artificial Intelligence (AI), Big Data, Blockchain, Cloud Computing, and other related tools. The online survey was developed to measure the three variables of the study: employee motivation, job performance, and usage of ARDS.

Before the full rollout, this research conducted a pilot study involving several employees to verify that the questions on the survey are comprehensible and measure the correct variables. Results from this preliminary study were incorporated to improve

the survey before the full rollout. To enhance participant accessibility, the survey was administered via email and Facebook page, a commonly utilized platform. Employees in the financial and accounting service industry who frequently engage with ARDS are the recipients of the Google Forms survey. The cover message summarizes the research study, highlights that participation is completely voluntary, and includes a confidentiality agreement. Employees who have accounting roles and use ARDS on a regular basis are the only respondents to this survey.

The first step in conducting the survey involves the participants being provided with informed consent, which states the purpose of the study, the ability to withdraw from the study at any time, and assurance of the confidentiality of their responses. This step complies with the ethical standards of conducting research. The survey was conducted on Google Forms, which is an excellent and straightforward method of collecting responses. Participants had the survey for approximately 5 to 10 minutes, and the survey was active for 1 week.

As for confidentiality, responses were anonymous, and no identifiable information was collected. The data is safely stored in Google Forms, and only the research team has access to it. Once the data collection period closes, the research team performs data validation and data cleaning to remove partially completed responses or responses with inconsistent information. This step is crucial in making sure that the data utilized in the analysis for writing a report is accurate and supported with evidence. The combination of utilizing Email, Facebook page, and Google Forms streamlines the survey distribution and collection process, while also giving participants a secure and efficient means of supporting the study.

### 3.12 Techniques of Data Analysis

Sekaran (2003) provides a comprehensive discussion of various data analysis techniques, both descriptive and inferential. Descriptive statistics, such as mean, median, mode, and standard deviation, help summarize and interpret the data, while inferential statistics, such as regression analysis and hypothesis testing, allow researchers to draw conclusions and make predictions based on the data (Sekaran, 2003). The findings in the current study were assessed using version 29 of SPSS. This is one of the most popular statistical software programs in the world, since it offers a wide variety of tools to conduct both descriptive and inferential analyses. A 0.05 ( $p < 0.05$ ) significance level was utilized, which is the standard in the social sciences. Sekaran (1992) accepts this significance level as reasonable for the social sciences to support hypotheses and is therefore valid for a variety of relationships. This study intends to investigate the impact of employee motivation and job performance on the application of Accounting-Related Digital Systems (ARDS). This involves determining the degree of association among variables, while not assuming directionality.

The first part of the analysis involves the use of descriptive statistical techniques to summarize the characteristics of the data. For example, how the average, the midpoint, and the spread measure on key variables of employee motivation, job performance, and use of ARDS provide a first approximation to the general pattern in the data and how widely it varies. It measures understanding and relationship of the demographic variables age, gender, years of experience, and working position with the variables of prime interest. This first step provides a sketch of how the variables are distributed and lays the groundwork for further inferential analysis.

Once the descriptive analysis is complete, inferential statistics provide techniques for hypothesis testing. The most important technique to be used is correlation, specifically Pearson correlation. This technique examines employee motivation and job performance, and ARDS variables, estimating the strength and direction of linear relationships among the variables. This analysis provides a first approximation to the positive or negative relationships between the sets of variables, laying the groundwork for understanding the interdependence of the variables, although it stops short of establishing a cause-and-effect relationship.

For the assessment of relationships among the constructs participating a multiple regression analytical strategy was utilized. In this case, the impact of employee motivation (independent variable) and job performance (dependent variable) was assessed. Furthermore, the role of ARDS as a mediator in the motivation-performance impact was assessed through PROCESS mediation analysis.

The mediation model examines two key relationships which is, does employee motivation affects job performance, and whether motivation affects performance differently when ARDS is present? In this case, mediation means that ARDS might help explain the impact on motivation and performance. The model looks to confirm that ARDS adds to the motivational benefits that employees possess, allowing them to perform their job at a higher level. If mediation is significant, this means ARDS is important to motivation and performance.

### **3.13 Summary of the Chapter**

Chapter Three describes the methodology applied for the research study concerning the financial sector of Malaysia, specifically the relation between employee motivation, job

performance, and the role of mediating Accounting-Related Digital Systems (ARDS). It starts by highlighting the research framework whereby employee motivation is independent, job performance is dependent, and ARDS is a variable that mediates the two.

A quantitative methodology is utilized for the research study, with surveys for data collection adopting a descriptive-correlational framework. A simple random sampling technique is utilized with a total of 73 respondents out of 88 members of MIA from Perlis. This guarantees an unbiased and adequate representation of the employees who actively use accounting software in the course of their duty.

All the critical variables, i.e., employee motivation, job performance, and ARDS, are defined operationally and attributed to each of the structured questions in the survey. Motivation and performance are measured using a Likert-type scale, and the respondents' demographics are measured using a nominal scale.

The collection of the data was commissioned through a survey that circulated online to members of the MIA from Perlis. Ethical principles of informed consent and confidentiality were observed. In the study, descriptive and inferential statistics were used in the analysis of the data collected. Furthermore, regression analysis and PROCESS mediation were used to analyze the data in relation to the effect of ARDS on the dependent variables motivation and job performance.

In summary, Chapter Three establishes a detailed methodology on the integration of ARDS and the motivation and performance of employees within the financial sector of Malaysia, employing a methodical and principled approach to data collection and analysis.

## CHAPTER FOUR

### RESULTS

#### 4.1 Introduction

This chapter presents the analysis of the data collected from employees using accounting software in Perlis, Malaysia and discusses the findings in relation to the study objectives. The chapter begins with a description of the demographic profile of the respondents, followed by a detailed examination of key variables, including employee motivation, Accounting-Related Digital Systems (ARDS), and job performance. Descriptive statistics, reliability tests, validity test, normality assessments, and linear regression analyses are employed to provide a clear understanding of the relationships between variables. In addition, mediation analysis is conducted to investigate the role of ARDS in linking employee motivation to job performance. The results are interpreted in light of relevant literature to highlight the implications of digital systems and motivational factors on employee performance and engagement.

#### 4.2 Demographic analysis

Table 4.1  
*Demographic information*

Variables		Frequency	%
Gender	Female	36	48.0
	Male	39	52.0
Age	25-34	39	52.0
	35-44	20	26.7
	44-54	16	21.3
	1-3 years	8	10.7

Variables		Frequency	%
Years of experience in the current position	3-5 years	34	45.3
	5-10 years	21	28.0
	More than 10 years	12	16.0
Education level	Diploma	7	9.3
	Bachelor's Degree	48	64.0
	Master's Degree	20	26.7
Job Position	Top Management	2	2.7
	Senior Management	5	6.7
	Managerial Level	34	45.3
	Executive Level	34	45.3

Table 4.1 presents the demographic profile of this study participants, providing an overview of gender, age, years of experience, department, and education level. When we look at the gender, of the 100 respondents, 52 were male and 48 were female, meaning the sample had even representation between the two genders.

In relation to age, the largest group of respondents (52%) were between 25-34 years, meaning most of them were fairly young. The next largest groups were 26.7% of the respondents who were aged 35-44 years and 21.3% who fell between the 44-54 years age category. This sample had a lot of younger and middle-aged respondents, and very few who fell into the older age category.

With regards to the respondents' education level, the largest group (64%) had at least a Bachelor's Degree, meaning most of them were fairly educated. A good portion of the respondents (26.7%) claimed to have a Master's Degree, so a considerable number of them had advanced levels of qualifications. Adding to this, a portion of the respondents (9.3%) claimed to have a Diploma, indicating that the sample had

respondents with differing levels of education, but the overwhelming majority were educated at levels above a Bachelor’s Degree.

In terms of the job position description breakdown among the participants. Exactly 45.3% of respondents were in executive-level roles. This points to a sizable number of respondents being in operations or entry to mid-level positions. Also, 45.3% were in managerial roles; thus, a notable portion of participants possesses positions entailing responsibility and the management of teams or divisions. A more limited distribution was found among the participants in senior management (6.7%) and top management (2.7%), reflecting the fact that the sample also includes a few respondents with higher degrees of responsibility and strategic roles within the firm. This spread of job position descriptions reveals a heterogeneity of professionals across varying levels of authority in the given sample.



### 4.3 Descriptive analysis

#### 4.3.1 Employee motivation

Table 4.2

*Descriptive analysis of employee motivation from the perspective of employees using an accounting-related digital system in Perlis.*

No.	Statement	1	2	3	4	5	M	SD
1.	I am motivated to put forth my best effort in my job.	0	4 (5.3)	1 (1.3)	15 (20.0)	55 (73.3)	4.61	0.77
2.	I feel a strong sense of purpose in my work.	0	4 (5.3)	5 (6.7)	19 (25.3)	47 (62.7)	4.45	0.84
3.	I am enthusiastic about the work I do.	0	3 (4.0)	5 (6.7)	22 (29.3)	45 (60.0)	4.45	0.79
4.	I find my work personally meaningful.	0	2 (2.7)	5 (6.7)	29 (38.7)	39 (52.0)	4.40	0.73

No.	Statement	1	2	3	4	5	M	SD
	<b>Overall</b>						<b>4.48</b>	<b>0.38</b>

*Notes: Strongly disagree (1), disagree (2), neutral (3), agree (4), strongly agree (5)*

Table 4.2 presents a descriptive analysis of employee motivation among employees using accounting software in Perlis, Malaysia. The first statement I am motivated to put forth the best effort in my job received 73.3% of the respondents strongly agreed to the statement. The mean score was 4.61 and the standard deviation was 0.77 leading to the conclusion that employees are highly motivated and agree strongly with the importance of effort in their job roles. The lower standard deviation also confirms that the employees views are congruent to their motivation levels.

