



Faculty of Economics and Business

**The Influence of Internal Organizational Factors on Employee Job
Commitment among Academic Staff in Private Universities in Sarawak,
Malaysia**

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The Influence of Internal Organizational Factors on Employee Job
Commitment among Academic Staff in Private Universities in Sarawak,
Malaysia

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A dissertation submitted

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DECLARATION

I declare that the work in this dissertation was carried out in accordance with the regulations of Universiti Malaysia Sarawak. Except where due acknowledgements have been made, the work is that of the author alone. The dissertation has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

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ABSTRACT

This study investigates the influence of internal organisational factors, technological adoption, job autonomy, supervisor support, and coworker support on employee job commitment among academic staff at private universities in Sarawak, Malaysia. In light of rising challenges in talent retention and job dissatisfaction within the private higher education sector, the study emphasises the need for strategic internal reforms to strengthen organisational commitment. A quantitative research design was employed, and data were collected via a structured survey involving 200 academic staff from three major private universities in Sarawak. The data were analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM) via SmartPLS. The findings indicate that technological adoption and job autonomy significantly enhance job commitment. However, coworker support and supervisor support were not significantly related to job commitment. Employment status was found to moderate the relationships between job autonomy and technological adoption with job commitment, with permanent employees benefiting more from these factors. Based on these insights, the study recommends that university management prioritise structured technological integration, promote job autonomy, and adopt HR strategies tailored to employment status. These policy recommendations are vital for improving staff retention, enhancing job commitment and sustaining the competitiveness of private universities in Sarawak. The study contributes to literature by addressing contextual gaps and informing HR policy and practice.

Keywords: Technological Adoption, Job Autonomy, Supervisor Support, Coworker Support, Employee Job Commitment

***Hubungan Faktor-Faktor Organisasi Dalam dan Komitmen Kerja Staf Akademik:
Peranan Moderasi Status Pekerjaan di Universiti Swasta Sarawak***

ABSTRAK

Kajian ini meneliti pengaruh faktor dalaman organisasi penggunaan teknologi, autonomi kerja, sokongan penyelia dan sokongan rakan sekerja terhadap komitmen kerja dalam kalangan staf akademik di universiti swasta di Sarawak, Malaysia. Dalam konteks cabaran pengekalan bakat dan ketidakpuasan kerja yang semakin meningkat dalam sektor pendidikan tinggi swasta, kajian ini menekankan keperluan kepada pembaharuan dalaman yang strategik bagi memperkukuh komitmen organisasi. Reka bentuk penyelidikan kuantitatif telah digunakan, dan data dikumpulkan melalui tinjauan berstruktur melibatkan 200 orang staf akademik dari tiga universiti swasta utama di Sarawak. Data dianalisis menggunakan Pemodelan Persamaan Struktur Kuasa Terkecil Separaan (PLS-SEM) melalui perisian SmartPLS. Dapatan menunjukkan bahawa penggunaan teknologi dan autonomi kerja meningkatkan komitmen kerja secara signifikan. Sebaliknya, sokongan rakan sekerja dan penyelia tidak menunjukkan hubungan yang signifikan. Status pekerjaan didapati mempengaruhi hubungan antara autonomi kerja dan penggunaan teknologi dengan komitmen kerja, di mana staf tetap mendapat lebih banyak manfaat. Berdasarkan dapatan ini, kajian mencadangkan agar pengurusan universiti memberi keutamaan kepada integrasi teknologi yang tersusun, meningkatkan autonomi kerja dan melaksanakan strategi sumber manusia yang disesuaikan mengikut status pekerjaan. Cadangan ini penting untuk meningkatkan pengekalan staf, memperkukuh komitmen kerja dan mengekalkan daya saing universiti swasta di Sarawak.

Kata kunci: *Penggunaan Teknologi, Autonomi Kerja, Sokongan Penyelia, Sokongan Rakan Sekerja, Komitmen Kerja Pekerja*

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LIST OF ABBREVIATIONS

AVE	Average Variance Extracted
CGS	Centre for Graduate Studies
CR	Composite Reliability
CS	Coworker Support
EJC	Employee Job Commitment
ES	Employment Status
HEI	Higher Education Institution
JA	Job Autonomy
JD-R	Job Demands – Resources (JD-R) Model
PLS-SEM	Partial Least Squares Structural Equation Modeling
PUI	Private University Institution
RBV	Resource-Based View (RBV) Theory
SD	Standard Deviation
SET	Social Exchange Theory
SPSS	Statistical Package for the Social Sciences
SS	Supervisor Support
TA	Technological Adoption
UNIMAS	University Malaysia Sarawak
VIF	Variance Inflation Factor

CHAPTER 1

INTRODUCTION

1.1 Introduction

Employee job commitment refers to the psychological and emotional attachment that individuals demonstrate towards their jobs, organisations, and institutional goals. It encompasses their willingness to invest effort, remain loyal, and actively contribute to the advancement and success of their organisations (Chen & Aryee, 2007; Cable & Vermeulen, 2018). Within universities, particularly private higher education institutions, academic staff commitment is essential for maintaining the quality of teaching, enhancing research outputs and supporting institutional growth. Employees who perceive that their contributions are meaningful beyond financial compensation are more likely to demonstrate high levels of innovation, engagement and citizenship behaviour at work (Cable & Vermeulen, 2018; Koomson, 2022).

In the context of private universities, where competition for student enrolment, research funding, and academic reputation is intense, maintaining a highly committed workforce is critical. Academic staff form the intellectual foundation of universities, influencing student satisfaction, research productivity, and overall institutional sustainability (Hasan & Masri, 2015; Ramaditya, 2023). A decline in academic commitment can negatively impact educational quality, student retention, and the university's external reputation, posing significant challenges to long-term viability (Dandis et al., 2021; Kohnova & Papula, 2019).

Given these challenges, it is essential to understand the internal organisational factors that shape employee experiences and influence their level of commitment. Such factors are

typically within the control of university management and present practical levers for institutional intervention. Moreover, employee responses to internal organisational conditions may vary according to employment status (permanent vs. contract full-time), which has become increasingly relevant in the staffing practices of private universities. Examining whether such differences moderate the influence of organisational factors on job commitment is crucial for informing targeted and equitable human resource strategies.

Multiple internal organisational factors have been identified as key influencers of employee commitment. Technological adoption is one such factor that has transformed academic work. Universities are increasingly integrating learning management systems, digital communication platforms and online teaching tools. While technological advancements introduce greater flexibility and efficiency, they also contribute to role expansion, heightened expectations for digital competency and increased stress and burnout if not managed effectively (Karamika & Singh, 2019; Wiblen et al., 2010). Technological changes demand continuous upskilling, and inadequate training or support may exacerbate employee strain, ultimately affecting job commitment (Bondarouk & Ruël, 2009; Strohmeier, 2007).

Another critical internal factor is job autonomy. Originating from the Job Characteristics Model (Hackman & Oldham, 1976), job autonomy refers to the degree of freedom, independence, and discretion employees have in scheduling their work and determining procedures. In academic settings, autonomy enables staff to exercise creativity in teaching, research, and service roles. However, excessive autonomy without clear structure or support can result in role ambiguity, task overload, and increased stress (Holte et al., 2019; Zhou, 2020). While autonomy is generally viewed as a resource that enhances

job satisfaction and organisational attachment (Naqvi et al., 2013), its effectiveness depends on the presence of adequate skills, support, and workload balance.

The interpersonal environment within universities also plays a vital role. Supervisor support fosters trust, enhances communication, and provides the emotional resources necessary to navigate complex academic responsibilities (Ahmed, 2015; Kumari & Kaur, 2019). In cultural contexts such as Malaysia, where hierarchical relationships are valued, the quality of supervisor support is especially important. Coworker support, through collaboration and mutual assistance, can buffer against job stress and contribute to a positive work environment (Tamer, 2014). Strong interpersonal relationships not only ease conflict resolution but also reinforce employees' sense of belonging and organisational identification.

Understanding internal organisational factors such as technological adoption, job autonomy, coworker support, and supervisor support is critical for improving employee job commitment because these elements directly shape employees' day-to-day work experiences, psychological engagement, and sense of belonging within the institution. While numerous external and macro-level factors such as salary, labour policies, or job market conditions can influence commitment, internal factors are often more actionable, modifiable, and within the control of institutional leadership.

These four specific factors were chosen for this study because they are central to how academic work is structured and experienced in contemporary private university environments. Technological adoption has become increasingly relevant as universities shift toward digital learning and administrative platforms, which can either enhance or hinder academic roles depending on support and infrastructure. Job autonomy is integral in academic professions where independent decision-making is necessary, but excessive or

unsupported autonomy can result in confusion and stress. Meanwhile, interpersonal resources, namely coworker and supervisor support, are essential in mitigating workplace challenges, fostering collaboration, and promoting psychological safety. When these internal factors are misaligned or underdeveloped, they can create dissatisfaction and disengagement, weakening institutional commitment despite competitive pay or career progression.

Therefore, this study focuses on these internal organisational elements because they represent practical intervention points for institutional leaders seeking to strengthen commitment among academic staff, particularly in the context of private universities, where resources, autonomy, and support structures often differ from public institutions.

In addition to these internal factors, employment structures in private universities have evolved, with increasing reliance on contract-based academic appointments. Contractual employment offers flexibility for institutions but often results in reduced job security and organisational attachments for employees (Indrayani, 2020; Jafri, 2013). Although some studies suggest minimal differences in commitment between permanent and contract staff (Ofosuhene & Sammo, 2020), others report that contract employees experience higher levels of job insecurity and stress. Employment status may thus moderate how internal organisational factors such as technology adoption, autonomy and interpersonal support influence job commitment, an area that remains underexplored, particularly in academic settings (Mendis, 2023; Malik, 2017).

This study is conducted in Sarawak, Malaysia, where private universities play a strategic role in human capital development. Institutions such as Swinburne University of Technology Sarawak, Curtin University Malaysia, and University of Technology Sarawak contribute significantly to educational advancement in the state. The relevance of studying job commitment among academic staff in Sarawak's private universities is further

underscored by the Sarawak Government's upcoming Free Tertiary Education initiative, set to commence in 2026. This policy aims to increase access to higher education and will likely result in higher enrolment, greater academic complexity and heightened expectations for educational delivery.

The success of this initiative depends heavily on the commitment, motivation, and adaptability of academic staff, who must manage increasing workloads, integrate technological innovations, and maintain educational quality standards. Hence, understanding the internal organisational factors influencing employee job commitment and examining whether employment status moderates these relationships is not only academically significant but also policy-critical.

By investigating the relationships between technological adoption, job autonomy, supervisor support, coworker support, and employee job commitment, with employment status as a moderator, this study aims to contribute to both academic knowledge and practical strategies for enhancing employee engagement and retention within private universities in Sarawak.

1.2 Background of the study

The field of organisational behaviour and human resource management is the cornerstone for understanding the dynamics of internal organisational factors and their influence on employee commitment. From a macro perspective, this research delves into organisational culture, leadership styles, job design, communication patterns, and employee engagement within private university academic institutions. These factors significantly contribute to shaping the work environment and play a pivotal role in determining the commitment level of academic staff members. In exploring organisational culture, the study investigates how technological adoption, job autonomy, and supervisor and coworker

support are prevalent within these private universities and impact the commitment of academic staff. Understanding the internal organisational factors allows for a deeper analysis of the practices that affect employee commitment. The study on internal organisational factors and their impact on employee job commitment among academic staff in Private Universities in Sarawak, Malaysia, and incorporating employment status as a moderator aims to comprehensively explore the influence between various internal organisational elements and the responsibility of academic staff within the context of private universities in Sarawak, Malaysia.

This study will be conducted in private universities. Private universities frequently encounter fierce competition to draw attention and retain students and academic professionals. This becomes particularly crucial in academia, where the expertise and dedication of staff significantly contribute to the institution's reputation and academic excellence. The financial health of private universities is subject to various factors, encompassing tuition fees, government funding, investment returns, student numbers, and the enrolment of international students. Private universities allocate revenue to attract students and facilitate research work (Hasan & Masri, 2015). Students' satisfaction in an educational institution has become a crucial concern for universities to ensure their survival and success. Hasan and Masri (2015) indicate by regression analysis that the university feature is the most significant element, followed by the student-lecturer relationship, costs and service quality, in that order.

1.2.1 Technology Adoption

Investigating the extent and efficacy of technology adoption within these universities can reveal its impact on job commitment among academic staff. Adopting modern tools, software, and learning management systems can affect teaching methodologies, research

productivity, and administrative efficiency, thereby influencing the commitment levels of faculty members. The effect of the pandemic has swept across the world and has impacted our way of life, including the educational sector, since 2020. The COVID-19 outbreak was declared a pandemic by the World Health Organisation (WHO). Given the detrimental effects of this virus, movement was controlled and entirely restricted due to its infectious nature. Consequently, COVID-19 profoundly affected human life and the education sector, resulting in a global crisis that disrupted life's social, political, cultural, and economic aspects. Countries were compelled to enforce strict measures such as complete or partial lockdowns. Face-to-face teaching and physical interactions came to a halt. The new circumstances mandated educational institutions to cease in-person learning and transition to online or distance learning. This dramatic shift altered the traditional concept of education, sparking numerous questions regarding adopting the internet and technology. While the onset of this pandemic has sparked heightened interest in e-learning, the challenges lie in selecting the right tools and adopting technologies (Miah et al., 2023).

Additionally, as Granic (2022) outlined, various factors influencing technology adoption are derived from thematic categorisation within TAM's and UTAUT's models. These factors are grouped thematically into (i) user aspects encompassing individual attributes, pleasure, and usefulness; (ii) task and technology aspects; and (iii) social aspects. Several studies have identified the technologies and delivery modes commonly utilised to facilitate the learning and teaching processes, as evidenced by previous literature reviews conducted by multiple researchers, for instance, Hanif et al. (2018; Song & Kong (2017); Lai (2020) Briz-Ponce & Garcia-Penalvo (2015) Vanduhe, Nat & Hasan (2020); and Nagy (2018).

1.2.2 Job Autonomy

Examining the extent of autonomy given to academic staff in decision-making, curriculum design, research pursuits, and teaching methodologies holds significant importance. Increased levels of job autonomy often correspond with heightened job satisfaction and commitment among employees, enabling them to leverage their expertise and creativity. Job autonomy is a fundamental aspect of work, extensively researched and recognised for its potential to enhance performance. When employees can make decisions and manage their work, it signals trust in their abilities, fostering satisfaction.

Naqvi et al. (2013) noted that heightened job autonomy correlates with elevated job satisfaction. Clausen et al. (2021) also discovered a positive link between job autonomy and psychological well-being. These findings underline the significance of job redesign, particularly emphasising the benefits of increased autonomy for workers' psychological well-being, especially among those with lower autonomy levels. The Job Demands-Resources (JDR) model identifies job autonomy as a resource in the psychosocial work environment. It empowers employees to make choices, fostering a sense of control and predictability. This perception of control provides a calming effect, reducing pressure on employees. Job autonomy, when present, contributes to improved health, well-being and enhanced cognitive performance by allowing employees a sense of control over their work situations.

However, it is crucial to acknowledge that job autonomy might not always lead to improved employee commitment, particularly when employees experience role ambiguity. When uncertainties exist regarding their responsibilities and role expectations, autonomy alone might not significantly contribute to their commitment. Excessive autonomy can lead individuals to juggle multiple tasks, potentially confusing their focus.

According to a recent study by Zhou (2020), excessive job autonomy can negatively impact employees. The presence of job autonomy requires employees to possess the necessary skills, knowledge, and resources to make independent decisions and handle increased responsibilities. When employees lack these essential elements, the impact of autonomy on job commitment might be limited. This inadequacy can result in feeling overwhelmed or uncertain, undermining the usual positive effects of autonomy. Furthermore, job autonomy often comes with greater responsibility and decision-making authority, potentially increasing job demands and workload. However, if employees perceive this added workload as burdensome and overwhelming, it could counteract the positive effects of autonomy.

1.2.3 Supervisor Support

Clark and Payne (2006) identified four character-based qualities of trust (ability, integrity, fairness, and openness) that leaders should practise. They argued that this variable is a crucial predictor of positive interpersonal relationships and group processes.

Healthy work relationships necessitate clear, consistent, honest and open communication, which is an element of trust. Without trust, all relationships falter. Lacking these qualities leads employees to feel disregarded and dehumanised. Humble, compassionate, generous, forgiving, and highly ethical leaders tend to excel. They lead with kindness and prioritise their employees' well-being. Such leaders cultivate positive workplaces that enhance financial performance, customer satisfaction, productivity, and employee engagement.

Another crucial aspect of an organisation's climate involves its socialisation practices. Baker and Dutton (2006) proposed that such rules, including pairing new employees with mentors, aid in teaching appropriate interaction norms and fostering positive

interactions. Empirical evidence supports this notion, indicating that formally and informally mentored employees integrate better into the organisation and achieve superior work outcomes than those without mentoring. Furthermore, leaders should ensure fairness in decision-making to enhance the social environment.

In the context of private universities in Malaysia, the relationship between supervisor support and employee job commitment can be crucial. One prominent issue that might arise is the cultural context and communication style within the Malaysian workplace, which can significantly impact the nature and effectiveness of supervisor support. Supervisor support plays a pivotal role in determining employee job commitment for several reasons, among which are providing guidance, recognition, and feedback, allocating resources, and resolving conflicts among the team. Most studies have mentioned that supervisors often provide employees with guidance, direction, and mentorship. In this study context, this support might involve helping employees understand their roles, offering advice on academic or administrative tasks, and providing career guidance. Supervisors are also expected to recognise and give feedback to their employees. Supportive supervisors offer recognition for good work and provide constructive feedback, enhancing employee morale and motivation to commit to their job. This is important to maintain a positive relationship in the workplace. Supervisors also play a role in resource allocation. This can be done by allocating resources such as funding, time, and training opportunities, which are essential for employees to perform their roles effectively. Support can also be shown as supervisors become the ones who settle conflicts. Supportive supervisors assist in conflict resolution and problem-solving, creating a conducive work environment where employees feel valued and understood.

1.2.4 Coworker Support

Co-worker support entails co-workers aiding each other in their responsibilities by exchanging knowledge and skills and offering encouragement and assistance (Zhou & George, 2001). In the context of coworker support and employee job commitment at private universities in Malaysia, several prominent issues may arise.

The diverse cultural backgrounds in Malaysia may pose difficulties in communication, comprehension, and harmonising expectations among colleagues. Variations in cultural norms and work styles may influence the level of support received from colleagues, which can impact one's level of commitment to their job.

Apart from that, higher education (private university) environments frequently entail substantial workloads, research requirements, and the expectation to achieve rigorous academic criteria. Insufficient assistance from colleagues in handling these requirements might result in heightened stress and less commitment to work among employees. Coworker support significantly influences employee job commitment through several means. Social support refers to positive interpersonal ties among coworkers that offer emotional and instrumental assistance. Experiencing appreciation and assistance from coworkers can enhance an employee's feeling of inclusion and connection to their work and organisation. The support from coworkers will enhance employees' job satisfaction when colleagues engage in collaboration and provide mutual support, which contributes to a more positive work environment. An optimistic work atmosphere enhances workplace contentment, promoting more significant job commitment. Apart from that, a high level of coworker support will alleviate employee stress and burnout. In an academic setting characterised by demanding workloads, receiving support from colleagues can serve as a protective barrier

against stress and burnout. Inadequate assistance might raise stress levels, resulting in less dedication and heightened intent to leave the organisation.

The quality of relationships among staff members, faculty and administration, and academic peers can profoundly influence job commitment. Trust, mutual respect, and a positive work environment fostered through healthy interpersonal connections can significantly contribute to the commitment of academic staff. Core principles such as transparency, authenticity, and value are essential to harness the benefits of strong interpersonal relationships at work. Furthermore, extensive research indicates that teams performing with shared mental models approaching projects with aligned expectations and priorities demonstrate improved members' performance.

Reich and Hershcovis (2011) describe two levels of interpersonal relationships. As Baumeister and Leary (1995) suggested, these levels encompass the macro level originating from the organisation and the group. Another factor that enhances membership is the group level, which originates from the membership itself. These groups can be formal (such as work groups or teams) or informal (like friendship networks). Some organisational groups might be transient, such as specific project work groups. However, even temporary work groups provide ample chances for frequent interaction, meeting the criteria of the need to belong. Moreover, groups offer the social context through which employees perceive an organisation (Robinson & O'Leary-Kelly, 1998). Consequently, formal and informal groups allow organisations to fulfil their employees' need to belong. Baker and Dutton (2007) state that individuals can derive significant social rewards from the mere presence and attention of others. The company of others provides an opportunity for social connection and fulfilment.

Based on the study by Limpanitgul et al. (2014), the research emphasises the well-established and scientifically proven significance of employee job commitment, specifically stressing social support as a crucial determinant. Although previous research frequently investigates the correlation between culture and employee commitment on an individual or national scale, there is a significant void in studying its effect on organisational culture. This study examines the effects of colleague support on three aspects of organisational commitment among Thai flight attendants working in organisations with distinct cultural orientations. The results, derived from a survey conducted with 439 individuals employed in Thai and American airlines, demonstrate notable disparities in the impact of coworker assistance on the level of dedication to the organisation between the two cohorts. The Thai sample demonstrates substantial relationships between colleague support and affective and normative commitment, while these associations are not statistically significant in the US group. Nevertheless, Thai employees working for American Airlines experience a negative effect on their commitment to stay on the job due to the support they receive from their colleagues. The findings relate to Hofstede's cultural dimensions theory, where individuals who strongly lean towards collectivism are said to prioritise the welfare of others over their own. In contrast, persons who strongly lean towards individualism tend to prioritise their interests and concentrate on economic affairs. Individuals acting inside a collectivist environment are likely to display behaviours that are more supportive of others, in contrast to those operating within an individualistic framework. Notably, it may be asserted that the benefits derived from colleague support are not considered a significant cost for employees in an organisation that may be impacted by an individualistic national culture, such as the one observed by American Airlines in this study. As a coworker's level of assistance grows, employees may feel irritated. They might think that the costs linked to receiving assistance

from colleagues outweigh the benefits they gain, and this perception could increase the likelihood of them choosing not to remain loyal to their current employer.

1.2.5 Employment Status

The ongoing progress of technology has led numerous firms and organisations to alter the composition of their workforce by opting for contract employees over permanent workers. This shift brings various advantages for both employers and employees.

From the employer's perspective, choosing contract employees allows organisations to meet economic needs and rapidly expand their skilled workforce, tailored to their specific requirements (Godfrey, 2018; Keim et al., 2014). Additionally, businesses benefit from reduced spending, avoiding the responsibility of providing benefits or ensuring retirement through pension plans. For employees, there are immediate advantages, such as higher hourly and overtime compensation and control and independence in selecting the type of work they wish to align with.

However, underlying difficulties exist despite the mutual benefits perceived in this relationship. These include the impact on the morale of contract employees and the effects on organisations and human resource management. Studies suggest a hierarchical distinction between contract and permanent employees, leading to reduced performance, diminished morale, and unanticipated turnover among contractors. Organisations face enduring consequences, including a rise in lawsuits and the need to compensate for unpaid benefits and wages.

Research reveals a moderate correlation between contract employment and various factors, with a weak impact on these variables. Additionally, there are no significant differences in the behaviour exhibited by contract workers and permanent employees (Godfrey, 2018).

Contract employment is receiving significant attention due to persistent changes in working structures worldwide. Organisations employ individuals on short-term or long-term contract agreements, driven by the need for flexibility and cost reduction. Despite justifications presented by organisations, little mention is made of denying fundamental rights to certain contract employees. Some are prohibited from participating in trade unions, impacting their ability to negotiate improved employment conditions (Godfrey, 2018). Employees exhibit varying attitudes in the workplace, influenced by job situations. Permanent workers are more prone to job satisfaction due to legal entitlements, while contract employees may lack motivation and face unequal treatment.

Contract employment is associated with greater job insecurity, negatively affecting psychological well-being. Studies show lower job satisfaction among contract employees than permanent ones, arising from concerns about job stability and exclusion from decision-making processes (Anwar et al., 2011; Bruno et al., 2013; Waaijer et al., 2017). According to Mulyana and Izzati (2022), academicians can perform their duties optimally with job security. Without job security, the emotional commitment to their career can fluctuate significantly, impacting an individual's decision to continue pursuing a career. Fostering a culture of innovation and conducting additional empirical research are vital to understanding the behaviour of contract and permanent employees, improving managerial decision-making, and overall employee management.

1.3 Problem Statement

The fields of organisational behaviour and human resource management provide critical frameworks for understanding how internal organisational factors influence employee commitment. These disciplines examine how job design, leadership styles, communication patterns, and organisational culture shape employee attitudes and behaviours

(Edgar & Geare, 2013). Within academic institutions, particularly private universities, factors such as technological adoption, job autonomy, and supervisor and coworker support are central to shaping how staff experience their work and engage with their roles.

Employee job commitment refers to the psychological and emotional attachment that an employee has toward their organisation. It reflects an individual's willingness to exert effort, maintain loyalty, and align with institutional goals (Chen & Aryee, 2007). For academic staff, commitment is not only vital for fulfilling teaching responsibilities but also for contributing to research, institutional development, and student success. A lack of commitment among academicians can lead to disengagement, reduced productivity in teaching and scholarship, and ultimately lower educational quality, student satisfaction, and institutional reputation (Huberman, 1993; Raza & Ahmed, 2017).

In private university institutions, maintaining a committed academic workforce has become increasingly important. These universities compete intensively to attract students, build research portfolios, and establish strategic collaborations. Academic staff serve as the intellectual foundation of these institutions. Their commitment directly influences student learning outcomes, research productivity, and the ability to foster long-term partnerships (Ramaditya, 2023). A decline in academic commitment may lead to reputational damage, lower student retention, and decreased institutional competitiveness (Dandis et al., 2021; Kohnova & Papula, 2019).

One pressing challenge affecting academic commitment is the rapid integration of digital technologies. Staff are expected to use learning management systems, virtual conferencing platforms, and digital tools for both teaching and administration. While technological adoption offers flexibility and efficiency, it also brings challenges such as constant connectivity, expanded work roles, and heightened expectations for digital

competency (Karamika & Singh, 2019). These demands can lead to stress, burnout, and information overload, which may negatively impact commitment and engagement (Wiblen et al., 2010). Moreover, insufficient support for technological transitions can exacerbate these effects, requiring staff to reskill without adequate training (Bondarouk & Ruël, 2009; Strohmeier, 2007).

Similarly, job autonomy, while traditionally valued in academia, presents both benefits and risks. Autonomy can empower staff to structure their work and exercise creativity, fostering job satisfaction and organisational attachment (Naqvi et al., 2013). However, excessive autonomy without clear expectations can result in role ambiguity, task overload, and disengagement (Holte et al., 2019; Zhou, 2020). The effectiveness of autonomy depends on whether employees possess the necessary skills, resources, and institutional support to exercise it effectively.

Interpersonal factors also significantly influence job commitment. Supervisor and coworker support can buffer against job-related stress and foster a sense of belonging and engagement (Kumari & Kaur, 2019; Ahmed, 2015). Effective supervisor support enhances trust and communication, which are particularly important in hierarchical cultural contexts such as Malaysia's. Positive coworker relationships provide both emotional and practical assistance, encouraging collaboration and mutual learning (Tamer, 2014). In contrast, weak or competitive peer dynamics may undermine motivation and create workplace tension.

Furthermore, employment structures in Malaysian private universities have shifted towards a greater reliance on contract-based academic staff. While offering flexibility for institutions, contractual arrangements can reduce job security and clarity. Although some studies report minimal differences in commitment between contract and permanent staff (Ofosuhene & Sammo, 2020), others highlight higher insecurity and lower organisational

attachment among contract employees (Indrayani, 2020; Jafri, 2013). Employment status may therefore shape how staff perceive and respond to organisational practices, such as technological change, autonomy, and interpersonal support. Despite its significance, few studies have systematically examined employment status as a moderating variable within academic contexts (Mendis, 2023; Malik, 2017).

This research addresses a significant gap by investigating how technological adoption, job autonomy, supervisor support, and coworker support influence employee job commitment, with employment status considered as a potential moderator. The study is situated within the context of private universities in Sarawak, Malaysia, a region where private institutions play a crucial role in advancing human capital development. The urgency of this research is further underscored by the Sarawak Government's forthcoming Free Tertiary Education initiative, scheduled for implementation in 2026. This policy aims to broaden access to higher education, increase enrolments, and position Sarawak as an educational hub in Malaysia. As the demands on the higher education system grow, sustaining a committed and adaptable academic workforce will be essential for ensuring quality education, institutional performance, and the success of this transformative policy.

By exploring the relationship between internal organisational factors and employment status, this study seeks to contribute both academic knowledge and practical strategies for enhancing academic staff commitment in private universities.

1.4 Research Questions

1. Is there a relationship between technology adoption and employee job commitment among private universities in Sarawak?
2. Is there a relationship between job autonomy and employee job commitment among private universities in Sarawak?

3. Is supervisor support positively linked to employee job commitment?
4. Does coworker support have a positive relationship with employee job commitment?
5. Does employment status moderate the relationship between technological adoption and employee job commitment?
6. Does employment status moderate the relationship between job autonomy and employee job commitment?
7. Does employment status moderate the relationship between supervisor support and employee job commitment?
8. Does employment status moderate the relationship between coworker support and employee job commitment?

1.5 Objectives of the study

This study aims to examine the relationship between selected internal organisational factors and employee job commitment within the context of academic staff in private universities in Sarawak, Malaysia. The objectives are structured into general and specific aims, which guide the scope and direction of the research. The general objective provides the overarching focus of the study, while the specific objectives outline the distinct areas of investigation, including the role of employment status as a moderating variable.

1.5.1 General Objective

To study the relationship between internal organisational factors and impact on employee job commitment among academic staff in private universities in Sarawak, Malaysia.

1.5.2 Specific objectives

1. To investigate the effect of technology adoption on employee job commitment among private universities in Sarawak.
2. To evaluate the effect of job autonomy on employee job commitment at private universities in Sarawak.
3. To identify the effect of supervisor support on an employee's job commitment.
4. To identify the effect of coworker support on an employee's job commitment.
5. To determine the influence of employment status as a moderator of the relationship between technological adoption and employee job commitment.
6. To determine the influence of employment status as a moderator of the relationship between job autonomy and employee job commitment.
7. To determine the influence of employment status moderators on the relationship between supervisor support and employee job commitment.
8. To determine the influence of employment status moderators on the relationship between coworker support and employee job commitment.

To ensure clarity and demonstrate the alignment between the research questions, objectives, and hypotheses, a systematic summary is presented in Table 1.1. This summary provides an overview of how each research question corresponds to a specific research objective and hypothesis tested in the study.

Table 1.1: Alignment of Research Questions, Objectives, and Hypotheses

Research Question	Research Objective	Hypothesis
Is there a relationship between technology adoption and employee job commitment among private universities in Sarawak?	To investigate the effect of technology adoption on employee job commitment among private universities in Sarawak.	Technology adoption significantly influences employee job commitment levels.
Is there a relationship between job autonomy and employee job commitment among private universities in Sarawak?	To evaluate the effect of job autonomy on employee job commitment at private universities in Sarawak.	Job autonomy has a positive effect on employee job commitment.
Is supervisor support positively linked to employee job commitment? Does coworker support have a positive relationship with employee job commitment?	To identify the effect of supervisor support on an employee job commitment. To identify the effect of coworker support on an employee's job commitment.	Supervisor support is positively linked to employee job commitment. Coworker support has a positive relationship with employee job commitment.
Does employment status moderate the relationship between technological adoption and employee job commitment?	To determine the influence of employment status as a moderator of the relationship between technological adoption and employee job commitment.	Employment status moderates the relationship between technological adoption and employee job commitment.
Does employment status moderate the relationship between job autonomy and employee job commitment?	To determine the influence of employment status as a moderator of the relationship between job autonomy and employee job commitment.	Employment status moderates the relationship between job autonomy and employee job commitment.
Does employment status moderate the relationship between supervisor support and employee job commitment?	To determine the influence of employment status moderators on the relationship between supervisor support and employee job commitment.	Employment status moderates the relationship between supervisor support and employee job commitment.
Does employment status moderate the relationship between coworker support and employee job commitment?	To determine the influence of employment status moderators the relationship between coworker support and employee job commitment.	Employment status moderates the relationship between coworker support and employee job commitment.