The second statement “I feel a strong sense of purpose in my work” shows 62.7% of the respondents felt a strong sense of purpose. The mean in this case was 4.45 and the standard deviation was 0.84. This means that a number of employees feel that the work they do has value. Value in work is also a key employee motivation. The higher standard deviation is referring to the dip in perception that some respondents feel affected their purpose in the employment. Some felt a \ strong purpose, while others felt a lower purpose.

The third statement “I am enthusiastic about the work I do” shows 60% of all employees showcase a company enthusiasm average score of 4.45 with a standard deviation of 0.79. This shows a bit of disparity in the distribution, as most employees show eagerness towards their job, while a few still show quite a bit of indifference towards their work. While enthusiasm may still be a great motivator for a large proportion of employees across the organization, the effect of enthusiasm may be limited for a smaller group of employees.

Fourth statement “I find my work personally meaningful” was also strongly agreed to by 52% of the respondents with an average of 4.40 and standard deviation of 0.73, showing that the employees have a large sense of job fulfillment. Similar to the previous case, in working with employees from multiple levels of the organization in terms of job responsibilities, there is quite a bit of variability in terms of the perceived levels of fulfillment that employees feel towards their job. While there is a large sense of job fulfillment, it is quite obvious that the job fulfillment that employees feel is quite inconsistent from employee to employee.

Based on available data, employee motivation has a mean score of 4.48. The calculated standard deviation is 0.38, meaning there is a strong consensus with low variation among the employees. It shows that the employees are highly motivated, which, in return, correlates with the employee engagement in their roles. The employees find their work meaningful and are dedicated to putting in their maximum effort.

#### 4.3.2 Accounting-related digital systems (ARDS)

Table 4.3

*Descriptive analysis of Accounting-Related Digital Systems (ARDS) from the perspective of employees using an accounting-related digital system in Perlis.*

No.	Statement	1	2	3	4	5	M	SD
1.	Using digital accounting can meet my financial preparation service need.	(0)	3 (4.0)	5 (6.7)	22 (29.3)	45 (60.0)	4.45	0.79
2.	Digital accounting services can save time.	(0)	3 (4.0)	(0)	22 (29.3)	50 (66.7)	4.59	0.70
3.	Digital accounting services can improve efficiency.	(0)	4 (5.3)	5 (6.7)	14 (18.7)	52 (69.3)	4.52	0.84
4.	Overall, digital accounting services have benefited me.	(0)	(0)	5 (6.7)	24 (32.0)	46 (61.3)	4.55	0.62
<b>Overall</b>							<b>4.52</b>	<b>0.35</b>

*Notes: Strongly disagree (1), disagree (2), neutral (3), agree (4), strongly agree (5)*

Table 4.3 presents a descriptive analysis of Accounting-Related Digital Systems (ARDS) from the perspective of employees using accounting-related digital system at Perlis, Malaysia. The first statement “Using digital accounting can meet my financial preparation service need” shows 60% of employees stating that digital accounting fulfills their needs for financial preparation services is reflected by the mean score of 4.45 and the standard deviation of 0.79. Employees seem to have the ability to use digital accounting tools to assist them in performing financial tasks, helping them improve their job experience. The lower variation of the responses shows it is likely that most employees share the same opinion regarding the effectiveness of the tools.

The second statement Digital Accounting Services Can Save Time,” shows majority (66.7%) of employees to save time. The mean score of 4.59 and standard deviation of 0.70 is the highest in this section, showing that employees overwhelmingly perceive digital accounting to provide time savings. The lower standard deviation shows that the responses are more concentrated and the employees are in agreement on the time effectiveness of the tools.

The third statement, “Digital accounting services can improve efficiency,” shows 69.3% of employees in the study asserted that digital accounting services improve work efficiency. A mean score of 4.52 and a standard deviation of 0.84 reflect this, and although the mean score is significantly high, the standard deviation is high in comparison. This can lead to the conclusion that there is a minority of employees who do not find the tools efficient.

Finally, the mean of 4.55 and a standard deviation of 0.62 is indicative of the positive sentiment expressed by employees when asked about digital services and their overall

benefit. Tools that save time and contribute to work efficiency are most likely a positive sentiment expressed by employees when asked about digital tools and their overall benefit.

In conclusion, 4.52 is the overall mean for the digital services utilized in accounting and is accompanied by a miniscule standard deviation of 0.35 which suggests a large of digital accounting services, the mean being this high along with the services perceived in a positive light and the overall service is most likely positive sentiment expressed by employees when asked about digital tools and their overall benefit.

### 4.3.3 Job performance

Table 4.4  
*Descriptive analysis of job performance from the perspective of employees using an accounting-related digital system in Perlis.*

No.	Statement	1	2	3	4	5	M	SD
1.	I consistently perform well on the core duties outlined in my job description.	(0)	4 (5.3)	1 (1.3)	22 (29.3)	48 (64.0)	4.52	0.78
2.	I regularly meet or exceed the formal performance targets set for my job.	(0)	1 (1.3)	4 (5.3)	20 (26.7)	50 (66.7)	4.59	0.66
3.	I am always proactive and responsible in completing all required tasks in my job.	(0)	(0)	5 (6.7)	29 (38.7)	41 (54.7)	4.48	0.62
<b>Overall</b>							<b>4.53</b>	<b>0.42</b>

Table 4.4 presents a descriptive analysis of job performance from the perspective of employees using the accounting-related digital system at Perlis, Malaysia. The first statement, "I consistently perform well on the core duties outlined in my job description shows 64% of employees, or almost two-thirds, share a confidence level strong enough to completely agree, and this lends support to the mean of 4.52 and standard deviation

.078. Both appreciate the credibility employees feel to perform and meet core job descriptions. In comparison to other means, the high trend and relatively low standard deviation. Reinforce the belief that core job descriptions are being met by the overwhelming majority.

The second statement "I regularly meet or exceed the formal performance targets set for my job" shows 66.7% of the entire population studied are performance achievers or exceders. In this instance, 4.59 is the mean, and .66 is the standard deviation, indicative of strong confidence. The belief of core job description achievability and the imminent target achievement serve to characterize the overwhelming majority positively.

The third statement "I am always proactive and responsible in completing all required tasks in my job" shows 54.7% of employees state they are always proactive and responsible in completing their tasks. The average score and the standard deviation of 4.48 and 0.62 respectively showed that the employees are in agreement to a high degree, but the response to the questions, who, in this case, are assuming responsibility and being proactive, may have a slightly higher variation and indeed may be lower than average.

Overall, the average job performance score for all employees is 4.53, while the standard deviation is 0.42. These results clearly demonstrate that employees are performing their job duties at an average level and most likely at a level beyond the job description. The responsibility, proactivity, and effectiveness of the employees in performing their respective jobs shows that the organization is performing at an all-time high.

#### 4.4 Reliability analysis

Table 4.5  
*Reliability analysis of variables in this study*

Variables	Total Item	Reliability ( $\alpha$ )
Employee motivation	4	0.97
Accounting-Related Digital Systems (ARDS) Use	4	0.96
Job performance	3	0.97

Table 4.5 presents the reliability analysis of the variables used in this study, showing that all constructs exhibit excellent internal consistency. Employee motivation and Accounting-Related Digital Systems (ARDS) both have a Cronbach's alpha of  $\alpha = 0.97$ , while job performance has a slightly lower but still very high alpha of  $\alpha = 0.96$ . These values indicate that the items within each variable are highly consistent and reliable for measuring the intended constructs. According to Tavakol and Dennick (2011), a Cronbach's alpha value above 0.90 is considered excellent, suggesting that the instruments used in this study are highly reliable for capturing employee motivation, ARDS usage, and job performance.

#### 4.5 Validity test

Table 4.6  
*KMO and Bartlett's Test of variables in this study*

Factorability Assessment	Results
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.85
Bartlett's Test of Sphericity	Approx. Chi-Square
	df
	105

Table 4.6 presents the results of the Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity, which assess the suitability of the data for factor analysis. The KMO value of 0.85 indicates meritorious sampling adequacy, suggesting that the correlations among the items are sufficiently strong to justify factor analysis (Kaiser, 1974). Bartlett's Test of Sphericity was significant ( $\chi^2 = 3245.99$ ,  $df = 105$ ,  $p = 0.00$ ), indicating that the correlation matrix is not an identity matrix and that the variables are correlated enough to proceed with factor extraction. Overall, these results confirm that the data are appropriate and suitable for conducting factor analysis in this study.

#### 4.6 Normality test

Table 4.7  
*Normality test of variables in this study*

Variables	<i>M</i>	5% Trimmed Mean	Skewness	Kurtosis
Employee motivation	3.76	3.85	-1.25	0.16
Accounting-Related Digital Systems (ARDS) Use	3.81	3.89	-1.37	0.43
Job performance	3.81	3.88	-1.28	0.18

Table 4.7 presents the normality test results for the variables in this study, including employee motivation, Accounting-Related Digital Systems (ARDS), and job performance. The comparison between the overall mean and the 5% trimmed mean shows minimal differences for all variables, with none exceeding one unit. This indicates that the data are largely free from extreme outliers that could potentially distort the results. Additionally, the skewness values range from -1.25 to -1.37, and the kurtosis values range from 0.16 to 0.43, all falling within the acceptable range of -2 to +2.