1.6 Significance of the study

This study offers both theoretical and practical contributions to various stakeholders within the higher education sector. By examining the influence of internal organisational factors on employee job commitment, particularly among academic staff in private universities in Sarawak, the findings are expected to inform institutional strategies, support academic discourse and enhance human resource practices. The following subsections outline the study's significance from industry, academic, strategic and human resource management perspectives.

1.6.1 Industry Contribution

In terms of organisational impact, investigating how technological adoption, job autonomy, and supervisor and coworker support affect job commitment among academic staff in private universities in Sarawak, Malaysia, holds immense significance for the industry. These internal organisational factors shape job commitment and deeply resonate with educational standards as they influence the competitive edge of these institutions. Technological adoption is a pivotal internal factor in moulding the work environment and instructional methods. Its direct influence on job commitment significantly affects talent retention. This study provides crucial insights for organisations to focus on their academic responses. Understanding the most effective strategies for incorporating technology and nurturing a technologically adopted culture among academic staff holds the potential to attract and retain highly skilled professionals, thus strengthening the competitive position of these universities. Job autonomy represents another vital facet in shaping the academic work setting. Empowering staff with autonomy fosters a sense of ownership that positively impacts their commitment. As the researcher delves into aligning job autonomy with job commitment, it aids in designing organisational frameworks that enhance academic staff

satisfaction, directly contributing to talent retention and organisational competitiveness. The quality of interpersonal relations within the organisational structure significantly influences the social dynamics of the work environment. Grasping the role of strong relationships among academic staff in influencing job commitment offers insights into fostering a cohesive and supportive workplace ambience. Such an environment not only aids in talent retention but also nurtures a collaborative culture that enhances the university's competitiveness in attracting and nurturing academic talent. These internal organisational factors substantially influence the private university landscape in Sarawak. Understanding their impact on job commitment directly contributes to talent retention strategies, thus augments the competitiveness of these institutions. Moreover, optimising technological integration, promoting job autonomy, and fostering positive interpersonal relations among academic staff reinforce job commitment and indirectly elevate the overall educational standards and branding of private universities in the state.

Furthermore, this study's focus on employment status (permanent vs. contract full-time) provides vital insights into how different categories of academic staff experience and respond to internal organisational factors that shape their job commitment. Understanding these differences is crucial, as varying levels of commitment between permanent and contract full-time staff may influence institutional performance outcomes, such as teaching quality, research productivity, and student satisfaction. Financially, lower commitment among contract full-time staff may result in higher turnover, increased recruitment and training costs, and disruptions in program continuity. Therefore, the study offers strategic implications for managing workforce stability and ensuring sustainable academic and financial performance within private universities in Sarawak.

1.6.2 Academic Contribution

In terms of academic contribution, this study addresses a research gap by exploring how internal organisational factors influence employee commitment within academic settings. It adds valuable insights to the literature on human resource management, organisational behaviour, and employee commitment, with a context-specific focus on private universities in Sarawak. By examining these factors in this unique setting, the study deepens understanding of their correlation and offers practical strategies that may be applicable to similar institutions globally.

1.6.3 Strategic Planning for Sustainability

An essential factor contributing to the sustainability of institutions is resilience. Organisational resilience is influenced by employee job commitment. Employees committed to their organisations can establish sustainable work environments, fostering stability and adaptability amidst changing educational landscapes or economic conditions. This factor significantly impacts the long-term performance of the institution. An organisation having employees with a strong sense of job commitment can yield higher productivity, innovation, and improved employee well-being, which are integral components of sustainable organisational performance. This support aligns with the long-term goals and growth objectives of private universities.

1.6.4 Human Resource Management Strategies

The discoveries offer valuable insights for refining human resource management strategies within private universities. By understanding the internal organisational factors that influence academicians, HR departments can develop tailored policies that address staff needs and motivations, increasing commitment and satisfaction. This understanding

supports the design of initiatives such as mentorship programmes, professional development opportunities, or structural changes that strengthen job commitment.

1.7 Scope of the study

This study investigates the relationship between internal organisational factors, namely technological adoption, job autonomy, and interpersonal support (from supervisors and coworkers), and their influence on employee job commitment among academic staff in private universities in Sarawak, Malaysia. Employment status (permanent versus contract full-time) is examined as a moderating variable, recognising its potential to influence how organisational factors affect job commitment.

The focus on private universities is justified by their critical and expanding role within Malaysia's higher education landscape. Unlike university colleges or colleges, private universities operate larger campuses, offer programmes across undergraduate and postgraduate levels, confer their own degrees, and are actively engaged in research and innovation activities (Wan et al., 2015). These institutions also face unique operational pressures, including market-driven competition, staff recruitment challenges, and the need to maintain high academic performance. This study concentrates on three private universities in Sarawak that hold full university status: Swinburne University of Technology Sarawak, Curtin University Malaysia, and the University of Technology Sarawak. These universities were strategically selected to represent the southern, central, and northern regions of the state, ensuring regional diversity and relevance.

The target population comprises academic staff, who perform multifaceted roles that extend beyond teaching to include research, consultancy, publications, marketing, and administrative tasks (Ismail & Noor, 2016). Balancing these diverse responsibilities requires strong institutional support, role clarity, autonomy, and efficient organisational systems.

Given the demanding nature of academic roles, job commitment is not only essential for individual performance but also for institutional sustainability and educational quality (Ahmad et al., 2015; Zakaria et al., 2016).

Employment status was incorporated as a moderating variable based on both theoretical and practical considerations. Contract and permanent staff often differ in terms of access to resources, perceptions of job security, and institutional engagement, which can affect their level of commitment. While some studies suggest no significant differences between employment groups, others highlight notable disparities related to job insecurity and career development opportunities (De Cuyper & De Witte, 2007; Yousaf et al., 2015). By testing the moderating effect of employment status, this study seeks to clarify these inconsistencies and provide nuanced insights into how organisational factors influence job commitment across different employment categories.

A quantitative survey methodology was employed, with data analysed using SmartPLS. The population includes approximately 400 academic staff distributed across the three universities. Despite the global attention given to internal organisational factors such as technological adoption, job autonomy, and interpersonal relationships, limited empirical research has been conducted within the private higher education context of Sarawak. This study aims to address this gap and contribute to both academic knowledge and practical human resource strategies.

1.8 Summary

Chapter 1 outlines the importance of employee job commitment among academic staff in private universities in Sarawak, Malaysia. It identifies a gap in the literature on how internal organisational factors influence job commitments. This study focuses on the impact of technological adoption, job autonomy, and support from supervisors and coworkers. The research questions are designed to explore the relationships between these factors and job commitment.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

In most cases, internal organisational factors encompass various factors within a company or institution that shape its functioning, culture, and operations. These components include organisational structure, leadership styles, communication processes, decision-making procedures, company policies, work environment, and corporate culture. All these factors significantly influence an organisation's operations, interactions, and attainment of its goals, affecting both internal dynamics among its members and its position within the more significant industry. Few studies have been conducted to explore how internal organisational factors may affect job commitments. In this section, an extensive literature review will be carried out through research on technology adoption, job autonomy, supervisor and coworker support, and job commitment. The review will show the gaps in the literature on the topic and how the current study will help address them. At the same time, this section will analyse the theoretical framework of the study area and develop a hypothesis for the current study.

2.2 Broad Concepts

This study focuses on six key constructs: technology adoption, job autonomy, supervisor relationship, coworker relationship, job commitment and employment status. These constructs were selected due to their relevance in understanding the factors that influence academic staff's commitment to their institutions. Technology adoption and job autonomy represent internal job resources, while supervisor and coworker relationships reflect interpersonal support within the workplace. Job commitment serves as the primary

outcome of interest with employment status (permanent or contract full time status) examined as a moderating variable that may influence these relationships.

2.2.1 Technology Adoption

Doss (2006) characterises technology adoption as the "adopter" of a technology. Across the 22 studies, definitions of an adopter exhibit considerable variation. Chowdhury (2015) and Carr (2001) specifically delineate adoption as the phase involving selecting technology for use, while they define diffusion as the subsequent stage when the technology spreads and becomes commonly applied. Operationally, it will refer to the extent to which a university embraces and implements technological advancements and tools within its academic operations. It encompasses integrating new technologies into teaching methodologies, administrative processes, research endeavours, and overall communication using the technology in the selected private university.

The abrupt onset of the COVID-19 pandemic led to an immediate transition to remote learning for most higher-education students from spring 2020 onwards (Abilash and Mary, 2021). Educators embraced technologies facilitating greater interactivity and hybrid online and in-person activities to enhance virtual classroom engagement beyond video lectures. These tools have reshaped learning, teaching, and assessment methods, potentially leaving a lasting impact post-pandemic. This shift has attracted attention from investors, evidenced by record-breaking venture capital funding for tech start-ups in 2020 and 2021, alongside soaring market valuations for prominent players.

McKinsey (2021) conducted a study highlighting eight dimensions crucial for effective engagement with students in higher education. This article delves into a study focusing on learning technologies that support various aspects of these eight dimensions. The trend toward diverse and interactive learning approaches is expected to persist.

According to an industry expert, the pandemic accelerated the demand for innovative online learning. It prompted institutions to reconsider their teaching methods, emphasising synchronous and hybrid learning. As a result, numerous US colleges and universities are expanding their online and hybrid programmes through significant investments (Khan et al., 2023).

The pandemic prompted a surge in technological adoption across various organisations. E-learning systems have become so much more practical in life, according to the study of Gopal et al. (2021) during the COVID-19 pandemic in Malaysia. Another method of technology adoption that can be used to enhance IoT sustainability is adopting business intelligence (BI). The study conducted by Iskandar et al. (2021) was born in a higher education institution (HEI) in Malaysia that adopted BI in its day-to-day operation. HEI administrators utilise BI to manage vast amounts of data, translating it into valuable insights. This includes monitoring semester enrolment, financial budgeting, and evaluating the effectiveness of fundraising efforts (JISC, 2016). Moreover, faculties and departments leverage BI tools to enhance course offerings by analysing student performance, ensuring curriculum efficiency, and providing targeted support to failing students (JISC, 2016).

Globally, the evolution of Higher Education Institutions (HEIs) in Malaysia has influenced institutional decision-making in finance, human resources, and marketing (Iskandar et al., 2021). The adoption of IT, particularly in massive open online courses (Hudjik, 2011), has contributed to a broader understanding of internationalisation in higher education. As HEIs evolve, they have created a concern and emphasis on regulated education quality. The role of the Malaysia Qualification Agency (MQA) signifies increased responsibility for ensuring and accrediting the quality and performance of HEIs on a national level.

In today's contemporary world, institutions of higher learning are undergoing substantial transformations due to constantly evolving environmental dynamics, such as financial sustainability, resource capabilities, political interventions, and adaptation to changing environments and governmental policies. Surviving in such an environment necessitates strategies that prioritise their stakeholders (students, parents, and industry), aiming to confront emerging environmental challenges that, in turn, present managerial hurdles (Laszlo, 2020).

Enhancing engagement and accessibility in education involves leveraging interactive tools such as smart boards, virtual reality (VR), and augmented reality (AR), which make classes more engaging and interactive. Algerafi et al. (2023) suggest that augmented reality and virtual reality are set to revolutionise education by providing immersive and interactive learning experiences. Additionally, online platforms like learning management systems (LMS), such as Moodle or Blackboard, improve the organisation of course materials, provide easy access to resources, and streamline communication between students and teachers, as affirmed by Murillo et al. (2023). Utilising interactive tools like Moodle can positively enhance student motivation. The flexibility of online classes and hybrid learning models also allows educators to reach a broader audience, including working professionals and international students, thereby increasing the impact and scope of their teaching, as highlighted in the study by Holmes et al. (2018).

From the perspective of research and publication, as the technology is adopted, it will facilitate efficiency and collaboration in research, which are greatly enhanced using various tools and platforms. Software for data analysis, such as SPSS and NVivo, and reference management tools, like EndNote and Mendeley, streamline the research process. Collaborative platforms like Google Scholar and ResearchGate facilitate global

collaboration with peers and increase the visibility of research work. Additionally, the dissemination and impact of research are amplified through digital repositories, institutional repositories and open-access journals, which provide broader dissemination of research findings. Metrics and analytics tools such as Altimetric and Google Analytics further help track the impact and reach of publications. Ebrahim (2016) emphasises that scientific tools enable researchers to collect, organise, analyse, visualise, and disseminate their research outputs. Ebrahim (2017) underscores how data analysis software, such as SPSS and NVivo, streamlines the research process and enhances the visibility of research work.

From the perspective of consultancy tasks, academicians can provide consultancy services to a global clientele without geographical limitations by using video conferencing tools like Zoom or Microsoft Teams (Pilafidis, 2022). These online platforms are believed to effectively accommodate the scientific consultation process for graduate students working on academic writing, aiming to offer alternative solutions to the challenges faced during the pandemic and to guide university principals in forming future policies for online academic writing consultation (Yundra, 2020).

Another important task for academics in a private university is marketing activity. Therefore, social media is one of the important tools that help in marketing universities. For instance, a significant benefit of social media is the opportunity to connect with individuals and content beyond immediate circles (Dauenhauer, 2020). Immediate connections include journals, universities, research centres, editors, professional organisations and students/alums, extending into their networks, enabling content sharing and reposting. This broadens exposure to new individuals, ideas, papers, and opportunities while reaching previously untapped audiences. Integrating social media into daily academic activities connects researchers with a broader network, diversifies knowledge sources, and extends

influence, especially when best practices in online communication are followed. Social media also enhances the impact of traditional communication methods, like academic conferences. The study by Kelly et al. (2012) suggests that personal use of social media can increase downloads by improving Search Engine Optimisation (SEO) rankings through inbound links from highly ranked websites. A survey of social media use across Russell Group universities shows the popularity of these platforms. It proposes that encouraging social media use among researchers can increase access to institutional research publications at minimal cost, enhancing SEO rankings and download numbers.

Technology adoption is also helpful in the administrative tasks of academicians. Khand (2020) underscores that Enterprise Resource Planning (ERP) systems significantly enhance academic processes within Pakistani universities by integrating various administrative processes. This integration supports improvements in managing academic records, financials, and human resources. Additionally, adopting cloud-based solutions facilitates streamlined data management, while business intelligence tools enable data-driven decision-making, collectively enhancing overall institutional management.

According to the study by Iskandar et al. (2021) on business intelligence (BI), the higher education sector in Malaysia has undergone substantial reforms focused on enhancing educational standards and attracting international students (Malaysia Ministry of Education (MoE), 2015). These reforms facilitated the influx of international students into Malaysia's HEIs. It can help to understand the trend. For instance, in 2025, according to available statistics from 2015, 74,748 international students from over 150 countries were enrolled in Malaysian HEIs. A total of 48,343 students were in private HEIs, while 26,405 were in public HEIs. Despite the growing enrolment of international students from diverse nations

in Malaysian HEIs, adopting BI remains crucial for maximising the utilisation of student data and optimising HEI operations.

Secondly, Malaysian organisations in the Asia Pacific region. For instance, Malaysia was forecasted to be the second-largest business intelligence market in ASEAN, after Singapore, reaching a value of USD 30.4 million by 2017. Moreover, demand for BI in the Asia Pacific region was anticipated to drive revenue growth by 7.4 per cent, reaching approximately USD 1.4 billion in 2014 and surpassing USD 1.6 billion in 2017. Consequently, within the Malaysian context, the potential for BI appears promising, emphasising the significance of BI adoption research in the HEI setting. HEIs are pivotal in producing a skilled workforce across all countries (Ong, 2016). Typically intricate, these institutions rely on extensive data sources spanning departmental boundaries to achieve academic excellence (Rahmat et al., 2016; Wong, 2017; Wong et al., 2018).

The BI industry has developed tools to support the advancement of HEIs' objectives. BI has evolved into a pivotal component that facilitates organisational decision-making. The corporate adoption of BI is anticipated to aid institutions in gaining competitive advantages and improving organisational performance by leveraging operational data to drive strategic decision-making.

As technology adoption is considered a resource, several actions must be considered. For instance, organisations need to motivate employees by offering training and skill development programmes, enabling them to swiftly acquire the necessary competencies and knowledge for advanced technology. Some scholars have noted that integrating advanced technology may lead to technostress among organisational members (Baskaran et al., 2020). Technostress arises when employees possess insufficient skills and knowledge to execute tasks, significantly affecting job performance and productivity and inducing role stress.

Previous research indicates that the causes of technostress directly impact an organisation's success (Im & Han, 2013).

Additionally, there exists some divergence in employee workload following the implementation of new technology. While most studies suggest that adopting advanced technology can alleviate workload by enabling smoother task execution, some researchers argue that technology might compel individuals to undertake more tasks in a shorter time, driven by demands from their superiors for additional essential data. Consequently, these factors contribute to heightened job insecurity, wherein individuals become apprehensive about technology replacing their roles. The World Economic Forum predicts that over a million jobs will be impacted by advanced technology within the next 5 to 10 years. Research corroborates this, with nearly half (49%) of respondents expressing concerns about job insecurity due to the emergence of new technology.

2.2.2 Job Autonomy

Job autonomy was initially introduced within the job characteristic model by Hackman and Oldham (1976), which described organisations as granting individuals the capacity to schedule work and determine the extent of freedom, independence, and self-determination in work procedures. Breugh (1985) further defined job autonomy as the extent to which employees possess control and authority to decide their work methods, arrangements, and standards (Zhou, 2020). Operationally, it will denote the academic staff's degree of independence and control over their work-related decisions and activities within the selected private university. It involves the freedom to choose teaching methodologies, research directions, work scheduling/time, and place of work.

The concept of job autonomy features prominently in central theories of work and organisational psychology (Clausen et al., 2022; Hackman & Oldham, 1976; Karasek, 1979),

and job autonomy is an essential determinant of worker well-being. The study by Zhu et al. (2021) found several factors that influence how committed people are to their careers. These include elements within the organisation, the social environment, job characteristics, personal qualities, and control over one's job, known as job autonomy. Job autonomy involves three main parts: first, having authority over how the employee does their work; second, being able to decide their work schedule; and third, having the freedom to choose where employees work (Fida & Najam, 2019). This freedom allows employees, like educators, to try different ways of doing things and develop new and creative ideas. It also gives them more freedom and power, making job autonomy essential in designing jobs to encourage organisational innovation (Swaroop & Dixit, 2018).

Previous studies highlight that autonomy significantly affects employee happiness. Autonomy and flexibility are crucial for academics to enter and stay in this field (Bellamy et al., 2003). Other studies also found a strong connection between job satisfaction and aspects like work and opportunities for progress (Mendis, 2023; Top et al., 2012), emphasising the importance of personal growth in feeling satisfied at work.

Through the JD-R model, the flexibility given to employees acts as a resource. Individuals become committed when their needs and autonomy are fulfilled, leading to favourable outcomes and enhanced job performance (Baker, 2006). Granting autonomy and freedom in daily tasks reduces constraints and excessive control, empowering individuals with a sense of choice in their work (Hackman & Oldham, 1976). According to the JD-R model, employees tend to show commitment to their careers when they perceive job autonomy allows them to organise work schedules and adapt methods to achieve their career aspirations (Berg et al., 2010; Demerouti, 2014; Hirschi et al., 2018). Job autonomy grants individuals greater control over their work environment, fostering positive job experiences

that cultivate lasting organisational relationships, which lead to career commitment (Dubbelt et al., 2019; Goulet & Singh, 2002). Therefore, examining the influence of workplace aspects, such as job autonomy, is crucial in encouraging individuals to commit to their careers in highly competitive work settings (Afsar et al., 2019).

2.2.3 Supervisor Relationship

According to Guchait et al. (2014), perceived supervisor support includes coaching, guiding each member with individual attention, helping subordinates fulfil their job responsibilities, and evaluating their performance. Supervisor support plays a pivotal role in enhancing employee job commitment. Kidd (2001) shows that factors such as trust, authority, feedback, and goal-setting from supervisors positively correlate with organisational commitment. Mohamed (2016) emphasised the significance of supervisor support in enhancing employees' affective commitment. Mills (2014) underscored the influence of supervisors who support family responsibilities, noting their impact on employee self-efficacy and affective commitment, subsequently influencing overall performance. It is also highlighted by Karatepe (2014). The supervisor serves as the primary organisational representative with whom employees regularly interact. Consequently, when the supervisor fails to provide support for employees' needs or when employees perceive a lack of support, it logically follows that there may be a decline in their commitment to the organisation. This decline could be attributed to their incapacity or reluctance to perform optimally under the guidance of an unsupportive organisational representative. Conversely, it is also logically plausible that employees would derive satisfaction from working for an organisation that acknowledges and supports its workforce, leading them to develop a high affective commitment to the organisation (Mills, Fleck & Kozikowski, 2013). Collectively,

these studies affirm the substantial influence of supervisor support on employee job commitment.

Based on a study by Malkoc (2022), which was conducted in Turkey in the sports industry, the shift in management mentality and behaviours in organisations driven by global transformation has resulted in a greater emphasis on positive attitudes rather than negative emotions and behaviours. The survey was done among instructors employed in sports facilities. The study's sample comprises 254 trainers, consisting of 88 males and 166 females, ranging in age from 22 to 63. These instructors are employed in different sports venues. Based on the analytical findings, it was determined that supervisor assistance significantly influences employee job commitment. The research findings indicated a negative correlation between the trainers' level of education and the perceived supervisor assistance. Nevertheless, research has revealed slightly different outcomes based on gender. Female trainers derive more significant advantages from supervisor support in the workplace than their male counterparts and exhibit higher dedication towards their professional responsibilities.

Emhan's (2012) study, centred on a comparative study exploring the associations among managerial support, job satisfaction, and organisational commitment in the non-profit, for-profit, and public sectors, was founded on a survey conducted with a cohort of 750 employees in educational and health institutions across three sectors in Turkey. Based on distributed surveys, 614 responses met the criteria for validity and were utilised as the dataset for the research. The subsequent data analysis found positive correlations between managerial support and job satisfaction, as well as between these variables and two components of organisational commitment. Notably, no such correlation was observed

concerning a third component of organisational commitment. Furthermore, these identified relationships exhibited variations across the three sectors under this study.

This study shows that non-profit employees exhibit lengthier working hours than their counterparts in the other two sectors, and their salaries are lower than those in the public sector (with for-profit employees refraining from disclosing their salaries). Despite the extended working hours and reduced remuneration, employees in non-profit organisations manifest higher levels of job satisfaction and organisational commitment than individuals in the other two sectors. This aligns with prior research suggesting that intrinsic motivations drive individuals working in nonprofits. In contrast, those in for-profit organisations may be motivated by factors such as higher salaries or career advancements (Mirvis & Hackett, 1983). The commitment shown by the employee mainly depends on the type of organisation.

The study also highlights that managerial support and job satisfaction are most pronounced in non-profit organisations but notably lower in public organisations. Affective and normative commitment levels are significantly elevated in non-profit and for-profit organisations compared to public organisations. However, the observed differences in affective and normative commitment levels between non-profit and for-profit organisations are not statistically significant. Conversely, continuance commitment is highest in public organisations and lowest in for-profit entities.

This trend aligns with the characteristic attributes of non-profit employees, often exemplifying strong support for their organisational missions, a characteristic indicative of both affective and normative commitment (Schaubrock & Ganster, 1991). It also corresponds with the perceived caring nature of non-profit organisations towards their employees. In this study, some academicians and doctors within the non-profit sector are among the sample. They received physical and moral support from their organisations, as

well as from social and professional networks and support groups during their graduate education. This heightened level of managerial support is associated with increased normative commitment, with employees feeling both obligated to and loyal towards their respective employment organisations.

Trust towards immediate supervisors is important to enhance clear communication that conveys organisational policies and individual job-related information and is poised to bolster trust in supervisors (Tzafrir et al., 2004; Cho, 2011). This communication aspect, among the three elements of trustworthiness, contributes to supervisors' perceived ability and benevolence. Clear communication can signal that supervisors are accountable for their duties and genuinely care for their subordinates.

Therefore, attitudinal commitment can be shown in two critical outcomes: commitment and satisfaction. Commitment and satisfaction collectively represent the overall evaluation of employees based on what they have received. Organisational commitment pertains explicitly to the future-oriented aspect of motivation, where committed employees are inclined to exert extra effort for their organisations that exceeds their job descriptions (Wright, 2001; Cho & Park, 2011). Commitment is highly regarded as an indicator of a high-quality workforce, and most previous studies explore personal traits, leadership practices, and organisational traits (e.g., Smeenk et al., 2006; Cho, 2011). Additionally, various outcomes are associated with commitment. For instance, as the employees become committed, it will lead to enhanced employee job performance, intention to leave, and turnover (Cho, 2011; Yao & Wang, 2006; Wasti, 2003).

2.2.4 Coworker Relationship

Co-worker support entails co-workers aiding each other in their responsibilities by sharing their knowledge and skills and offering encouragement and assistance (Zhou &

George, 2001). These relationships foster and sustain employee trust and positive sentiments (Ahmed, 2015). Operationally, it will focus on the factor encompassing the quality and nature of interactions among academic staff within the selected private university. It includes aspects such as the strength of collaboration, trust, communication channels, support networks among colleagues, and the overall social dynamics within the academic community. The findings indicate that employee trust impacts normative commitment and peer support. However, normative commitment specifically affects peer support. Peer support is essential to create a sense of trust. Tamer (2014) anchored peer support as one form of social support. Wallace (2010) defined social support as a coping resource where one person assists another, improving their well-being. Carlson and Perrew (2019) describe social support as an interpersonal exchange involving emotional care, practical assistance, information, or assessment. Therefore, social support encompasses the emotional, practical, and structural aid individuals or organisations provide.

Supportive peer relationships at work involve strong connections based on intimacy, trust, sharing thoughts and feelings, and the belief that one can seek help from another. According to Bacharach, Bamberger, and McKinsey (2018), coworkers employ empathetic skills, such as attentive listening and action-oriented skills like providing advice or information, to create this kind of environment. Based on Padsako et al., coworker support within organisations is thought to yield various benefits. Coworkers' support impacts individual, group, and organisational performance. This assertion is supported by highlighting peer support's significant and positive influence on organisational performance outcomes.

The strength of collaboration focuses on trust among colleagues and has stemmed from significant shifts in work environments, notably the rise of work teams in the early

1990s (Ingraham & Jones, 1999). In a way, trust among colleagues is one of the essential aspects. This shift necessitated interdependence and collaboration to achieve organisational objectives. As the employee has trust among peers, it will amplify problem-solving capabilities by promoting information exchange within groups (Zand, 1972) and aligning individual drive with collective endeavours (Dirks, 1999). Moreover, group trust boosts supportive interpersonal behaviours (Choi, 2006; McAllister, 1995). Consequently, fostering trust enhances the capacity of group members to collaborate, ultimately elevating team performance (Cho and Park, 2011). Thus, co-workers' trust is anticipated to correlate positively with commitment and satisfaction.

2.2.5 Job Commitment

Researchers have varying interpretations of employee commitment terms. Akanbi and Itiola (2013) define it as the extent to which employees identify with their organisation and are dedicated to making substantial contributions to accomplish organisational goals. On the other hand, Igbeneghu and Popoola (2011) characterise organisational commitment as the emotional connection employees have with the organisation, highlighting its three components: affective, normative, and continuance commitment (Meyer & Allen, 1984; Opeke, Adebara, 2020). In Shepherd and Mathews's study (2000), the researcher divided commitment into four facets: attitudinal dedication, normative commitment, behavioural commitment, and calculative commitment. Among these, the attitudinal aspect has gained most prominence in assessing an individual's commitment to their organisation (Cho, 2011). This is the focal point of the study. It is the degree of an individual's identification with and engagement in their organisation.

Based on the study by Mulyana and Izzati (2022), academicians perform their best when they have job security. The emotional connection to the profession becomes crucial

for someone to continue choosing academician as a career. Career commitment reflects an individual's dedication to their goals and is a vital aspect of their life (Vandenberghe & Ok, 2013). It is linked to various parts of employee development, indicating that those committed to their careers tend to show more dedication at work and yield positive outcomes for their organisation to sustain (Atmaca, 2022). An educator's career commitment reflects their belief in educating students and aiding their cognitive, emotional, and behavioural growth (Butucha, 2013; Atmaca, 2022). To achieve high levels of career commitment, academicians must value their profession and aspire to stay in teaching. This commitment allows them to dedicate themselves to teaching, enhancing education, and growing (Picard & Kutsyuruba, 2017; Atmaca, 2022).

The literature identifies two ways to define organisational commitment. From the first perspective, an employee intends to remain employed within the organisation (Meyer, 1997). The other view defines it as an attitude resembling a solid connection between the individual and the organisation, reflected in the employee's psychological identification and involvement, as highlighted by Mowday et al. (1979). Meyer and Allen (1997) initially conceptualised organisational commitment as "the psychological connection between an employee and their organisation, reducing the likelihood of employee turnover." Subsequently, numerous researchers have segmented organisational commitment into three primary categories: affective, normative, and continuance commitment (Meyer & Allen, 1997; Laschinger et al., 2000; Fields, 2002; Manion, 2004). Affective commitment is the "employee's linking for an organisation and related to involvement with the organisation" (Fields, 2002, p. 43). For normative commitment, it designates the feeling of obligation of needing to continue employment, and continuance commitment is created by high costs associated with leaving the organisation and creates a sense of needing to continue

employment (Van de Hooff & de Ridder, 2004, p. 119). The current research utilised Meyer and Allen's three-factor model and tool for organisational commitment to measure employee commitment levels.

In the study of Tran et al. (2018), highly committed employees will have less intention to withdraw behaviours like lateness, absenteeism, and turnover intention and are more open to embracing changes. Apart from that, it significantly contributes towards job performance. The majority have highlighted the positive effect of employee commitment on performance. This is because it illustrates how committed individuals dedicate their efforts to achieving organisational objectives and delivering exceptional performance (Hunjra et al., 2010). Notably, Khan et al. (2010) studied Pakistan's oil and gas industry and concluded that higher employee commitment predicted enhanced performance. The survey by Bakiev (2013) supported it, and Mansour et al. (2014) demonstrated the positive influence of organisational commitment on perceived performance among police officers and human resource management (HRM) practices in Kyrgyzstan in the Tunisian financial services industry.

2.2.6 Employment Status

Employment status is a critical organisational variable that significantly shapes employees' work attitudes, behaviours, and levels of commitment. In this study, employment status is conceptualised as a moderating variable, categorised into two principal groups: permanent and contract (full-time) academic staff. This distinction is particularly salient in private universities, where employment types influence access to resources, institutional engagement, career development opportunities, and perceptions of job security.

Permanent employment refers to roles involving ongoing contractual agreements and long-term institutional affiliation. Permanent academic staff often benefit from greater job

stability, access to research and professional development opportunities, and clearer career advancement pathways (Lee & Chen, 2013; Yousaf et al., 2015). These advantages tend to foster a stronger sense of organisational identification and psychological ownership, both of which are positively associated with higher levels of affective and normative commitment (Meyer & Allen, 1991; Chattopadhyay & Ghosh, 2012). Permanent staff are also more likely to be entrusted with leadership roles and to participate in institutional governance, further enhancing their engagement and long-term investment in the university's outcomes (Kim & Cho, 2020).

In contrast, in this study contract (full-time) employment involves hiring individuals for a specified duration, typically ranging from one to three years, with contract renewals contingent upon performance, funding availability, or institutional needs (Bassanini & Cingano, 2017; Ofosuhene, 2020). While contract academic staff typically perform similar responsibilities to permanent staff, including teaching, research, supervision, and administrative duties, they often encounter greater job insecurity and may have limited access to resources, professional development, and institutional decision-making processes (Malik, 2017; Altbach, 2015). The finite nature of contract employment can reduce perceptions of long-term career prospects, which may negatively influence organisational commitment unless mitigated by supportive HR policies (De Cuyper & De Witte, 2006; Wilkin, 2013; Bos-Nehles & Meijerink, 2018).