These results suggest that the distributions of the variables are approximately normal, supporting the appropriateness of parametric statistical analyses for this dataset (George & Mallery, 2003). Overall, the findings indicate that the data meet the assumptions of normality, with no significant deviation that would compromise the validity of subsequent analyses.

#### 4.7 Correlation Analysis

Table 4.8  
Correlation Matrix

Variable	1	2	3
1. Employee Motivation	—		
2. ARDS	.975**	—	
3. Job Performance	.961**	.957**	—

The correlation analysis was performed to test the relationships between the study variables. Table 4.8 shows the results of Pearson correlation coefficients between Employee Motivation, Accounting-Related Digital Systems (ARDS), and Job Performance. The results showed a strong positive correlation among all variables. Employee Motivation showed a significant positive correlation with ARDS ( $r = .975$ ,  $p < .01$ ) and Job Performance ( $r = .961$ ,  $p < .01$ ). Similarly, ARDS was significantly and positively correlated with Job Performance ( $r = 0.967$ ,  $p < .01$ ). These findings offer tentative evidence to the hypothesized relationships that there are positive associations between employee motivation and ARDS effectiveness and job performance. The strong correlations indicate that all the variables are closely linked in the proposed research framework.

#### 4.8 Regression Analysis

Table 4. 9

*Linear regression analysis to analyse the impact of Employee Motivation and Job performance among employees using accounting software in Perlis.*

<i>R</i>	<i>R</i> <sup>2</sup>	Adjusted <i>R</i> <sup>2</sup>	<i>SE</i>	<i>R</i> <sup>2</sup> Change
.962	.925	.926	0.312	.924

A simple linear regression was conducted to assess the direct impact on Employee Motivation and Job Performance to test Hypothesis 1. The model summary shown in Table 4.9 shows that Employee Motivation explained 92.8 percent of the variance in Job Performance ( $R^2 = .925$ ; Adjusted  $R^2 = .926$ ). These results support the existence of a strong predictive impact on the constructs.

Table 4.10  
ANOVA

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Regression	131.542	1	131.542	1320.636	< .001
Residual	10.338	110	0.094		
Total	142.920	111			

The results of the analysis of variance (ANOVA) are presented in Table 4.10 , and these results indicate that the regression model is statistically significant ( $F(1, 110) = 1320.636, p < .001$ ). This indicates that significant prediction of Job Performance is ensured by Employee Motivation.

Table 4.11  
Coefficients

Variable	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
Constant	0.125	0.102		1.349	.177
Employee Motivation	0.968	0.026	.965	36.560	< .001

Table 4.11 lists the regression coefficients. The unstandardized coefficient ( $B = 0.968$ ,  $SE = 0.02$ ) indicates for each one-unit increase in Employee Motivation, Job Performance increases by an average of 0.969 units. The standardized coefficient ( $\beta = .965$ ,  $t = 36.560$ ,  $p < .001$ ), a very strong positive effect. The intercept was not statistically significant ( $p = .177$ ). These results provide strong support to H1 and thus confirm that Employee Motivation is positively related to Job Performance.

Table 4.12

*Linear regression analysis to analyse the impact of employee motivation by using ARDS among employees using accounting software in Perlis.*

Variables	Model Summary	ANOVA			Coefficients		
	$R^2$	$df$	$F$	Sig.	Unstd. B	Stand. B	Sig.
ARDS	0.94	1	2167.7	0.00	0.97	0.97	0.00

\* $p < 0.05$  (significant at the 0.01 level, 2-tailed)

In Table 4.12, the regression model shows that there is a strong impact on motivation by using ARDS among employees using accounting software in Perlis, with an  $R^2$  value of 0.94. This indicates that 95% of the variance in employee motivation can be explained by the use of ARDS. The ANOVA results are significant ( $F = 2167.73$ ,  $p = 0.00$ ), confirming that the regression model is a good fit for the data. The unstandardized coefficient ( $B = 0.97$ ) and standardized beta ( $\beta = 0.97$ ) further demonstrate a strong and significant impact on employee motivation by using ARDS, suggesting that increased utilization of digital accounting systems is closely associated with higher motivation among employees.

Table 4.13

*Linear regression analysis to analyze the significant impact between ARDS and Job performance among employees using accounting software in Perlis.*

Variables	Model Summary	ANOVA			Coefficients		
	$R^2$	$df$	$F$	Sig.	Unstd. B	Stand. B	Sig.
ARDS	0.93	1	1578.8	0.00	0.96	0.97	0.00
			3				

\* $p < 0.05$  (significant at the 0.01 level, 2-tailed)

Similarly, Table 4.13 shows that there is a strong positive impact between ARDS and Job performance among employees using accounting software in Perlis, with an  $R^2$  value of 0.93, indicating that 93% of the variance in job performance is explained by ARDS. The model is statistically significant ( $F = 1578.83$ ,  $p = 0.00$ ). The unstandardized coefficient ( $B = 0.96$ ) and standardized beta ( $\beta = 0.97$ ) indicate a strong and significant effect, showing that employees who effectively use ARDS tend to demonstrate higher job performance.

Overall, these findings suggest that ARDS play a crucial role in enhancing both employee motivation and job performance among employees using an accounting software in Perlis. The results align with previous research emphasizing the positive influence of digital systems on work efficiency, engagement, and productivity

#### 4.9 Mediation analysis

Table 4.14

*Indirect effect in mediation analysis of employee motivation on job performance via Accounting-Related Digital Systems (ARDS)*

Indirect Effect	Effect (b)	Standard Error (SE)	$P$ -value	95% CI
Impact of the employee motivation → job performance via Accounting-Related Digital Systems (ARDS)	0.54	0.22	0.00	[0.23, 1.03]

\* $p < 0.05$  (significant at the 0.01 level, 2-tailed)

Table 4.14 presents the results of the mediation analysis examining the indirect effect of employee motivation on job performance through Accounting-Related Digital Systems (ARDS). The findings indicate a significant positive indirect effect, with a coefficient of 0.54, a standard error of 0.22, and a p-value of 0.00. The 95% confidence interval ranges from 0.23 to 1.03, which does not include zero, confirming that the mediation effect is statistically significant.

This result suggests that ARDS act as an important mediator, strengthening the impact of employee motivation and job performance. In other words, motivated employees are likely to achieve higher job performance, in part because the use of ARDS facilitates more efficient, accurate, and effective work processes. These findings highlight the critical role of digital accounting systems in enhancing employee outcomes and are consistent with prior research indicating that technology adoption can mediate the impact of motivational factors and performance outcomes (Davis, 1989; Venkatesh et al., 2003).

#### 4.10 Summary of the chapter

Table 4.15  
Hypothesis development

Hypothesis	p-value	Result
H1: Employee motivation has a significant impact on job performance	0.00	Accepted
H2: Employee motivation has a significant impact on the Accounting-Related Digital Systems (ARDS)	0.00	Accepted

H3: Accounting-Related Digital Systems (ARDS) has a significant impact on job performance	0.00	Accepted
H4: ARDS mediates the significant impact on employee motivation and job performance	0.00	Accepted

Table 4.15 presents a summary of the hypotheses tested in this study. Hypothesis 1 (H1), which proposed that employee motivation has a significant impact on job performance, was supported, with a p-value of 0.00, indicating a strong and statistically significant positive impact.

Hypothesis 2 (H2), which suggested that employee motivation has a significant impact on Accounting-Related Digital Systems (ARDS), was also accepted. The results showed a significant positive impact on employee motivation and ARDS, with a p-value of 0.00, indicating that motivated employees are more likely to effectively utilize accounting-related digital systems.

Hypothesis 3 (H3), which posited that Accounting-Related Digital Systems (ARDS) have a significant impact on job performance, was confirmed with a p-value of 0.00, demonstrating a strong and significant positive impact. This finding indicates that the effective use of ARDS contributes directly to higher levels of employee job performance.

Finally, Hypothesis 4 (H4), which proposed that ARDS mediates the significant impact on employee motivation and job performance, was supported. The mediation analysis revealed a significant indirect effect with a p-value of 0.00, confirming that ARDS plays

a significant mediating role in translating employee motivation into improved job performance.

Overall, the findings indicate that Accounting-Related Digital Systems play a critical role not only as a direct predictor of job performance but also as a key mechanism through which employee motivation enhances performance. These results highlight the importance of integrating digital accounting systems to improve employee efficiency, effectiveness, and overall performance within employee using accounting software in Perlis.



## CHAPTER FIVE

### DISCUSSION

#### 5.1 Introduction

Chapter 5 discusses the findings of the study on employee motivation, job performance, and the role of Accounting-Related Digital Systems (ARDS) in enhancing these factors within the context of Perlis, Malaysia. The results show that employee motivation has a significant positive impact on job performance, with ARDS acting as a key enabler in improving both motivation and performance. By integrating ARDS, such as accounting software and digital tools, employees were able to work more efficiently, leading to higher job satisfaction and productivity. This chapter also compares the findings with existing literature, highlighting the contributions of ARDS in the digital workplace, while addressing the study's limitations and suggesting directions for future research.