Drawing on Social Exchange Theory (SET) (Blau, 1964), employment status influences how employees perceive their social and economic exchange relationships with the organisation. Permanent employees, who experience more stable and enduring employment relationships, are likely to perceive higher organisational support, stronger reciprocity expectations, and consequently, greater commitment levels (Cropanzano et al.,

2017; Jafri, 2022). Conversely, contract employees, whose tenure is finite and often transactional, may perceive lower relational investment from the organisation and reciprocate with comparatively lower levels of commitment.

The relevance of employment status as a moderator is well-supported in the literature. Empirical studies indicate that employment type influences how employees respond to organisational resources and support systems. For example, Gupta et al. (2022) found that employment type moderated the relationship between organisational support and employee engagement, with stronger effects observed among permanent employees. Similarly, Asante and Affum-Osei (2019) demonstrated that psychological contract fulfilment had differential impacts on organisational commitment across contract and permanent staff. Sharma and Dhar (2023) also reported that leadership support had a more pronounced effect on employee loyalty among permanent employees compared to contract staff.

In the context of private universities in Sarawak, Malaysia, where an increasing proportion of academic staff hold contract-based appointments, understanding these dynamics is critical. By incorporating employment status as a moderating variable, this study aims to assess whether the effects of internal organisational factors (technological adoption, job autonomy, supervisor support, and coworker support) on employee job commitment differ based on employment type.

Specifically, it is hypothesised that the relationship between technological adoption and job commitment may be stronger among permanent employees, as they are more likely to perceive technological investments as long-term organisational resources that enhance their work effectiveness and institutional engagement. Similarly, job autonomy is expected to exert a more significant positive effect on commitment for permanent staff, who tend to

value autonomy as a pathway to career development and psychological ownership. In contrast, supervisor support may exhibit varying impacts across employment types, with contract employees potentially prioritising tangible outcomes, such as job security and career progression over relational support. Coworker support is also anticipated to differ in its influence, as permanent staff are more inclined to engage in long-term collegial relationships that foster stronger organisational commitment compared to their contract counterparts.

Testing employment status as a moderator ensures that the relationships between internal organisational factors and employee job commitments are not generalised across heterogeneous employment groups. Rather, the moderation analysis provides a rigorous evaluation of potential differential effects, enhancing the explanatory power of the research model. Such insights are essential for developing targeted, equitable human resource strategies that address the distinct motivations and challenges faced by both permanent and contract academic staff. A summary of key studies highlighting the differential effects of employment status on employee job commitment is presented in Table 2.1.

Table 2.1: Summary of Past Studies on Employment Status and Employee Job

Commitment

Study	Context	Employment Status Categories	vs.	Key Findings
De Cuyper & De Witte (2006); Wilkin (2013)	Belgium; Meta-analysis	Permanent Contract full-time	vs.	Contract employees reported lower job security, organisational support and affective commitment.
Yousaf et al. (2015); Kim & Cho (2020)	Higher education – Pakistan; South Korea	Permanent Contract full-time	vs.	Permanent academics showed stronger organisational identification, engagement and commitment, often due to stability and access to career development.
Bassanini & Cingano (2017); Asante & Affum-Osei (2019)	OECD; Ghana	Permanent Contract full-time	vs.	Employment type influenced motivation and how employees reacted to psychological contract fulfilment; permanent employees responded more positively.
Gupta et al. (2022); Sharma & Dhar (2023)	India – Education and IT sectors	Permanent Contract full-time	vs.	Organisational and leadership support had stronger effects on permanent staff's engagement and loyalty.

Table 2.2 summarises the definitions and relevance of the key constructs examined in this study. It presents the principal authors and definitions for each variable, supported by empirical findings and contextualised to the study's focus on employee job commitment among academic staff in private universities. This table ensures conceptual clarity and demonstrates the theoretical and practical importance of the selected variables.

Table 2.2: Key Constructs, Authors, Definitions and Relevance to Employee

Commitment

Variable	Author(s)	Definition/Focus	Key Findings	Relevance to Job Commitment
Technology Adoption	Doss (2006); Chowdhury (2015); Carr (2001) Gopal et al. (2021)	Selection, adoption and integration of technology. E-learning in COVID-19.	Enhances teaching, research and efficiency. Shift to online teaching increased tech reliance.	Increases effectiveness, autonomy and engagement; poor adoption may increase stress. Impacted faculty stress and engagement.
Job Autonomy	Hackman & Oldham (1976); Breugh (1985)	Freedom in work methods and decision-making	Supports creativity, ownership and satisfaction	Autonomy drives career commitment and reduces stress.
Supervisor Support	Guchait et al. (2014); Kidd (2001)	Coaching, guidance, feedback	Builds trust, fairness and loyalty	Increases affective and normative commitment.
Coworker Support	Zhou & George (2001); Ahmed (2015)	Peer assistance, knowledge sharing	Enhances collaboration and reduces stress	Improves satisfaction, team cohesion and commitment.
Job Commitment	Meyer & Allen (1997); Mowday et al. (1979)	Affective, normative, continuance commitment, attachment, dedication and satisfaction	Predicts higher performance and lower turnover	Key to retention and organizational success.
Employment Status	Meyer & Allen (1991); De Cuyper & De Witte (2006)	Permanent vs. contract full-time employment	Shapes resource access and job security	Permanent staff show stronger commitment; contract staff may need tailored support.

2.3 Underpinning Theories

The study proposes a theoretical framework that seeks to compromise the factors that impact employee job commitment. These three internal factors within an organisation will

be focused on technology adoption, job autonomy, supervisor and coworker support, and their impact on employee job commitment among academic staff in private universities in Sarawak, Malaysia. The following provides the justification for the proposed theoretical framework.

2.3.1 Resource-based view (RBV) theory

The resource-based view (RBV) theory emerged in the late 1980s and early 1990s as a response to limitations found in other strategic management theories, notably Michael Porter's Five Forces framework, which centred on industry-based perspectives. Pioneers like Jay Barney, Birger Wernerfelt, and others crafted RBV by shifting attention away from external market dynamics to internal resources within organisations. They argued that a firm's distinctive resources and capabilities, embracing tangible and intangible assets, skills, knowledge, and organisational practices, were the primary drivers of competitive advantage.

Barney's contributions in the early 1990s significantly shaped RBV's evolution. The scholar has introduced the "VRIN" criteria (Value, Rarity, Inimitability, and Non-substitutability) to evaluate a resource's strategic potential. According to Barney, for a resource to yield a lasting competitive advantage, it must possess these attributes. RBV gained traction by offering a new outlook on strategy formation. Rather than fixating solely on external factors, RBV prompted companies to introspect, highlighting the strategic significance of harnessing and nurturing their distinct resources and capabilities for enduring success. RBV concentrates on how a company's distinct resources and abilities contribute to its competitive edge.

Based on Dewis and Dewwit (2021), the organisation's resources (capital, labour, and resources) must be ready for the digital revolution to be sustainable in the market. The Resource-Based View (RBV), which examines how a company's distinct resources and

capabilities impact its competitive edge, could be effectively utilised to study the correlation between internal organisational factors and academic staff's job commitment in private universities in Sarawak, Malaysia. Four internal organisational factors must be studied: technology adoption, job autonomy, and supervisor and coworker support. Integrating this theory can help identify how these specific internal factors contribute to the university's overall resource pool.

This theory suggests that internal resources will be subject to gaining a sustainable competitive advantage. This theory will help understand how technology adoption, job autonomy, and support from supervisors and coworkers impact employee job commitment. It can contribute to the university's competitive advantage in attracting and retaining talent. Based on this theory, there are several dimensions called VRIN frameworks. The VRIN framework within RBV evaluates if resources (internal organisational factors) offer a lasting competitive edge. Utilising this framework can ascertain how valuable, rare, inimitable, and non-substitutable these internal organisational factors are in cultivating employee job commitment among academicians.

There are a few issues with identifying its usefulness. Moreover, sometimes, there is ongoing debate around the dynamic nature of resources and their long-term sustainability. For instance, in this study, competitive advantage can be debated if job commitment is lower due to internal organisational factors. This shows here that the internal organisational factor might not be a helpful resource to the organisation. RBV could intersect with theories such as the Job Demands-Resources (JD-R) Model.

In the context of RBV, technological resources can be seen as valuable, especially if they provide a competitive advantage or enhance employee productivity. There are several reasons technological adoptions have become a valuable resource to employees. ICT is one

of the most critical changes to sustain education, particularly as the education industry has changed its landscape during the pandemic. During that period, all the traditional face-to-face methods of conducting face-to-face classes were online. Now, it has become a challenge to teach interesting online courses. Technology adoption becomes an essential aspect of conducting and interacting with students. Apart from that, the emergence of the pandemic scenario required the workforce to be accommodated with ICT skill competency (Dewis Dewitt (2021). A few dimensions have become a concern whenever technology adoption is integrated into the workplace, for instance, the level of technological sophistication, accessibility, and the degree to which it is integrated into daily tasks within the university. This is because whenever the technology becomes too advanced, the organisation should understand that the current workforce has the knowledge, skills, and abilities (KSA) to use the technology. Next is accessibility, which is accessibility for everyone or specific for a certain level. Finally, to what extent can the technology be integrated with the working process in the institution? These are some of the considerations before adopting technology in an organisation.

Moreover, upholding a company's technological competitiveness is a responsibility shared among all management team members (Smith, 1996). According to scholars, understanding information technologies requires considering their interactions with individuals and organisations from diverse perspectives.

The technology, organisation, and environment (TOE) framework was developed in 1990 (Tornatzky & Fleischer, 1990). It identifies three aspects of an enterprise's context that influence the process of adopting and implementing technological innovation: technological context, organisational context, and environmental context, as shown in Figure 2.2. The technological context describes the internal and external technologies relevant to the

organisation. This includes current practices, internal equipment (Starbuck, 1976), and available technologies external to the firm (Thompson, 1967; Khandwalla, 1970; Hage, 1980). Organisational context refers to descriptive measures about the organisation, such as scope, size, and managerial structure. Environmental context is the arena in which a firm conducts its business. It is concerned with industry, competitors, and dealings with the government (Tornatzky & Fleischer, 1990). The TOE framework, as initially presented and later adapted in IT adoption studies, provides a practical analytical framework that can be used to study the adoption and assimilation of different types of IT innovation.

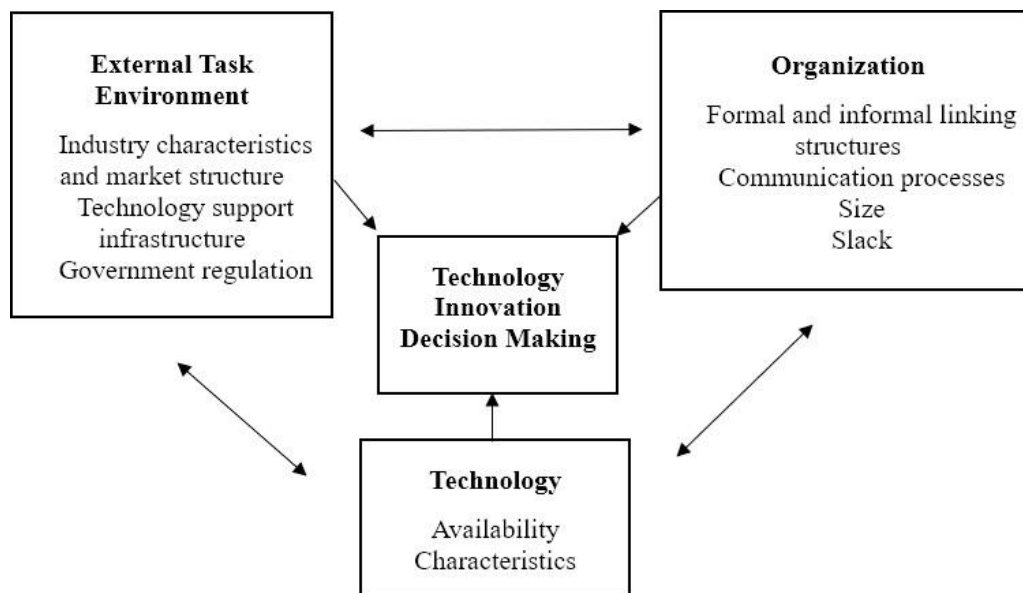


Figure 2. 1: Technology, organisation and environment framework

Note: Tornatzky and Fleischer (1990)

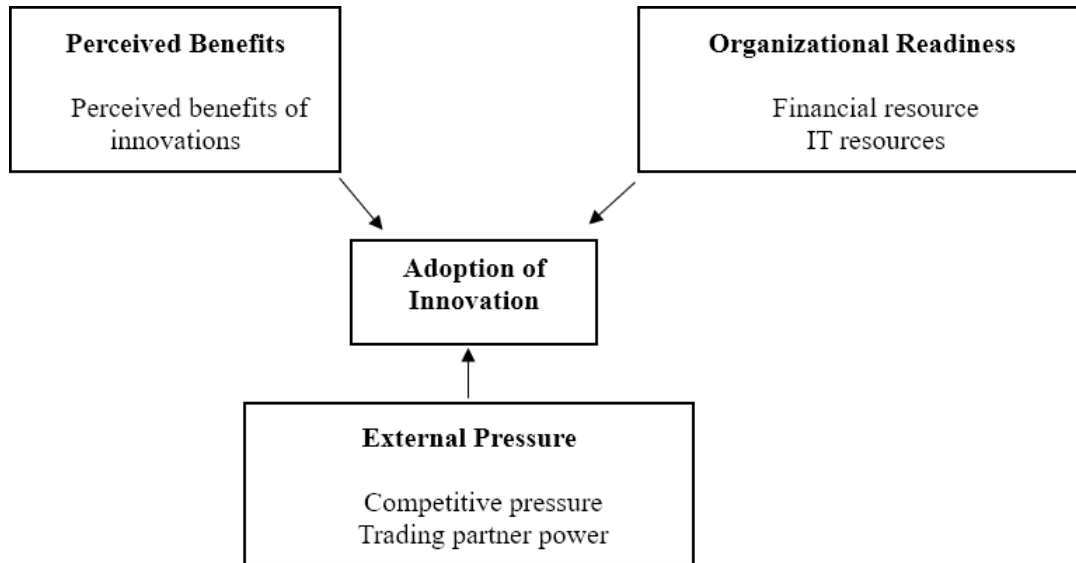


Figure 2. 2: Adopting an inter-organizational system (IOS)

Note: Baker (2011)

Their framework is well suited to explain the adoption of an Inter-Organisational Systems (IOS). It is based on perceived benefits, organisational readiness, and external pressure. Perceived benefits differ from the TOE framework, whereas organisational readiness combines the technology and organisation context of the TOE framework. Hence, IT resources are similar to the technology context, and financial resources are similar to the organisational context. The external pressure in the model is adding the trading partners to the external task environmental context of the TOE framework as a critical role of IOS adoptions.

The adoption of new technology can sometimes lead to challenging processes. This is because the employees may require time to adapt to the technology. Occasionally, the organisation's adoption of technology may result in the technology itself interfering with the boundaries of the employees' work and life, as it allows them to be connected at any time. Due to that, it may be examined whether technology is a resource that aligns with the organisation's strategic objectives. Technological resources align with RBV when they

possess value and are potentially rare or challenging to duplicate, enhancing the university's competitive advantage.

The factor of job autonomy represents non-tangible resources that influence how people employ their abilities and choices. This flexibility might potentially influence their effectiveness and dedication. The extent of decision-making power, the flexibility to carry out tasks, and the level of control individuals have over their work might be crucial when job autonomy is being studied. The study by Stan De Spiegelaere (2015) conducted research across 927 employees in various industries to explore the factor of autonomy. It has been stated that job autonomy deals with how work is done, scheduling, timing, and location.

Autonomy is classified as a resource that brings a sense of flexibility to the employee; however, it may trigger several problems, such as balancing autonomy with accountability. Apart from that, it is to address the potential conflicts arising from autonomy; for instance, based on the study by Raharjo et al. (2018), job autonomy may not always be good, as it can lead to a high workload because it extends the decision-making power of the employees. This situation may create a worse scenario if the employee given high autonomy does not have the appropriate KSA to conduct the task. The effective management of job autonomy can be seen as an intangible resource, and it should be managed wisely to reap its competitive advantages for the organisation.

Relationships between employees in RBV may be seen as a type of social capital, emphasising the significance of connections and networks within the organisation. Several dimensions of supervisor and coworker support relations in the workplace emphasise trust, communication, collaboration, and the quality of relationships among employees. The main challenges in supervisor and coworker support relations may include fostering positive relationships in a diverse academic environment, managing conflicts, and ensuring equitable

access to social networks. The change may influence this in the composition of the generation entering the workforce, which may be due to differences in personality traits. These things are experienced by employees in their personal lives, leading to distressful situations and varying expectations in how colleagues interact within the workplace. This might distract their relationship at work if the quality of the relationship is low. Supervisor and coworker support is a valuable resource for enhancing the sense of commitment among employees. Strong support can be seen as a valuable and potentially rare resource that contributes to the private university's overall capabilities and competitive advantage.

2.3.2 Social Exchange Theory

The collaborative efforts of George C. Homans and Peter M. Blau in the 1950s and 1960s laid the foundation for the formulation of Social Exchange Theory (SET). Homans' seminal work, "Social Behavior: Its Elementary Forms," published in 1961, is widely recognised as a pivotal contribution to establishing this theory. SET posits that commitment, loyalty, and trust are outcomes that emerge over time through the development of relationships (Cropanzano & Mitchell, 2005). This pillar of the theory emphasises the importance of parties adhering to specific regulations, such as exchange norms. As individuals engage in social interactions, they navigate a complex web of give-and-take, evaluating the costs and benefits of their actions. The reciprocity inherent in these exchanges shapes the dynamics of relationships, influencing the emergence of commitment and trust. Social Exchange Theory continues to influence the understanding of the intricacies of social relationships and interactions.

The foundational work of George C. Homans and Peter M. Blau in the mid-20th century, Social Exchange Theory (SET), has evolved into a comprehensive conceptual framework for understanding human interactions. As Hsieh (2019) outlined, SET views

social interactions as a series of transactions characterised by the exchange of rewards. The theory emphasises the pivotal elements of trust, commitment, and interdependence in shaping social behaviour, echoing the sentiments expressed by Varey (2015). SET has found applications in diverse domains, including marketing, expanding its reach beyond its origins.

Moreover, as articulated by Cropanzano and Mitchell (2005), the theory delves into the nuanced dynamics of repeated exchanges and their profound impact on social structures. Through ongoing interactions, individuals navigate the intricate landscape of give-and-take, influencing the development of commitment and trust over time. This evolution of SET has also prompted researchers to explore the role of emotions within these exchanges, recognising the affective dimension that plays a crucial role in shaping the outcomes of social transactions. Social Exchange Theory remains a versatile and enduring framework, shedding light on the complexities inherent in social relationships and interactions across various fields.

In the context of Social Exchange Theory (SET), exploring the impact of internal organisational elements on the social relationships between academic staff and the university reveals the intricate dynamics at play. The theory posits that individuals enter into relationships or commit to endeavours with the expectation of receiving valuable returns. When applied to academic staff at private universities, their commitment to their roles can be demonstrated through a thoughtful consideration of the advantages offered by the institution. For instance, academic staff members may find commitment through utilising cutting-edge technology, the autonomy granted in their roles, and the support extended by colleagues and supervisors. According to SET, these elements contribute to a reciprocal exchange where commitment and loyalty are cultivated over time. Moreover, the study extends its exploration by integrating the employment status factor into this study.

Understanding how employment status influences commitment becomes pivotal, as it may either bolster or hinder the employee's sense of commitment to the university. This multifaceted approach to examining Social Exchange Theory within the academic setting provides valuable insights into the complex relationship between internal organisational elements, employment status, and social relationships among academic staff.

Regarding technology integration in academia, the institution posits that adopting technology can be seen as a reciprocal investment, aligning with the social exchange theory proposed by Hai and Rebenu (2018). In the evolving landscape of the modern workplace, digitalisation is becoming increasingly prevalent, with organisations providing advanced technologies that demand creativity and innovation from their employees, according to Briken et al. (2017). However, this digital transformation may inadvertently lead to a digitalisation gap, particularly for academics already grappling with time constraints and competing priorities, as highlighted in the study by Willis et al. (2013).

While universities globally invest substantially in contemporary teaching tools, the question arises of whether academic staff can effectively incorporate these technologies into their teaching methodologies amid the escalating demands on their time. The institution believes that, if systematically integrated, technology can yield long-term efficiencies, compensating for any initial rise in workload and potentially enhancing student comprehension and satisfaction. Essentially, this becomes an opportunity for the academic community to benefit mutually.

Moreover, the challenges posed by remote work are recognised, echoing the sentiments of Wiesenfeld, Raghuram, and Garud (1999) regarding the importance of organisational culture in successfully managing virtual personnel. The digitalisation of the workplace, though a gift in technological advancements, may contribute to reduced

organisational commitment among remote employees due to physical separation and extended integration into a specific organisation. Thus, fostering a strong organisational culture becomes pivotal in maintaining affiliation, even in a physically distant work environment.

Granting employees autonomy emerges as a strategy to cultivate trust within the workplace. When academic staff members feel their judgement and expertise are respected, it often leads to a reciprocated sense of dedication. In this context, autonomy is a valuable resource exchanged between employees and the organisation. This perspective aligns with the research conducted by Lartey (2021), where the Social Exchange Theory was applied, explicitly focusing on employee autonomy. The study surveyed 120 employees in the United States' small and medium-sized enterprises (SMEs). The results demonstrated a statistically significant correlation between employee autonomy and job commitment, providing empirical evidence for the impact of autonomy on employee commitment. These findings carry implications for social exchange theory as a valuable resource for organisations. They suggest that, from a managerial standpoint, granting subordinates autonomy can foster employee loyalty and commitment. This implies that managers can stimulate greater devotion by affording employees autonomy, thereby establishing a positive exchange dynamic within the workplace.

Supervisor support is a form of social support, creating a positive social exchange dynamic as academic staff members reciprocate with increased dedication in response to supervisors' advice, mentoring, and help. Kidron's (2018) study underscores the crucial role of supervisors in preserving the psychological contract and fostering commitment among employees, irrespective of their employment status. Corporations aim to establish themselves as pivotal entities in employees' minds through social interactions. Employees

form social exchange connections with their organisations, driven by their perceptions of organisational commitment and the acknowledgement received. Based on the perceived level of support, employees gauge their commitment to the firm, aligning with the principle of reciprocity. Xerri, Eisenberger, et al. further demonstrate the positive impact of perceived organisational support on employees' intrinsic motivation, reinforcing the core concept of Social Exchange Theory (SET), emphasising the effective utilisation of social ties for employee job commitment.

Lartey's (2021) study mentions that recognition by the supervisor rewards successful task completion through financial or non-financial means. It serves as an influential element in the workplace. As the employees are acknowledged, it instills a sense of achievement, motivation, and value among employees, enhancing individual involvement and overall commitment, leading to improved retention rates. Montani, Boudrias, and Pigeon's (2020) study highlights that managerial support positively influences employee engagement. Their research, involving 249 employees and 151 managers from nine Canadian organisations, substantiates that managerial recognition fosters a sense of purpose and significance, promoting active employee engagement. Particularly effective when combined with career planning sessions, managerial recognition induces a psychological impact, instilling a sense of progress and enhancing employees' motivation to achieve their career milestones.

A helpful work environment can be facilitated by having positive relationships with coworkers. Academic staff members may show more remarkable dedication to their work when they have cooperation and support from their colleagues because they view the workplace as socially fulfilling. Establishing a foundation rooted in the belief that a substantial portion of social interactions thrive on unspoken responsibilities promotes a more relaxed atmosphere within relationships; however, the success of these interactions hinges

on the unwavering commitment of all parties involved. Notably, significant strides in management research have been achieved in the realms of exchange relationships, specifically in terms of team support and organisational support (Bishop et al., 2000), supervisor support (Masterson et al., 2000), and trust (Dirks & Ferrin, 2002). This notion is further affirmed by Cureton (2014), whose social exchange theory is applied in the study. It has confirmed positive correlations between coworker social support and employee job commitment.

2.3.3 Job Demands-Resources (JD-R) Model

The other relevant theory is the Job Demands-Resources (JDR) model (Bakker and Evangelia (2016); Schaufeli & Bakker, 2004). This model functions on the premise that a rise in job autonomy correlates positively with factors like psychological well-being. Within the JDR model, job autonomy is defined as a resource within the psychosocial work setting.

The JD-R Model centres around job demands, referring to job elements that need physical, mental, or emotional exertion. In contrast, the job resources encompass physical, mental, social, or organisational aspects aiding in achieving work-related objectives. This model explores how these elements influence the employees' well-being, motivation, and performance. It considers the balance between demands (e.g., workload, time pressure) and resources (e.g., autonomy, support from colleagues) and how these affect employee engagement, burnout, and commitment. The JD-R model, widely utilised in studying factors influencing worker well-being, engagement, and commitments at individual and organisational levels, is summarised by Bakker and Evangelia (2016). This model suggests several key ideas. First, it classifies job characteristics as either demands necessitating coping efforts or resources aiding goal attainment and personal growth (Demerouti et al., 2001). Second, it suggests that demands relate to health deterioration (exhaustion), while

resources foster motivation (engagement, commitment). Third, resources mitigate the adverse effects of demands on burnout, especially in high-demand situations, enhancing work engagement (Bakker, 2015). Moreover, job strain adversely impacts job performance, whereas motivation correlates with positive performance outcomes (Bakker & Demerouti, 2017). The theory also outlines Bakker's concept of the "loss cycle of job demands and exhaustion" and the "gain cycle of job resources and engagement" (Kaiser et al., 2020).

Chetti and Plessis (2021) classify job demands into three categories: quantitative (publication pressure, overburdened with the load, and competing time demands), qualitative (work/home balance, complexity of student support, organisational politics, and lack of mental health support), and organisational demands (using technology-mediated learning and lack of structural resources). Job resources were organised into organisational (social support) and personal resources (autonomy, meaningful work, and personal support).

Based on this model, several challenges might arise, mainly in delineating between demands and resources. This is because it depends on how employees perceive the aspects. As for this study, job autonomy is deemed a resource and sometimes can be classified into demands. Therefore, it highly depends on how employees perceive the factor. Three internal organisational factors are being studied. In the JD-R Model framework, technology adoption can be perceived as a job demand because of the learning curve it presents or as a job resource when it enhances task completion and efficiency. This depends on how employees perceive the emergence and technological adoption process. For instance, they feel the adoption of IT will simplify and make the task more efficient; the technological factor will become a resource for the employees.

Technology adoption also concerns the level of complexity of the system, ease of use, and the degree to which it aids or burdens employees in their tasks, which could be

significant details in these factors. In terms of the relationship of the factors towards the model, how technological adoption can be analysed in terms of how it influences job demands will be studied. For instance, do employees experience stress from learning new systems? If they perceived it as a resource, adopting the technology would contribute towards efficiency gains in implementing the task.

Another internal organisational factor used in this study is job autonomy. This factor is mainly considered a job resource in the JD-R Model. This is because job autonomy is assumed to give individuals control and discretion over their work. As things become more predictive, employees will feel they have a sense of control over their situation, reducing their stress. A sense of autonomy will provide employees with flexibility in the job. At this point, job autonomy can be seen in the level of decision-making authority, flexibility, and empowerment given to employees in task completion, which could be key dimensions. From this model, job autonomy always aligns with the concept of a job resource, as it potentially helps mitigate job demands and promotes the well-being and commitment of the employees.

Interpersonal relations are also a factor that is included in job resources. This is because the JD-R Model provides employees with social support, feedback, and a sense of belonging. Good terms are something that can boost employees' sense of motivation. This factor, often highlights trust, collaboration, communication, and the quality of relationships as crucial dimensions of interpersonal relationships. This model argues that strong interpersonal relations can be seen as resources that buffer against job demands and foster commitment and engagement.

However, the presumed direct connection between job autonomy and related outcomes has faced scrutiny across multiple studies (Dettmers & Bredehoeft, 2020; De Jonge et al., 2000; Kubicek et al., 2014; Stiglbauer & Kovacs, 2018). These studies propose

a hypothesis suggesting that increasing job resources, such as autonomy, might reach a point where too much of a good thing exists, which aligns with a previous study by Dettmers and Bredehoeft (2020). This suggests that the potential positive impact of increased job resources overall, specifically job autonomy, on psychological well-being might diminish or even turn negative beyond an optimal threshold of job autonomy. The Vitamin model (Warr, 1987) proposes that the relationship between nine environmental factors and psychological well-being is not linear. According to this model, the link between control opportunities (like job autonomy) and psychological well-being is anticipated to be positive only up to a certain threshold of autonomy. Beyond this point, the relationship is expected to weaken and potentially become negative. This suggests that an increase in job autonomy past this optimal level could adversely affect the psychological well-being of employees (Warr, 1987), following a pattern described as an "additional decrement," resembling an inverse U-shaped curve. This should be studied as the existing research has limitations and seeks improvement.

2.4 Conceptual Framework

The study's overall objective is to investigate the influence of internal organisational factors and their impact on employee job commitment as well as employment status as moderators among academic staff in private universities in Sarawak, Malaysia. The Resources-Based View and Job Demand – Resources (JD-R) Model are being adopted to help predict how internal factors in an organisation influence employee job commitment.

The assumption is that when an organisation adopts the technology, it will turn to resources that might help enhance employee job commitment. ICT adoption, acting as a critical catalyst, significantly impacts employees' behavioural and positive cognitive processes concerning their organisation. Specifically, ICT adoption leads to a positive growth mindset and organisational commitment as shown by the complementarities between

ICT adoption and employees, influencing the growth of businesses (Li et al., 2021). Adopting new digital tools or mobile applications results in organisational and technological change strongly influenced by an open line of communication between management and employees, a growth mindset, a culture of freedom to choose and innovate, and a shared vision and goal. A strategic approach contributes to employee commitment by embracing constant change and enabling employees to contribute and engage within their organisations. However, based on a previous study by Li et al. (2021), it was found that ICT positively impacts employee commitment only when used effectively (Sarayani et al., 2014; Naser & Sajad, 2016). This involves centralising information and effectively disseminating it to the appropriate person at the appropriate location and time (Li et al., 2021). As the conditions are favourable, the employee will become committed. The researcher reviewed past studies that revealed the association between measures of technology adoption and employees' job commitment.

The assumption is that the more job autonomy given to employees, the more it will positively impact employee job commitment. This is because job autonomy is considered one of the resources in the Job Demand-Resources (JD-R), as employees are given the power to control methodologies, work directions, work scheduling/time, and place of work. In Rajarjo's study (2018), autonomy provides a sense of responsibility and feedback offers knowledge about work results. The more these three psychological states are evident, the more employees feel comfortable performing their jobs (Hackman & Oldham, 1976). Based on the analysis of hypothesis testing results, it has been shown that job autonomy has a positive and significant effect on employees' job commitment. The study reveals a significant direct effect between job autonomy and job commitment. The positive coefficient of the direct effect indicates that increasing job autonomy will increase job commitment.

Thus, their study supports the hypothesis that job autonomy affects job commitment. These findings align with M. Steers and Porter's (1983) research, suggesting that individuals' characteristics, job autonomy, and work experience influence commitment and performance. Specifically, work experience has a dominant effect on commitment.

Theoretically and practically, these empirical facts provide rational support that job design, in terms of variations in ability, job identity, task significance, freedom of work, and feedback, does not significantly contribute to improving employee commitment and satisfaction in direct construction services (Raharjo et al., 2018). Prior studies have indicated that organisations can cultivate a more dependable workforce by bolstering employee commitment to their careers (Goulet & Singh, 2002). While organisational commitment delves into the bond between an employee and their workplace, career commitment refers to an individual's valuation and connection with their chosen profession or occupation or their drive to engage in their specific job (Goulet & Singh, 2002). Those exhibiting more substantial career commitment demonstrate a readiness to invest additional time and effort into personal development and pursuing career aspirations (Goulet & Singh, 2002). As such, job autonomy may influence the employee's commitment if the management is willing to give flexibility to their employees.