#### 5.2 Employee motivation has a significant impact on job performance

The findings from this study validate hypothesis one suggested that employee motivation significantly impacts job performance. Employee motivation was able to predict 92.8% of job performance from the regression analysis. The R-Squared and Adjusted R-Squared values were 0.925 and 0.926, respectively. The regression model is statistically significant at  $F(1,110) = 1320.636$ ,  $p < 0.001$ , thus confirming the positive impact employee motivation has on job performance. In addition to the positive impact, the unstandardized and standardized coefficients suggest that the relationship is close to 1, thus solidifying the relationship as positive. The regression equation will

suggest that, for every unit increase in employee motivation, we will achieve a 0.969 unit increase in job performance.

Regarding the use of accounting software by employees in Perlis, findings indicate that motivated employees tend to work better, especially in areas that require accuracy, precision, and detail. This observation is consistent with the Job Demands-Resources (JD-R) framework model, which states that motivation, as a job resource, serves to strengthen employees' performance. The research discovered that employees motivated by the meaning of their work (intrinsic motivation) and motivated by the organization (extrinsic motivation) through rewards like recognition and opportunities for advancement in the organizational hierarchy, improved their job performance. The results attest to the fact that extrinsic and intrinsic motivators in a digitalized accounting setting work to improve job performance.

The results of this study reaffirm the work of Alase and Akinbo (2021) and Al-Kharabsheh et al. (2022), who argued that motivation improves job performance, particularly in the digital work environment. This study contributes to this understanding by demonstrating the use of accounting software, especially in the Perlis context, increases intrinsic and extrinsic motivation and subsequently job performance. This underscores the need for organizations to enhance employee motivation by demonstrating to the employees that they are valued, recognized, and supported, in this case, by the provision of appropriate accounting software.

This study's regression results highlight the importance of employee motivation in influencing job performance. Motivated employees are engaged, creative, and efficient,

which is one of the most important attributes in accounting due to the need for accuracy and quality. Furthermore, the impact of employee motivation and job performance discovered in this study affirms the need for organizations to enhance employee motivation, both intrinsically and extrinsically, in order to increase job performance. When organizations combine motivation strategies and provide employees with advanced technology like accounting software, they will create a high-performing workforce that is prepared to meet the demands of the digital age.

### **5.2.1 Employee motivation has a significant impact on the accounting-related digital system (ARDS)**

Employee motivation positively correlates with Accounting-Related Digital Systems (ARDS), where the use of ARDS motivates employees with an  $R^2$  value of 0.94. 94% of the variation in employee motivation is attributed to ARDS. The result of the regression model shows statistical significance ( $F = 2167.73$ ,  $p < 0.00$ ), which means the use of ARDS is highly likely to motivate employees. A positive unstandardized coefficient ( $B = 0.97$ ) and standardized beta ( $\beta = 0.97$ ) suggest a lack of ARDS. This means that the use of ARDS in Perlis accounting software is likely to motivate employees.

Considering employees' use of accounting software in Perlis, this finding emphasizes the importance of ARDS in encouraging employees to work more constructively. Digital accounting systems, including ERP systems, AI software, and cloud-based systems, offer employees the means to complete their work with greater effectiveness and precision. By alleviating the tedium associated with performing the same tasks over

and over, these systems increase motivation by allowing employees to shift their attention to more important and strategic activities. The current study illustrates how motivation is greatly influenced by the perception of enhanced ability and the opportunity to make more rational choices.

This study's finding that ARDS positively affects employee motivation corresponds with Al-Kharabsheh et al.'s (2022) study, which stressed the impact digital tools had on motivating employees. Similarly, this study corroborates Junaidi's (2022) research that stated employees' motivation increased when they participated in designing and implementing accounting information systems. In the context of the JD-R model, ARDS aids employees in performing complicated tasks and therefore serves as an important resource. In this model, resources are paramount in helping employees manage job demands and motivating them.

Furthermore, incorporating ARDS within the workplace increases employee encouragement and strengthens job satisfaction. Employees see the digital systems as an advantage and, as a result, work better and become motivated. This correlates with Kuvaas et al. (2020) and Resende (2024) as the use of ARDS systems while performing accounting functions motivates employees because of time saved on monotone and less fulfilling activities. Thus, it can be said that organizations utilize ARDS; employee motivation and job performance will increase. This further promotes the success of an organization.

### **5.2.2 The Accounting-Related Digital System (ARDS) has a significant impact on job performance**

According to the regression analysis, for ARDS and job performance, the positive effect is stated with the confidence interval of  $R^2 = 0.93$ , which explains that ARDS accounts for 93% of the job performance variance of employees with accounting software in Perlis. The model for this analysis is statistically validated as ( $F = 1578.83$ ,  $p = 0.00$ ), with unstandardized coefficient ( $B = 0.96$ ) and beta ( $\beta = 0.97$ ) respectively positioned at positive high and strong ARDS influence on job performance. These results indicate ARDS systems efficiency in improving employee job performance through process streamlining, precise and rapid decision making.

In Perlis, the implementation of ARDS systems has helped improved employee productivity in using accounting software. Employees have been able to complete tasks in a more efficient, accurate, and automated manner with the use of state-of-the-art systems like cloud accounting and artificial intelligence. As noted in the literature, these systems remove repetitive tasks, including the entry of data, reconciliation, and financial reporting, allowing employees to focus on more important and sophisticated activities. The elimination of tedious tasks increases employees' job satisfaction, motivation, and performance.

These results are comparable to other research, where ARDS was positively affecting job performance. For example, Davenport (2019) and Hidayat (2023) observed that ARDS in accounting departments increased operational efficiency, decision-making, and financial reporting. Similarly, in this research, Resende (2024) was referenced who

stated that ARDS is not only efficient but also describes a phenomenon less employee work errors. The combination of AI, cloud computing, and automation enables employees to work faster and more accurately, thus improving performance.

### **5.2.3 ARDS Mediates the Significant Impact on Employee Motivation and Job Performance**

Per mediation analysis, there is a positive and significant mediating effect of employee motivation on job performance via ARDS, with a coefficient of 0.54, standard error of 0.22, and p of 0.00. The 95% CI is between 0.23 and 1.03; thus, ARDS is a mediator for the impact of employee motivation and job performance. This means that motivated employees can achieve greater job performance because of ARDS, which allows employees to work more efficiently and effectively. The findings also suggest that the positive effects on performance of ARDS systems also serve to strengthen employee motivation, providing a positive feedback loop to the system.

The mediating influence is in line with the JD-R model and the Information Systems Success Model, which underscore ARDS as a resource in the job moderation and enhancement framework. This study corroborated Al-Kharabsheh et al (2023), where the digitalization of HRM, including ARDS, positively shaped employee motivation and job performance. For instance, in the employment of ARDS in accounting software within Perlis, the ARDS systems not only advanced employee performance but also increased motivation by minimizing monotonous work and enabling employees to engage in more rewarding and constructive functions.

To summarize, this study confirms the hypotheses set out in Chapter 2 and shows how ARDS contributes to increasing employee motivation and performance. ARDS as a system resource improves employee engagement and job performance by providing the means to complete tasks more efficiently and accurately. This study's findings complement existing theories and literature, reiterating the value of digitally driven systems in the workplace to enhance and motivate employees, especially in the Malaysian accounting industry.

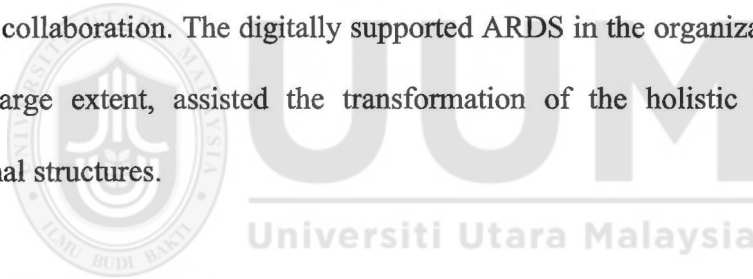
### **5.3 Contribution of the study**

The current study adds to the body of knowledge on employee motivation, job performance, and the role of Digital Technology, specifically Accounting-Related Digital Systems (ARDS), in the workplace. The study helps to understand the ARDS role towards employee performance, particularly in the case of accounting software employees in Perlis, Malaysia. By evaluating ARDS influence on motivation and performance, the study furthers the understanding of the role of digital systems as job resources that boost employees' performance in their jobs.

Furthermore, this research adds to the body of knowledge by utilizing established theory such as the Job Demands-Resources (JD-R) model and the Information Systems Success (ISS) model in the Malaysian context. These models have been largely utilized in Western studies, and this study tests their applicability in a non-Western context for cross-cultural contribution. The results affirm the ability of digital systems to alleviate the physical and psychological demands of the job, allowing for better coping, motivation, and performance of employees. The studies also demonstrate that

employees who are motivated by both internal and external ARDS consumer factors are likely to enhance their job performance.

As such, it is only in this research that the researcher considers positive correlations existing between employee motivation, ARDS, and job performance. The need for motivation, as a concept, and digital systems, as a concept, are intertwined. For these organizations, there are practical contributions these findings provide to organizations concerned with optimum employee performance because of the ARDS technology in the formative period of job functions, employee satisfaction, the reduction of boredom, and the overall atmosphere of the workplace. The study will also serve the research and practice sides of the professions in the Human Resource, Information and Systems, and Accounting collaboration. The digitally supported ARDS in the organizational setting has, to a large extent, assisted the transformation of the holistic technological organizational structures.



#### **5.4 Limitation of the study**

Acknowledgment of a study's limitations is a positive demonstration of a researcher's integrity. Among the most prominent of the numerous limitations for this study is the frame of focus, which is the Perlis region of West Malaysia. Applied to the rest of the region or locations with distinct organizational arrangements, levels of technological integration, and prevailing work cultures, the findings may tell a different story. The level of technology integration disparities will also impact the extent of employee motivation and performance mediated by ARDS, thus cautioning the extent of dependence placed on these findings in other environments.

Other than that, measuring employee motivation and performance using surveys and questionnaires has also been primarily done in this study. Values of the employees perceived and experienced have a lot of value in understanding employee attitudes to ARDS; however, they provide an empirical performance data gap. Future studies on ARDS impact on employee performance may fill this gap using measured performance data with time to accomplish tasks and the number of errors made, in addition to self-reporting measures.

Ultimately, this study examines only the perceived effects of ARDS on employee motivation and performance and does not consider the actual effects and the systems' usage. Future research should focus on how often employees use these systems, how well employees incorporate ARDS into their daily routines, and the relationship between these variables and job performance. Comprehending the usage and effectiveness of the ARDS could yield more definitive evidence on the systems' effects on employees.

### **5.5 Recommendation for Future Research**

This study aims to demonstrate how significant and where gaps, among other things, exist. First, researchers could examine the ARDS research across borders and contextualize the results of this study among the employees in Perlis and other countries to see how far the results can travel across varying economic, cultural, and organizational landscapes. Furthermore, the variations in the motivation of employees and the performance of their job as a result of ARDS across different cultures would

provide a richer understanding of the phenomena related to digital transformation in the workplace.

Secondly, ARDS has long-lasting consequences on employee motivation and performance, which is a state of affairs that future research could investigate using a longitudinal design and adapting ARDS over the years. With the aid of a longitudinal design, researchers would be able to observe the motivational and performance-related impacts of ARDS as employees become increasingly accustomed to the systems. Moreover, a longitudinal study is best positioned to identify the impacts of ARDS over time (i.e., after the fact) that cross-sectional studies would not be able to identify.

Lastly, while this study was based on self-reported data, future studies could merge self-reported data with objective data on performance to evaluate the impact of ARDS on job performance more fully. ARDS's impact on productivity would be evaluated more to the extent that performance is measured. For instance, researchers could assess the actual impact of ARDS on employees' productivity in terms of completion of tasks, time taken to complete tasks, and error rate, as well as financially quantifying productivity. In this regard, the subjective measures of motivation and performance would be supplemented by more objective measures of ARDS, productivity, and performance.

It could also be important for researchers in the future to examine the different factors that may moderate or mediate the influence of ARDS on employee motivation and performance. For example, factors like employee self-tech, leadership, and organizational culture may shape employee interactions with ARDS and how these

systems influence employee motivation and performance. Understanding such factors would add to the stream of research investigating employee motivation and performance outcomes in relation to digital systems.

The future also holds the potential for research to address the mechanisms whereby ARDS affect employee motivation. For example, ARDS may differ in how they impact employees' different components of the motivation system (i.e., competence, autonomy, and relatedness). Using a Self-Determination Theory framework, a study may examine the impact of different ARDS (e.g., AI applications, cloud computing solutions, and ERP systems) on the components of motivation. Understanding these mechanisms would help organizations design and implement ARDS that are more effective in motivating employees and improving job performance.

## **5.6 Conclusion**

This study brought new insights into the use of Accounting-Related Digital Systems (ARDS) and the respective impact on employee motivation and job performance. More specifically, the accounting software application in the study area, Perlis, Malaysia, was analyzed. The study confirmed the claim that motivated employees positively affect job performance under the conditions where precision, accuracy, and efficiency play critical roles. The study also confirmed the primary research claim of ARDS positively streamlining motivational and performance interrelationships, primarily due to the repetitive nature of the tasks and the empowering tools that foster employees' competence and autonomy.

The findings of the regression and mediation analyses convincingly demonstrated that ARDS improves job performance and also functions as mediators between employee motivation and performance. These findings are consistent with the theoretical constructs and frameworks highlighted in Chapter Two, primarily the Job Demands-Resources (JD-R) and the Information Systems Success (ISS) models, both of which are heavily resource (ARDS) dependent, to boost employee performance.

While acknowledging its limitations, including reliance on self-reported data and specific geographic boundaries, this study does examine some aspects pertaining to the digital tools used in today's workplaces, especially in the accounting field. It also assists organizations in understanding how the use of ARDS can positively impact employee performance and motivation, albeit the study also needs to be expanded. Future research needs to address ARDS and employee motivation and job performance by having more than self-reported metrics, additional performance factors, and other variables to contribute to the understanding of gaps associated with the use of digital systems in varying workplaces.

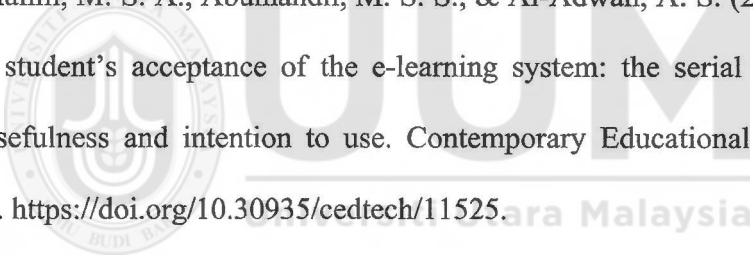
## REFERENCES

- Abdulkareem, A. K. (2025). Examining the influence of Task-Technology fit in the interplay of work motivation and job satisfaction in the public sector. *Public Organization Review*, 25(2), 541–560. <https://doi.org/10.1007/s11115-025-00821-4>.
- Akerele, O. O. (2023). The Link between Motivation and Organizational Performance: An Exploration of Factors Influencing Employee Motivation and its Impact on Organizational Success. *International Journal of Business Ethics and Governance*, 6(1), Article 1. <https://doi.org/10.51325/ijbeg.v6i1.118>.
- Al-Abbadi, L. H. M. (2018). The impact of high performance human resources practices on in-role and innovative job performance: The mediation role of affective commitment. *Global Journal of Management and Business Research*, 18(4), 52-65.
- Al-Abbadi, L. H., Alshawabkeh, R. O., Al-Quran, A. Z., Eldahamsheh, M. M., Almomani, H. M., Bani-Khaled, A. K., & Al-Hawary, S. I. S. (2021). Do high performance work systems enhance employee engagement? An empirical study at mobile telecommunication companies in Jordan. *International Journal of Entrepreneurship*, 25(S5), 1-14.
- Al-Hattami, H. M., & Almaqtari, F. A. (2023). What determines digital accounting systems' continuance intention? An empirical investigation in SMEs. *Humanities and Social Sciences Communications*, 10(1). <https://doi.org/10.1057/s41599-023-02332-3>.
- Al-Kharabsheh, S. A., Attiany, M. S., Alshawabkeh, R. O. K., Hamadneh, S., & Alshurideh, M. T. (2022). The impact of digital HRM on employee performance through employee

motivation. *International Journal of Data and Network Science*, 7(1), 275–282.  
<https://doi.org/10.5267/j.ijdns.2022.10.006>.

Al-Okaily, M., Al-Kofahi, M., Shiyab, F. S., & Al-Okaily, A. (2023). Determinants of user satisfaction with financial information systems in the digital transformation era: insights from emerging markets. *Global Knowledge Memory and Communication*, 74(3–4), 1171–1190. <https://doi.org/10.1108/gkmc-12-2022-0285>.

Alase, G., & Akinbo, T. (2021). Employee Motivation and Job Performance: Empirical Evidence from Nigeria. *Applied Journal of Economics Management and Social Sciences*, 2(2), 16–23. <https://doi.org/10.53790/ajmss.v2i2.20>.

Alkhwaja, M. I., Halim, M. S. A., Abumandil, M. S. S., & Al-Adwan, A. S. (2022). System quality and student's acceptance of the e-learning system: the serial mediation of perceived usefulness and intention to use. *Contemporary Educational Technology*, 14(2), ep350. <https://doi.org/10.30935/cedtech/11525>.  


AlNasrallah, W., & Saleem, F. (2022). Determinants of the digitalization of accounting in an emerging market: the roles of organizational support and job relevance. *Sustainability*, 14(11), 6483. <https://doi.org/10.3390/su14116483>.

Berghaus, S., & Back, A. (n.d.). Stages in Digital Business Transformation: Results of an Empirical Maturity Study. *AIS Electronic Library (AISeL)*.  
<https://aisel.aisnet.org/mcis2016/22>.

Bounfour, A., & Golembiewski, R. (2023). "The Digital Transformation of Accounting and Its Impact on Employee Engagement." *Journal of Business Research*, 147, 180-192.