The assumption is that the organisation's higher supervisor and coworker support will help enhance employees' job commitment. Studies indicate that high-quality support from supervisors and coworkers might foster better communication channels and be one of the most important means in business because they play a critical role in achieving a common goal of the organisation's objectives, particularly within a team (Tomal & Jones, 2015). In this study, the supervisor and coworker support aspects such as the strength of collaboration, trust, communication channels, support networks among colleagues, and the overall social

dynamics within the academic community. Based on the analysis of hypothesis testing results from the study of Cho (2011), the analysis using structural equation modelling (SEM) shows significant connections between trust, employee satisfaction, and organisational commitment.

Notably, trust in management leads to the most robust associations with these outcomes. Therefore, these findings emphasise the importance of prioritising trust-building efforts in managing organisations.

Numerous scholars argue that trust significantly impacts individual attitudes and directly leads to organisational performance (Dirks & Ferrin, 2001; Davis et al., 2000). Focusing on the pivotal role of trust between individuals and groups is deemed a crucial element for an organisation's enduring stability and the members' well-being. Ouchi (1981) strongly asserts that trust is the primary determinant fostering high levels of commitment, loyalty, and productivity within type-Z organisations. Type-Z organisation combines traits from both cultures to boost performance by fostering strong employee loyalty, making consensus-based decisions, ensuring job security, and prioritising long-term employment.

Recent empirical evidence further supports this, indicating that management trust positively influences organisational commitment. Travaglione (2003) also points out that trust in senior management not only enhances organisational commitment but also diminishes turnover intentions and cynicism toward changes. Apart from that, the Leader-Member Exchange (LMX) theory highlights trust as a fundamental gauge representing the quality of the bond between leaders and their team members; it correlates positively with different aspects of job attitudes and performance (Graen & Uhl-Bien, 1995; Liden et al., 1993). Numerous experts in leadership studies also view trust as a foundational element of successful leadership (Fairholm, 1994).

Consequently, this study presumes that supervisor trust will amplify employee commitment and satisfaction. Tran et al. (2018) agreed that high-quality workplace relationships positively affected work behaviour, leading to increased commitment, reduced job stress, and a stronger perception of social impact among employees. As such, supervisor and coworker support may influence employees' job commitment if practiced in the workplace.

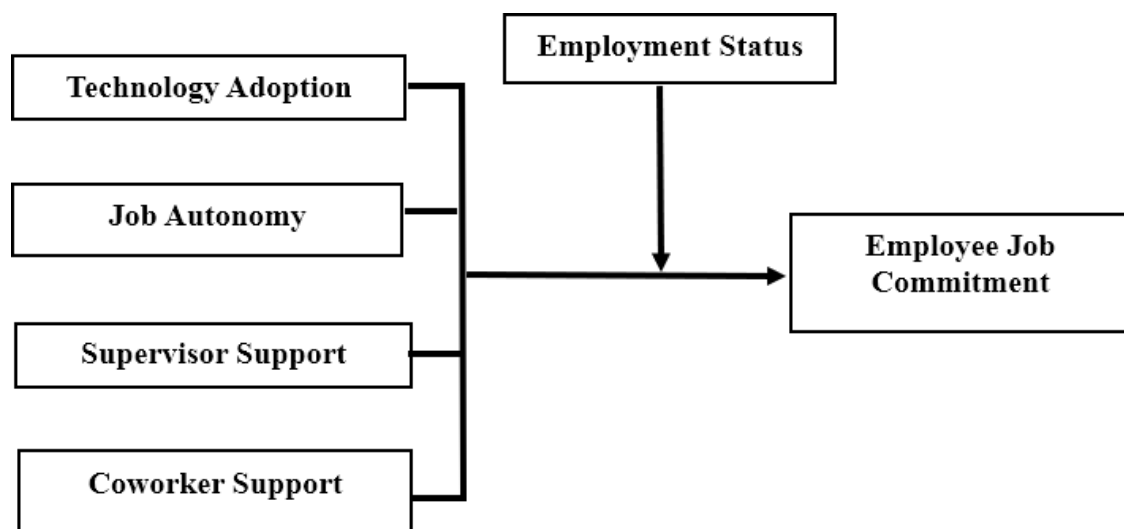


Figure 2. 3: Conceptual Framework of the Study

2.5 Hypothesis Development

This section outlines the development of hypotheses based on the theoretical framework and relevant empirical literature. The hypotheses are formulated to examine the relationships between internal organisational factors namely, technology adoption, job autonomy, supervisor support and coworker support and employee job commitment. Additionally, employment status (permanent versus contract full time academicians) is introduced as a moderating variable to investigate its influence on these relationships.

2.5.1 Hypothesis Development 1

Based on the preceding literature, this study aims to investigate the potential internal organisational factors that influence employee job commitment and employment status as moderators among academic staff in private universities in Sarawak, Malaysia. The hypothesis posits a direct association between these two variables.

There are multiple methods to be considered for technological adoption. Many organisations have embraced technology to keep and foster interaction, with telecommuting emerging as a prominent solution, as highlighted by Abilash and Siju (2021). Based on their study, the research explored how implementing telecommuting during critical situations empowered employees to perform optimally, enhancing job satisfaction and commitment. The study revealed continuous employee connectivity and engagement through telecommuting bolstered job autonomy, granting individuals control over their professional responsibilities and work environment dynamics. Notably, the findings indicated a robust correlation between employee commitment and job satisfaction when telecommuting was integrated into organisational practices.

Furthermore, telecommuting was observed to efficiently maintain regular work routines and facilitate official meetings amid ongoing circumstances. As the study recommends, employees should ensure a conducive work environment before adopting telecommuting methods. This finding is also similar to Terek et al. 2018; the research was conducted among 380 middle managers from 102 companies in Serbia. The study's findings show that all correlations between information technology elements and measured organisational performance (job satisfaction dimensions and organisational commitment dimensions) are statistically significant, robust, and positive. The most significant correlations within information technology are associated with employee motivation to

engage with modern IT, the emphasis placed by management on modern IT, and the utilisation of modern IT (Hye, 2021). In this research, there are six specific items outlined to assess the state of information technology: ownership of modern IT, application of modern IT, utilisation of modern IT, employee training in modern IT, employee motivation to engage with modern IT, and the emphasis management places on modern IT. The study by Awuor et al. (2023) revealed that technological change positively impacts employee commitment at Kisii University. Through regression analysis, it became evident that the variables accounted for up to 83.0% of the variance in employee commitment within public universities in Kenya. Conclusively, the research highlighted the significant influence of all variables on employee commitment, emphasising the necessity for better planning during organisational changes, particularly in technology implementation, to ensure a positive influence on employee commitment.

Recent studies have predominantly focused on the importance of organisations motivating employees to increase technology adoption rates within the workplace (Imran et al., 2014; Baskaraan, 2021). They also suggest that technological advancements significantly impact employee performance. Numerous research works consistently demonstrate a positive correlation between appropriate technology adoption and employee performance. This is because, without a proper transition in adopting technology, some scholars have noted that integrating advanced technology may lead to technostress among organisational members (Ho-Jin & Cho, 2016). The study by Oliveira (2011) has recognised the important role of information technologies as a strategic resource. Technological adoption is a resource that helps gain crucial data necessary for informed decision-making (Galbraith, 2012). Delone and McLean's (1992) classification of information technology performance, drawn

from an extensive review encompassing 180 studies on its organisational impact, contributes significantly to this. Based on previous considerations, we propose the following hypothesis:

Hypothesis 1: Technology adoption significantly influences employee job commitment levels.

2.5.2 Hypothesis Development 2

As per the JD-R model, work environments that cater to an individual's need for autonomy may positively link with work motivation and commitment to persist in their profession or calling (Debus et al., 2019; Dubbelt et al., 2019; Grant & Parker, 2009). The desire to pursue and sustain a career within the organisation could be reinforced in such scenarios. When employees feel their jobs allow them to organise and handle tasks according to their preferences, needs, and capabilities, they tend to be driven to invest more in their careers. This investment includes acquiring knowledge and enhancing skills to actively foster higher levels of commitment (Berg et al., 2010; Tims & Bakker, 2010). Several studies have provided evidence suggesting a clear association between low job autonomy and increased risk for mental health problems (Madsen et al., 2017; Theorell et al., 2015), somatic health problems (Theorell et al., 2016), sickness absence (Clausen et al., 2014), turnover (Clausen & Borg, 2010; Hayes et al., 2012), and disability retirement (Clausen et al., 2014; Knardahl et al., 2017).

In this study, we define job autonomy as the degree of freedom and discretion of the employee in the work situation, for instance, in making task-related decisions and selecting work procedures (Hackman & Oldham, 1976). In the study by Mulyana and Izzati (2022), the study participants are 191 academicians from educational backgrounds in Indonesia. This study shows that job autonomy and career commitment have a significant relationship that can interconnect each other regarding a professional career as an academician. In other

words, the higher the autonomy of the job for academicians, the higher their career commitment.

Based on the study by Amarasena et al. (2015), the research showed that work autonomy significantly affects job satisfaction among academic staff in Sri Lanka's state universities. This means having control over their work is important for their satisfaction. Based on the study by Chang et al. (2021), the data for this study involving three waves was gathered from 350 R&D engineers working across 25 high-tech companies in Guangdong Province, China. The study proposed several hypotheses. From this study, it was found that (a) job crafting acts as a mediator between job autonomy and career commitment and (b) the impact of job autonomy on career commitment through job crafting is more pronounced in individuals with a stronger sense of calling compared to those with a weaker sense of calling. Apart from workplace aspects, job autonomy allows employees to manage their schedules. However, it is crucial to explore how individual traits, such as a sense of calling, motivate employees to commit to their careers. Enhancing the job through job autonomy provides employees with increased freedom, control, and decision-making power, fostering a sense of expertise in pursuing their career objectives (Cai et al., 2018; Goulet & Singh, 2002; Li et al., 2020). Lin and Ping (2016) conducted their study of corporate employees from a private higher education institution in Malaysia based on a purposive sampling. A hierarchical multiple regression analysis revealed that autonomy did not significantly predict commitment. According to Lin and Ping (2016), the lack of a significant link between perceived job autonomy and organisational commitment can be due to various factors, including employees' job roles, individual traits, standard operating procedures (SOPs), and organisational policies. In prior research, these elements have shown connections to job autonomy and organisational commitment, potentially contributing to this observed

relationship. (Deconinck et al., 2011; Lew, 2011; Hussain et al., 2012.) Consequently, we propose the following hypothesis:

Hypothesis 2: Job autonomy has a positive effect on employee job commitment.

2.5.3 Hypothesis Development 3

This is aligned with Hsieh and Tsai (2019), who noted that inadequate support from supervisors and colleagues led to heightened occupational stress in military personnel. Apart from that, Ito and Brotheridge (2013) found that employees receiving social support may fulfil expectations from supervisors and peers by actively approaching problem-solving with positive attitudes and hard work. Hence, employees with such job resources may effectively manage stressors and challenges.

Based on the study by Tran et al. (2018), the research aimed to explore the influence of positive workplace relationships on employees' behaviours, thereby impacting their overall performance. This study focused on the key drivers of performance for 303 nurses in Vietnamese hospitals and delved into the impact of high-quality workplace relationships on staff behaviours. This is considered one crucial resource that contributes towards employee job commitment.

Significantly, the study highlighted the pivotal role of relationships between leaders and their nurse staff in determining the quality of workplace relationships and subsequently affecting their performance. These findings support the notion that high levels of quality relationships result in numerous positive outcomes, such as enhanced patient care standards, heightened job commitment, and better performance ratings. Prior studies have also focused on exploring staff nurses' involvement in decision-making processes that aim to enhance organisational procedures. This is because it has portrayed high-quality workplace relationships between supervisors.

Based on a study by Malkoc (2022), which was conducted in Turkey in the sports industry, the shift in management mentality and behaviours in organisations driven by global transformation has resulted in a greater emphasis on positive attitudes. Positive organisational behaviour has gained increased significance recently (Bostancı & Ekiyor, 2015). The analytical findings determined that supervisor assistance significantly influences employee job commitment. Nevertheless, research has revealed slightly different outcomes based on gender. Female trainers derive more significant advantages from supervisor support in the workplace than their male counterparts and exhibit higher dedication towards their professional responsibilities.

Emhan's (2012) study focused on comparing the relationships between managerial support, job satisfaction, and organisational commitment in the non-profit, for-profit, and public sectors. The study was based on a survey of 750 employees working in educational and health fields. It has been shown that there are varying outcomes inside the institution. Research shows that receiving assistance from supervisors has a consistently favourable effect on employees' commitment to their jobs. The studies conducted by Kidd (2001) and Gatling (2014) revealed a positive correlation between supervisor support and increased levels of organisational commitment. Rousseau (2010) provided more evidence for this relationship, demonstrating that supervisor and coworker support had a cumulative impact on emotional commitment, especially when job resource adequacy was high.

Hypothesis 3: Supervisor support is positively linked to employee job commitment.

2.5.4 Hypothesis Development 4

According to Sankar et al. (2014), insufficient interpersonal relationships and communication abilities in the workplace often result in job-related stress, ultimately leading to decreased organisational commitment. Based on the study focused on veterinarians from

the Animal Husbandry department in Kerala by using the questionnaire-based approach among 47 senior veterinary surgeons and 170 veterinary surgeons. The findings indicate that the lack of interpersonal relationships and effective communication was identified as a stress-inducing factor in the workplace. Additionally, social commitment was found to have a notably negative correlation with stress attributed to these dimensions. Specifically, communication-related stress exhibited a significant negative association with job commitment.

Based on the study, Tamer (2014) hypothesised that peer trust significantly influences organisational commitment levels and supportive interactions. The authors hypothesised that peer trust significantly influences their organisational commitment levels and supportive interactions. The study's results by Trans et al. (2018) revealed that high-quality workplace relationships positively affected work behaviour, leading to increased commitment, reduced job stress, and a stronger perception of social impact among the nurses. These findings support the notion that high levels of quality relationships result in numerous positive outcomes, such as enhanced patient care standards, heightened job commitment, and better performance ratings.

Based on the study by Aydin and Tuzun (2019), the study examines the relationship between different types of social support inside a company and the level of job performance employees report. The study utilised self-reported data from 300 employees in the hotel business and employed structural equation modelling. The findings indicate that both supervisor and co-worker support significantly impacted job performance. Furthermore, the study illustrates that employee job commitment is a partial moderator in the relationship between perceived support from colleagues and job performance beyond one's assigned duties. This study was done in hospitality, a service industry that depends on crucial and

indispensable collaboration and support among team members (Chen, 2016; Lin et al., 2013). Without harmony and coordination, the quality of service decreases. Employees in the hotel industry may feel fatigued due to the ongoing production of services (Lee et al., 2014). Therefore, it is imperative for individuals facing comparable job circumstances to understand and support each other.

According to Sloan (2017), the study examines gender differences in affective organisational commitment by analysing survey data collected from many state employees. Based on the theory of relational cohesiveness, researchers propose that the perception of emotional support among employees in the workplace is positively linked to their affective commitment. Sloan (2017) hypothesises that women's higher level of affective commitment, compared to men, can be attributed to their heightened perception of coworker support. The findings of the studies strongly corroborate the assumptions and indicate that public-sector managers should actively promote the cultivation of supportive relationships among employees. Prior studies indicate that women's dedication to employment in the public sector is influenced by the advantages they receive, such as reduced bias and higher salaries, compared to what they could encounter in the private sector (Bygren, 2015; Llorens et al., 2008; Moynihan & Landuyt, 2008).

The correlation between coworker support and affective commitment to state employment is significant. It aligns with relational cohesion theory, indicating that individual experiences within workplace relationships among employees are linked to broader group commitments at an intermediate level. Therefore, efforts to enhance worker loyalty and devotion to the achievement of state and regional public services should prioritise the cultivation and sustenance of supporting connections among employees.