- Bravo-Duarte, F., Tordera, N., & Rodríguez, I. (2025). Overcoming virtual distance: a systematic review of leadership competencies for managing performance in telework. *Frontiers in Organizational Psychology*, 2. <https://doi.org/10.3389/forgp.2024.1499248>.
- Chen, X., Hefei University of Technology, Wei, S., Hefei University of Technology, Davison, R. M., Rice, R. E., & Santa Barbara. (2018). How do enterprise social media affordances affect social network ties and job performance? In *Information Technology & People* (Vols. 33–1, pp. 361–388) [Journal-article]. Emerald Publishing Limited. <https://doi.org/10.1108/ITP-11-2017-0408>.
- Cheng, Q., Goh, B. W., & Kim, J. B. (2018). Internal control and operational efficiency. *Contemporary Accounting Research*, 35(2), 1102–1139. <https://doi.org/10.1111/1911-3846.12409>.
- Cohen, B. P. (1989). *Developing sociological knowledge: Theory and method* (Vol. 1123). Wadsworth Publishing Company.
- Cosa, M., & Torelli, R. (2024). Digital Transformation and Flexible Performance Management: A Systematic literature review of the evolution of performance measurement systems. *Global Journal of Flexible Systems Management*, 25(3), 445–466. <https://doi.org/10.1007/s40171-024-00409-9>.
- Dao, N. H. (2023). Factors affecting the use of management accounting information in Vietnamese commercial and service enterprises. *Dialnet*. <https://dialnet.unirioja.es/servlet/articulo?codigo=9013997>.

- Dao, T. H. A., Sisavath, C., Bui, H. T. T., Bui, T. Q., & Le, T. H. (2025). Digital workforce training, employee motivation, job satisfaction, digital behavior as determinants of employee performance: Empirical research from Vietnam. *SAGE Open*, 15(4). <https://doi.org/10.1177/21582440251395698>.
- Daoud, H., & Triki, M. (2013). Accounting information systems in an ERP environment and Tunisian firm performance. *The International Journal of Digital Accounting Research*, 13. [https://doi.org/10.4192/1577-8517-v13\\_1](https://doi.org/10.4192/1577-8517-v13_1).
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268.
- Delone, W. H., & McLean, E. R. (2003a). The DeLone and McLean model of information systems success: A ten-year update. *Information Systems Research, Journal of Management Information Systems*, 19(4).
- Delone, W. H., & McLean, E. R. (2003b). The DeLone and McLean model of information systems success: A ten-year update. *Information Systems Research, Journal of Management Information Systems*, 19(4).
- Demerouti, E., Nachreiner, F., Bakker, A. B., & Schaufeli, W. B. (2001). The job demands resources model of burnout. *Journal of Applied Psychology*, 86(3), 499-512.
- Diamantidis, A. D., & Chatzoglou, P. (2019). Factors affecting employee performance: an empirical approach. *International Journal of Productivity and Performance Management*, 68(1), 171–193. <https://doi.org/10.1108/IJPPM-01-2018-0012>.

Elamalki, D., Kaddar, A., & Beniich, N. (2024). Impact of motivation on the job performance of public sector employees: the case of Morocco. *Future Business Journal*, 10(1). <https://doi.org/10.1186/s43093-024-00342-4>.

Emerging Technologies Revolutionizing the Accounting Profession—Practical Applications. (2025). In *Information Management and Business Review* (Vol. 17, Issue 1, pp. 126–136).

Fogoroş, T. E., Maftai, M., Biţan, G. E., & Kurth, B. L. (2020). Study on methods for evaluating employees performance in the context of digitization. *Proceedings of the . . . International Conference on Business Excellence*, 14(1), 878–892. <https://doi.org/10.2478/picbe-2020-0084>.

Gani, H. M. U., Nur, M., Mallongi, H. S., & Rusjdin, H. (2018). The impacts of competence, work motivation, job satisfaction, and organizational commitment on lecturers' performance. *IRA-International Journal of Management & Social Sciences*, 11(1), 17–25.

García, J. A., Carcedo, R. J., & Castaño, J. L. (2019). The influence of feedback on competence, motivation, vitality, and performance in a throwing task. *Research Quarterly for Exercise and Sport*, 90(2), 172-179.

Gonçalves, M. J. A., Da Silva, A. C. F., & Ferreira, C. G. (2022). The future of accounting: How will digital transformation impact the sector? *Informatics*, 9(1), 19. <https://doi.org/10.3390/informatics9010019>.

- Guzmán-Ortiz, C. V., Navarro-Acosta, N. G., Florez-Garcia, W., & Vicente-Ramos, W. (2020). Impact of digital transformation on the individual job performance of insurance companies in Peru. *International Journal of Data and Network Science*, 337–346. <https://doi.org/10.5267/j.ijdns.2020.9.005>.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective* (7th ed.). Pearson.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). A primer on partial least squares structural equation modeling (PLS-SEM). In *A primer on partial least squares structural equation modeling (PLS-SEM)* (pp. 1–39). <https://www.researchgate.net/publication/354331182>.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). Evaluation of reflective measurement models. In *Partial least squares structural equation modeling (PLS-SEM) using R* (pp. 91).
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*.
- Hartati, T. (2020). Analysis of influence of motivation, competence, compensation toward performance of employee. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 3(2), 1031-1038.
- Hartoko, S., & Fitri, N. (2023). The influence of accounting information systems, work motivation, and internal control on employee performance. In *Advances in Social Science, Education and Humanities Research/Advances in social science, education*

and humanities research (pp. 518–525). [https://doi.org/10.2991/978-2-38476-202-6\\_75](https://doi.org/10.2991/978-2-38476-202-6_75).

Hidayat, R. (2023). "Transparency in Accounting through Advanced Information Systems: A Stakeholder Perspective." *International Journal of Accounting Information Systems*, 44(2), 134-150.

Hossain, M. K., & Hossain, A. (2012). Factors affecting employee's motivation in the fast food industry: The case of KFC UK Ltd. *Research Journal of Economics, Business and ICT*, 5, 21-23.

Hossan, D., Mansor, Z. D., & Jaharuddin, N. S. (2021). Revisiting of Job Demands-Resources Theory in Malaysia [Journal-article]. Malaysia.

Hossin, M. A., Hosain, M. S., Frempong, M. F., Adu-Yeboah, S. S., & Mustafi, M. a. A. (2021). What drives sustainable organizational performance? The roles of perceived organizational support and sustainable organizational reputation. *Sustainability*, 13(22), 12363. <https://doi.org/10.3390/su132212363>.

Junaidi, M. (2022). "Employee Involvement in Accounting System Development and Its Impact on Performance." *Journal of Business Research*, 130, 734-742.

Kallet, R. H. & Daedalus Enterprises. (2004). How to write the methods section of a research paper. In *RESPIRATORY CARE* (Vols. 49–49, Issue 10, pp. 1229–1232).

- Kaya, C. T., Turkyilmaz, M., & Birol, B. (2019). RPA teknolojilerinin muhasebe sistemleri üzerindeki etkisi. *Muhasebe Ve Finansman Dergisi*, 235–250. <https://doi.org/10.25095/mufad.536083>.
- Kenpro. (2012, August 25). Sample size determination using Krejcie and Morgan Table - KENPRO. KENPRO. <https://kenpro.org/sample-size-determination-using-krejcie-and-morgan-table/>.
- Khan, A., & Ali, M. (2023). "Employee Motivation: The Key to Enhance Productivity in Organizations." *International Journal of Productivity and Performance Management*, 72(3), 626-640.
- Kieso, D. E., Weygandt, J. J., & Warfield, T. D. (2016). *Accounting Information Systems: Integrating Business Processes*. 14th ed. Hoboken, NJ: Wiley.
- Kuo, R. J., & Yang, C. C. (2023). "The Effect of IT Capability on Employee Performance in Small and Medium Enterprises." *Journal of Small Business Management*, 61(1), 122-144.
- Kuvaas, B. (2006). Performance appraisal satisfaction and employee outcomes: Mediating and moderating roles of work motivation. *The International Journal of Human Resource Management*, 17(3), 504-522.
- Lee, Y. J., & Kim, J. (2023). "Leveraging Big Data Analytics in Accounting Information Systems." *Journal of Information Systems*, 37(1), 77-98. <https://doi.org/10.2308/JIS-2022-0207>.

- Lifang, Z., & Ali, D. A. (2024). Performance Management System design and Implementation: best practices and challenges. *Revista De Gestão Social E Ambiental*, 18(7), e06438. <https://doi.org/10.24857/rgsa.v18n7-114>.
- Lutfi, A. (2022). Understanding the intention to adopt cloud-based accounting Information system in Jordanian SMEs. *The International Journal of Digital Accounting Research*, 47–70. [https://doi.org/10.4192/1577-8517-v22\\_2](https://doi.org/10.4192/1577-8517-v22_2).
- Lutfi, A., Alkelani, S. N., Al-Khasawneh, M. A., Alshira'h, A. F., Alshirah, M. H., Almaiah, M. A., Alrawad, M., Alsyouf, A., Saad, M., & Ibrahim, N. (2022). Influence of digital accounting system usage on SMEs performance: The Moderating Effect of COVID-19. *Sustainability*, 14(22), 15048. <https://doi.org/10.3390/su142215048>.
- Marr, B. (2018). What is industry 4.0? Here's a super easy explanation for anyone. *Forbes*. Accessed January 27, 2024. <https://www.forbes.com/sites/bernardmarr/2018/09/02/what-is-industry-4-0-heres-a-super-easy-explanation-for-anyone/#1cdcbe8c9788>.
- Mediaty, M., Maryanti, M., Arifin, A. H., Mas'ud, A. A., & Dinar, D. (2025). Enhancing digital financial inclusion: Adoption factors of digital accounting among MSMEs in Indonesia. *International Journal of Innovative Research and Scientific Studies*, 8(3), 1423–1434. <https://doi.org/10.53894/ijirss.v8i3.6818>.
- MIA Professional Practices & Technical Team. (2020). Technology adoption by the accountancy profession in Malaysia. <https://at-mia.my/2020/04/15/technology-adoption-by-the-accountancy-professional-in-malaysia>.

- Mohammed, A. I. K. (2024). The role of motivation and job satisfaction in enhancing employee performance: Systematic review. *Psikostudia: Jurnal Psikologi*, 13(1), 115–120. <http://dx.doi.org/10.30872/psikostudia.v13i1>.
- Mohd Fatzel, F. H., Wan Abdullah, W. R., Zamri, N., & Faculty of Accountancy, Universiti Teknologi MARA, Perak Branch, Tapah Campus, 35400, Tapah Road, Perak, Malaysia. (2024). The Impact of digital Technologies on accounting Research: A Bibliometric analysis. *Proceedings of the 2nd International Conference on Accounting and Business (ICAB2024)*, 459–460.
- Mosuin, E., Mat, T. Z. T., Ghani, E. K., Alzeban, A., & Gunardi, A. (2019). Accountants' acceptance of accrual accounting systems in the public sector and its influence on motivation, satisfaction and performance. *Management Science Letters*, 695–712. <https://doi.org/10.5267/j.msl.2019.2.002>.
- Muliati, L., Asbari, M., Nadeak, M., Novitasari, D., & Purwanto, A. (2022). Elementary school teachers performance: How the role of transformational leadership, competency, and self-efficacy? *International Journal of Social and Management Studies*, 3(1), 158-166.
- Nain, S., Francis, E. A., & Xue GuoHong. (2025a). ACCOUNTING IN THE ERA OF DIGITALIZATION IN MALAYSIA: THE CONCEPTUAL FRAMEWORK. In *Labuan Bulletin of International Business & Finance (Vols. 1–1, pp. 1–11)*.
- Nain, S., Francis, E. A., & Xue GuoHong. (2025b). ACCOUNTING IN THE ERA OF DIGITALIZATION IN MALAYSIA: THE CONCEPTUAL FRAMEWORK. In *Labuan Bulletin of International Business & Finance (pp. 1–11)*.

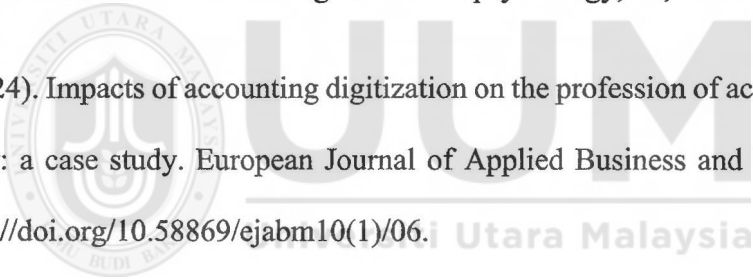
- Nangoy, R., Mursitama, T. N., Setiadi, N. J., & Pradipto, Y. D. (2019). Creating sustainable performance in the fourth industrial revolution era: The effect of employee's work well-being on job performance. *Management Science Letters*, 1037–1042. <https://doi.org/10.5267/j.msl.2019.11.006>.
- Nasar, N., Ray, S., Umer, S., & Mohan Pandey, H. (2021). Design and data analytics of electronic human resource management activities through Internet of Things in an organization. *Software: Practice and Experience*, 51(12), 2411-2427.
- Nassani, A. A., Yousaf, Z., Grigorescu, A., Oprisan, O., & Haffar, M. (2023). Accounting Information Systems as mediator for digital technology and Strategic Performance interplay. *Electronics*, 12(8), 1866. <https://doi.org/10.3390/electronics12081866>.
- Njeje, D. A., Chepkilot, R., & Ochieng, I. (2018). E-performance management systems and organization performance of Sacco's in Kenya. *IOSR Journal of Business and Management*, 20(5), 89-98.
- Nurain, A., & Chaniago, H. (2024). Digital Behavior and Impact on Employee Performance: Evidence from Indonesia. *Journal of Technology Management & Innovation*, 19(3), 15–16. <http://jotmi.org>.
- Pargmann, J., 1\*, Riebenbauer, E., Flick-Holtsch, D., & Berding, F. (2023). Digitalisation in accounting: a systematic literature review of activities and implications for competences. *Empirical Research in Vocational Education and Training*, 1–37. <https://doi.org/10.1186/s40461-023-00141-1>.

- Peiró, J. M., Bravo-Duarte, F., González-Anta, B., & Todolí-Signes, A. (2024). Supervisory performance in telework: the role of job demands, resources, and satisfaction with telework. *Frontiers in Organizational Psychology*, 2. <https://doi.org/10.3389/forgp.2024.1430812>.
- Purwanto, A., Asbari, M., & Santoso, P. B. (2019). Does culture, motivation, competence, leadership, commitment influence quality performance? *Inovbiz: Jurnal Inovasi Bisnis*, 7(2), 201-205.
- Purwanto, A., Asbari, M., Santoso, T. I., Haque, M. G., & Nurjaya, N. (2020). Marketing research quantitative analysis for large sample: Comparing Lisrel, Tetrad, GSCA, Amos, SmartPLS, WarpPLS, and SPSS. *Jurnal Ilmiah Ilmu Administrasi Publik: Jurnal Pemikiran dan Penelitian Administrasi Publik*.
- Purwanto, A., Asbari, M., Santoso, T. I., Paramarta, V., & Sunarsi, D. (2020). Social and management research quantitative analysis for medium sample: Comparing Lisrel, Tetrad, GSCA, Amos, SmartPLS, WarpPLS, and SPSS. *Jurnal Ilmiah Ilmu Administrasi Publik: Jurnal Pemikiran Dan Penelitian Administrasi Publik*.
- Purwanto, A., Wijayanti, L. M., Hyun, C. C., & Asbari, M. (2019). The effect of transformational, transactional, authentic, and authoritarian leadership style toward lecture performance of private university in Tangerang. *Dinasti International Journal of Digital Business Management*, 1(1), 29-42.
- Rachman, G. G., Juniarti, S. S., & Nurcholisah, K. (2024). The influence of accounting information system quality and work motivation on employee performance. *Almana*

Jurnal Manajemen Dan Bisnis, 8(3), 581–588.  
<https://doi.org/10.36555/almana.v8i3.2721>.

Raed, H., Qawasmeh, E. F., Al-Serhan, A. F., Hanandeh, A., Hammouri, Q., Halim, M., & Darawsheh, S. R. (2023). Utilizing business intelligence and digital transformation and leadership to enhance employee job satisfaction and business added value in greater Amman municipality. *International Journal of Data and Network Science*, 7(3), 1077.  
<https://doi.org/10.5267/j.ijdns.2023.5.016>.

Ramos-Villagrasa, P., Barrada, J. R., & Fernández-del-Río, E. K. (2019). Assessing job performance using brief self-report scales: The case of the individual work performance questionnaire. *Journal of work and organizational psychology*, 35, 195- 205.

Resende, M. S. (2024). Impacts of accounting digitization on the profession of accountants and productivity: a case study. *European Journal of Applied Business and Management*, 10(1). [https://doi.org/10.58869/ejabm10\(1\)/06](https://doi.org/10.58869/ejabm10(1)/06).  


Saleem, N. (2025). The Impact of Digital Transformation on Corporate Financial Performance: A Multi-Dimensional Analysis *Milky Way Scientific Journal*, 1(1), 71–81.  
<https://doi.org/10.65021/mwsj.v1.i1.6>.

Scholze, A., & Hecker, A. (2023). Digital Job Demands and Resources: Digitization in the Context of the Job Demands-Resources Model [Review of Digital Job Demands and Resources: Digitization in the Context of the Job Demands-Resources Model]. *International Journal of Environmental Research and Public Health*, 20(16), 6581. Multidisciplinary Digital Publishing Institute. <https://doi.org/10.3390/ijerph20166581>.

- Scholze, A., & Hecker, A. (2023). Digital Job Demands and Resources: Digitization in the context of the Job Demands-Resources Model. *International Journal of Environmental Research and Public Health*, 20(16), 6581. <https://doi.org/10.3390/ijerph20166581>.
- Sekaran, U. (2003). *RESEARCH METHODS FOR BUSINESS* (J. Marshall, Ed.). John Wiley & Sons, Inc. <http://www.wiley.com/college>.
- Sekaran, U., & Bougie, R. (2010). *Research methods for business: A skill building approach* (Fifth Editioned.). John Wiley & Sons Ltd.
- Senin, N. S., & Rashid, U. K. (2025). Information System Success Factors and Their Influence on Employee Performance in a Digital Environment. <https://doi.org/10.30880/jbsnexus.2025.02.01.006>.
- Taib, A., Awang, Y., Shuhidan, S. M., Zakaria, Z. N. Z., Sulistyowati, S., & Ifada, L. M. (2023). Digitalization of the Accounting profession: An assessment of digital competencies in a Malaysian Comprehensive University. *Asian Journal of University Education*, 19(2). <https://doi.org/10.24191/ajue.v19i2.22229>.
- Tran, T. L. Q., Herdon, M., Phan, T. D., & Nguyen, T. M. (2023). Digital skill types and economic performance in the EU27 region, 2020-2021. *Regional Statistics*, 13(3), 536–558. <https://doi.org/10.15196/rs130307>.
- Victolia, L., Setiawan, A., Wirawan, S., & Djajadikerta, H. (2023). The implementation of accounting information systems, internal control, and work motivation on employee performance. *International Journal of Applied Finance and Business Studies*, 59–67. <https://www.ijafibs.pelnus.ac.id>.

- Wahet, A., Widagdo, S., & Prastyowati, A. H. (2020). The effect of work environment, work facilities and work motivation on employee performance at the DPRD Secretariat Bondowoso Regency. *ABM: International Journal of Administration, Business and Management*, 2(1), 29-45.
- Wege, L. G., Ngige, C. D., & Dieli, O. J. (2019). Electronic human resource management (E-HRM) and organizational performance in Nigeria. *International Journal of Management and Entrepreneurship*, 1(1), 53-69.
- Widjaja, W. (2021). Analisis Kinerja Karyawan dan Faktor-Faktor yang Memengaruhinya: Studi Kasus di PT X. *Jurnal Perspektif*, 19(1). <https://doi.org/10.31294/jp.v19i1.9527>.
- Winarno, A., & Perdana, Y. (2015, November). The effects of competence and motivation on employee performance at PT Pos Indonesia Bandung Cilaki Head Office. In *International Conference on Business, Marketing & Information System Management* (pp. 25-26).
- Yazdifar, H., & Askarany, D. (2023). "The Relationship Between Accounting Information System Quality and Organizational Performance." *Accounting Research Journal*, 36(1), 12-30. <https://doi.org/10.1108/ARJ-11-2022-0165>.
- Zhang, Y., & Zhao, X. (2022). Impact of cloud computing on accounting information systems. *Journal of Cloud Computing*, 11(1), 17-29.

## Appendix A

### Section A: Demographic Profile

No.	Statement
1	Gender
2	Age
3	Years of Experiences in the Current Role
5	What is your current job position?

### Section B: Employee Motivation (Independent Variable)

The scale was adapted from the study by Abdulkareem (2025)

**1 = Strongly Disagree   2 = Disagree   3 = Neutral   4 = Agree   5 = Strongly Agree**

No.	Statement	1	2	3	4	5
1	I am motivated to put forth my best effort in my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	I feel a strong sense of purpose in my work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	I am enthusiastic about the work I do.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	I find my work personally meaningful.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Section C: Accounting-Related Digital Systems (ARDS) (Mediator)**

The scale was adapted from the study by Mediaty et al., 2025

**1 = Strongly Disagree   2 = Disagree   3 = Neutral   4 = Agree   5 = Strongly Agree**

No.	Statement	1	2	3	4	5
1	Using digital accounting can meet my financial preparation service need	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Digital accounting services can save time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Digital accounting services can improve efficiency.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Overall, digital accounting services have benefited me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



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**Section D: Job Performance (Dependent Variable)**

The scale was adapted from the study by Chen et al. (2019)

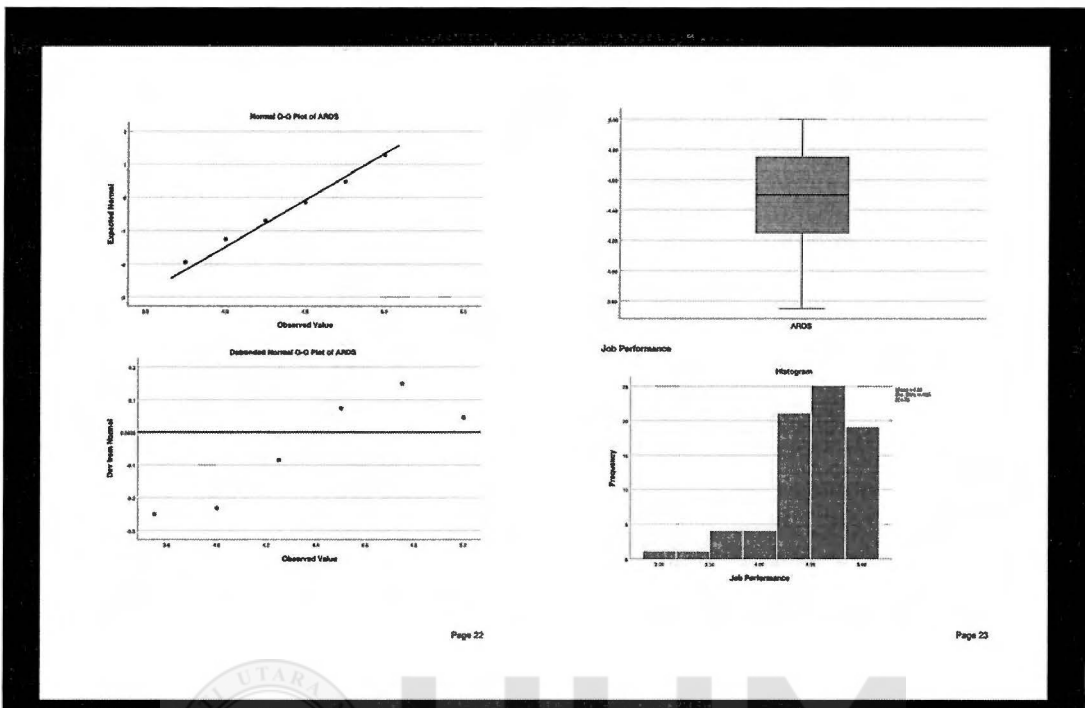
1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

No.	Statement	1	2	3	4	5
1	I consistently perform well on the core duties outlined in my job description.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	I regularly meet or exceed the formal performance targets set for my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	I am always proactive and responsible in completing all required tasks in my job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



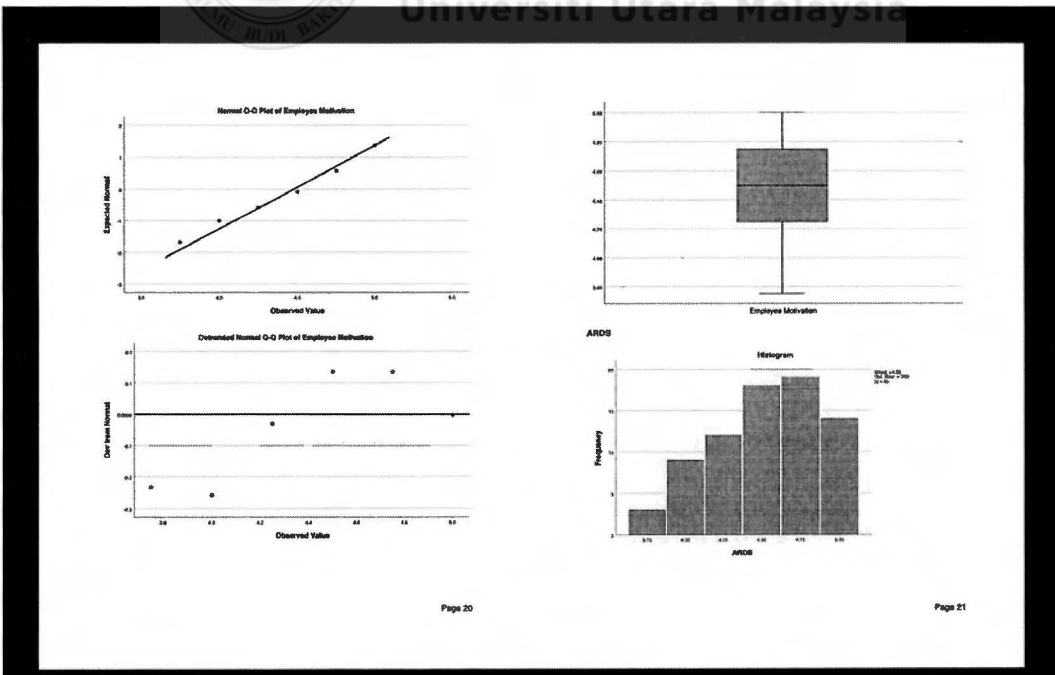
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## Appendix B



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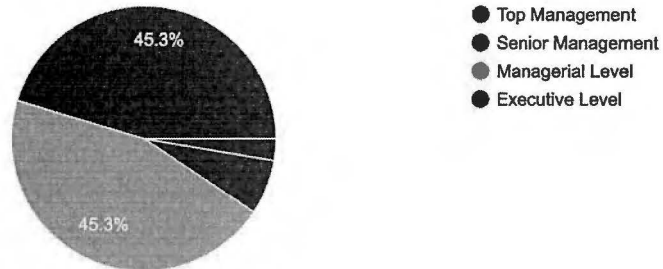
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## Appendix C

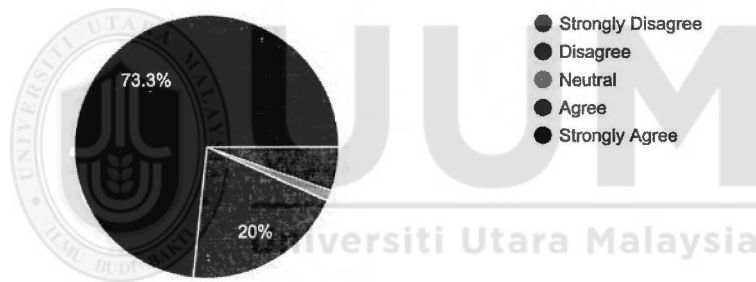
6. What is your current job position?

75 responses



1. I am motivated to put forth my best effort in my job.

75 responses



1. Using digital accounting can meet my financial preparation service need

75 responses