This indicates that establishing interpersonal relationships more frequently does not directly lead to increased employee organisational commitment. In essence, strong interpersonal relationships with coworkers do not directly cultivate a firm commitment from employees toward their work or organisation. These findings align with prior research that found no significant impact of coworker support on organisational commitment (Ahmed, 2015). The study by Ramditya et al. (2019) supports the notion that the regular establishment of coworker relationships does not directly result in increased organisational commitment from employees. Additionally, despite strong relationships within a company, there is no guarantee of fostering higher employee commitment. These conclusions are consistent with research indicating that interpersonal relationships do not notably influence organisational commitment. This might happen due to individual values, interpretations of the organisational culture, leadership approaches, and chances for personal progress and advancement. Another finding in the research found that work incentives directly impact organisational commitment. Consequently, we propose the following hypothesis:

Hypothesis 4: Coworker support has a positive relationship with employee job commitment.

2.5.5 Hypothesis Development 5

It is commonly assumed that temporary employment negatively impacts job satisfaction and affective commitment, as suggested by research (De Cuyper et al., 2008; De Witte & Näswall, 2003). The findings only partially support this notion. Based on Martis (2013), the study revealed no significant difference in job satisfaction and affective commitment between temporary and permanent employees. This lack of distinction may be attributed to legislative measures and national regulations that mitigate the impact of employment status on organisational outcomes.

In many European countries, employment regulations provide protective measures for permanent and temporary employees, ensuring that minimum rights associated with permanent positions are extended to those in temporary roles (De Cuyper et al., 2008). Consequently, the study suggests that permanent and temporary employment are nearly equivalent, indicating no direct correlation between employment status and job satisfaction and affective commitment outcome variables.

The level of employee job commitment is significantly affected by the adoption of technology, and this connection is influenced by employment status. More precisely, it is anticipated that the influence of technology adoption on job commitment will differ depending on various employment statuses, including full-time and contract positions. For instance, in the study by Yu et al. (2010), it was found that the scenario is that contract employees, who are not encumbered by research and administrative responsibilities, may have additional time to explore new educational technologies. Based on the study, contract-based employees encompass various individuals, such as faculty associates, lecturers, and graduate assistants, each with distinct motivations for embracing technology. Secondly, an individual might have multiple reasons for adopting technology. Supported by Kalyal et al. (2010), employees are inclined to exhibit an increased commitment towards the change process when they perceive the associated benefits of its adoption.

Consequently, this reliance hinges on how employees perceive organisational change. Alternatively, adaptability fosters enhanced employability as employees demonstrate the capacity to remain appealing and productive amidst alterations in the work environment (Chan, 2000).

Some researchers argue that employment status could influence the relationship with different outcomes, such as employee job commitment (Sverke & Hellgren, 2002). For

instance, a study by Silla et al. (2008) revealed that employment status moderated the link between job insecurity and life satisfaction. The findings indicated that individuals with higher employability reported greater life satisfaction than those with lower employability levels, particularly when facing high job insecurity. There are two competing predictions.

A sense of employability can alleviate the adverse impacts of job insecurity on an affective and normative commitment to change, particularly when employees harbour confidence in their abilities.

Hypothesis 5: Employment status moderates the relationship between technological adoption and employee job commitment.

2.5.6 Hypothesis Development 6

Park (2012) mentions that granting employees job autonomy enhances their ability to successfully carry out production and service tasks by optimising their knowledge, skills, and capabilities. The level of job autonomy given to employees can have varying effects on employee outcomes, depending on how much the firm emphasises the quality of its products or services in the business. Employees in firms who have been granted high autonomy typically show higher levels of commitment and experience improved mental well-being.

Hence, job autonomy can be considered a "best practice" as it consistently correlates with improved mental well-being and increased organisational commitment. However, it should also be acknowledged that the strength of these associations may vary depending on the specific context. For instance, Malek (2017) found drawbacks to the link between contract and permanent employment, notwithstanding the advantages. An important drawback is the practice of employee segregation. Research indicates that a status or class hierarchy is emerging in workplaces due to this form of employment, resembling the hierarchies based on race and gender. The segregation will lead to differences in the

allocation of resources, such as benefits, remuneration, and decision-making autonomy, between contract and permanent employees, leading to a divergence in their perceived identity. This discrepancy in identity gives rise to a conceptualisation of social hierarchy (Boswell et al., 2012). The class hierarchy would correspond to the allocation of resources, leading to different manifestations of organisational injustice or inequality observed in other social contexts.

Several research studies have examined the behaviour and attitudes of temporary employees compared to permanent employees. These studies include Wooden et al. (2004), Lee et al. (1991), Griffin et al. (2009), Wilkin (2012), and Cuyper et al. (2008). This research has demonstrated that the outcomes differ depending on one's work situation.

Temporary employment has been found to have detrimental effects on job satisfaction and organisational commitment, as suggested by the job stress theory (De Witte & Näswall, 2003). According to this hypothesis, temporary employees have workplace features that are more frustrating, resulting in increased strain and unfavourable stress reactions. As a result, employee job commitment by temporary workers is low. Temporary employees are more susceptible to limited decision-making authority, unclear job roles, and diminished control over their work (job content category). They also experience unfavourable working conditions (working conditions category), receive less social support from colleagues and supervisors (social relations at work category), and face job insecurity (employment condition category).

As a result, temporary employees are more likely to experience higher stress levels than permanent employees (De Witte & Näswall, 2003). Several studies have consistently demonstrated a positive relationship between job autonomy and employee outcomes, including mental well-being, organisational commitment, job self-efficacy, and work

performance (Park, 2012; Ng, 2015; Dysvik, 2011). Nevertheless, the correlation between employment status and the strength of this association may differ, as full-time employees tend to encounter a more pronounced favourable impact (Park, 2011). These findings indicate that job autonomy may have a more significant impact on the dedication of permanent employees than part-time or contract workers. The following hypotheses were generated based on the previous finding:

Hypothesis 6: Employment status moderates the relationship between job autonomy and employee job commitment.

2.5.7 Hypothesis Development 7

The category, known as social relations at work, pertains to stress-inducing factors such as limited or non-existent social support from supervisors. This can lead to reduced involvement in decision-making and challenges in expressing criticism and being listened to (De Witte & Näswall, 2003). When the impact of these stressors is significant, individuals are more prone to be less effective and less attentive when carrying out their activities. Consequently, this can have an impact on their efficiency and well-being.

The supervisor and employee are connected through a psychological contract for the social support factor. It asserts that employers and employees have a mutual expectation of reciprocal obligations, emphasising the importance of balance. There are four distinct types of psychological contracts: transactional, relational, symmetrical, and asymmetrical. Transactional contracts involve incorporating job-related external factors into the exchange relationship from a short-term perspective. Relational contracts integrate both inherent and external employment elements, taking a long-term viewpoint on the reciprocal relationship.

The symmetrical contract denotes a state where the power dynamics between employees and employers are balanced and equal. Conversely, the asymmetrical contract

represents a situation where there is an inherent imbalance of power. This kind of contract portrays the situation of contract employees. The prevalence of transactional (also known as limited contract) and asymmetrical contracts is expected in temporary employment. It is generally associated with declining job satisfaction and commitment (De Witte & Näswall, 2003). The psychological contract of temporary employees is believed to have fewer and lower-quality content elements than that of permanent employees (De Witte & Näswall, 2003). The following hypotheses were formulated based on the social comparison process and the psychological contract theory.

Multiple studies consistently demonstrate a strong correlation between supervisor support and employee job commitment (Kidd, 2001; Rousseau, 2010; Qureshi, 2017). The correlation is more robust among full-time individuals since they will likely derive more significant advantages from the stability and security associated with their positions (Kidd, 2001). Further study is needed to understand the precise mechanisms by which supervisor support impacts job commitment and to determine any potential differences between permanent and contract-based employees.

Hypothesis 7: Employment status moderates the relationship between supervisor support and employee job commitment.

2.5.8 Hypothesis Development 8

Martis (2013) mentions social relations at employment status, which refers to a lack of employee job commitment, such as little to no social support from colleagues and supervisors, less influence in the decision-making process, and difficulty raising criticism and being heard. When the influence of these stressors is high, individuals are more likely to be concerned and less efficient and vigilant when performing their tasks.

Temporary workers have little power in socialisation due to insufficient social interactions. It is characterised by the inability to assimilate and integrate into the corporate culture due to an excessive focus on task orientation. Apart from that, most of the time, the employer does not consider their opinion and decisions. They are commonly perceived as transitory supplements. The third issue pertains to the absence of security when contract workers searching for permanent positions become aware that the client business is unlikely to supply such opportunities. The fourth factor involves a diminished capacity to accept perceived unfairness resulting from class differences and social categorisation. The ultimate component contributing to the issue is a lack of commitment caused by a sense of being easily replaceable and a general perception of unfairness inside the organisation (Foote, 2004). Based on Franz Eiffe et al. (2018), the findings demonstrate disparities in job quality between temporary employees, self-employed workers, and permanent employees, as well as between part-time and full-time workers. Considering other variables, it is noteworthy that temporary contracts, particularly those of short duration, consistently exhibit unsatisfactory outcomes across several aspects of job quality. It can be shown that the issues persist concerning the quality of working time, career opportunities, the acquisition of skills, and the exercise of discretion.

Based on the study, several reasons cause the different findings among different types of employment. For instance, access to training, job security, being called to work at short notice, having difficulty arranging time off, regularity of working hours, high job strain (combination of high work and intensity), and low job autonomy. Contract workers constantly face disadvantages compared to people with permanent positions across these items. Individuals with temporary employment agreements experience disadvantages, including less job stability and increased work-related stress.

Hypothesis 8: Employment status moderates the relationship between coworker support and employee job commitment.

Table 2.3 provides a synthesis of the study's hypotheses, outlining the predictor and outcome variables, the theoretical frameworks supporting each proposed relationship, and relevant empirical studies. The table highlights key findings from the literature that justify the hypothesised associations, offering a clear rationale for the conceptual framework of the study.

Table 2.3: Summary of Hypotheses, Theoretical and Empirical Support

Hypothesis	Predictor	Outcome	Theoretical Support	Empirical Support	Key Findings
H1	Technology Adoption	Employee Job Commitment	RBV, SET, JD-R	Abilash & Siju (2021); Terek et al. (2018); Awuor et al. (2023); Imran et al. (2014); Oliveira (2011); Baskaran (2021)	Technology adoption enhances autonomy, satisfaction, and engagement; poor adoption can cause technostress but effective implementation increases commitment.
H2	Job Autonomy	Employee Job Commitment	RBV, JD-R, SET	Debus et al. (2019); Dubbelt et al. (2019); Mulyana & Izzati (2022); Amarasekera et al. (2015); Chang et al. (2021)	Autonomy fosters motivation, satisfaction, and career commitment; reduces stress and turnover risk.

Table 2.3 continued

H3	Supervisor Support	Employee Job Commitment	RBV, SET, JD-R	Hsieh & Tsai (2019); Tran et al. (2018); Malkoc (2022); Emhan (2012); Rousseau (2010)	Supervisor support increases affective and normative commitment; enhances coping with stressors and improves performance.
H4	Coworker Support	Employee Job Commitment	SET, JD-R	Sankar et al. (2014); Tamer (2014); Aydin & Tuzun (2019); Sloan (2017); Ramditya et al. (2019)	Peer support fosters trust and collaboration, reduces job stress, and supports commitment. Effects vary based on culture and values.
H5	Employment Status × Technology Adoption	Employee Job Commitment	RBV, SET	De Cuyper et al. (2008); Yu et al. (2010); Silla et al. (2008); Kalyal et al. (2010)	Employment status influences how technology adoption affects commitment; contract and permanent staff may respond differently.
H6	Employment Status × Job Autonomy	Employee Job Commitment	RBV, SET, JD-R	Park (2012); Malek (2017); Wooden et al. (2004); Griffin et al. (2009); De Witte & Näswall (2003)	Autonomy has a stronger effect on permanent staff's commitment due to stability, resource access, and social identity.

Table 2.3 continued

H7	Employment Status × Supervisor Support	Employee Job Commitment	SET, Psychological Contract Theory	Kidd (2001); Rousseau (2010); Qureshi (2017); De Witte & Näswall (2003)	Supervisor support benefits permanent staff more, reflecting stable psychological contracts and relational exchanges.
H8	Employment Status × Coworker Support	Employee Job Commitment	SET, Social Comparison Theory	Martis (2013); Franz Eiffe et al. (2018); Foote (2004); Ramditya et al. (2019)	Contract staff may experience weaker effects of coworker support due to lower social integration and role insecurity.

2.6 Summary

The introduction of theoretical frameworks aims to establish a conceptual foundation for comprehending the relationship of the concepts in this study. Through extensive studies and theories, the review of existing literature serves as the underpinning for this research.

CHAPTER 3

METHODOLOGY

3.1 Introduction

The study design's general strategy is the main topic of this chapter. This introduces the philosophical presupposition of the quantitative methods approach. Next, the justification for selecting a quantitative method design is discussed. This chapter also describes a quantitative-method research design.

3.2 Research Design

Positivism relies on empirical observation and measurement, aiming for objectivity and generalisable findings. It emphasises structured data collection, statistical analysis, and the verification of hypotheses.

A well-structured research design is crucial to address the research questions and validate the hypotheses effectively. This framework plays a pivotal role in controlling potential risks and ensuring the integrity and reliability of the research process and gathered data. The design comprehensively outlines the data collection process, encompassing sample selection, population, location, and time considerations. It delineates how data will be analysed, ensuring comprehensive and detailed plans and methodologies for the planning, collection, and analysis stages (Parahoo, 1997).

The study's primary aim is to explore the influence of internal organisational factors on employee job commitment within academic staff in private universities in Sarawak, Malaysia. The specific objectives and research questions established in the initial chapter serve as foundational support for the literature review and formulation of hypotheses. Consequently, the study adopts a cross-sectional design employing a quantitative strategy.

Questionnaires for quantitative analysis aim to better comprehend the relationship between internal organisational factors and employee job commitment among academic staff in private universities.

Based on the study's focus and the nature of social science surveys, a cross-sectional research design, a common approach in such circumstances, was chosen. Data collection employed questionnaires completed by a specific population, with each element of the conceptual framework acting as a variable. The questionnaire was tailored to gather responses on each variable at a specific time.

A quantitative research strategy within a cross-sectional design was adopted to ensure a clear understanding of reality and achieve high-quality, accurate results through this data collection method, primarily through quantitative questionnaires. The rationale behind selecting a cross-sectional design lies in the absence of researcher influence on respondents and data. Roopa (2012) stresses the importance of careful questionnaire design to avoid introducing researcher bias in cross-sectional studies. This study's research design and quantitative strategy yield crucial data that underpins the conceptual framework, questions, objectives, and hypotheses.

Further support for choosing a cross-sectional design in this study includes several key points: The study aims to measure relationships between variables outlined in the conceptual framework, such as technology adoption, job autonomy, supervisor and coworker support, and employee job commitment, as well as employment status as moderator. Using the quantitative method, the study analyses the impact of technology adoption, job autonomy, and supervisor and coworker support as independent variables on employee job commitment as the dependent variable. Importantly, data collection co-occurs, allowing a

snapshot without tracking changes over time, and involves a broader sample population for enhanced representation.

Positivism is conducive to quantitative methods because they prioritise empirical data collection and statistical analysis, enabling researchers to gather numerical data and draw statistically supported conclusions. These approaches are suitable for studies that quantify phenomena, measure relationships between variables, and generate numerical data for analysis.

Positivism employs the hypothetico-deductive approach to validate preconceived hypotheses, typically expressed in quantitative terms. This method establishes functional connections between causal factors (independent variables) and outcomes (dependent variables) (Creswell & Creswell, 2018). However, it is essential to note that positivist research is not exclusively reliant on quantitative methods. For instance, an experimental investigation assessing intervention effects via qualitative analysis also aligns with the positivist paradigm.

The hypothetico-deductive method forms a cyclical procedure initiated by a theory drawn from existing literature. This method involves three key steps: firstly, formulating testable hypotheses; secondly, crafting an experiment by defining variables to manipulate and measure via group assignments (known as operationalising variables); and finally, executing an empirical study rooted in experimentation. Ultimately, the findings from such a study are used to help inform theory and contribute to the literature, thereby completing the circular process (theory → hypothesis → operationalising variables → experimentation → theory).

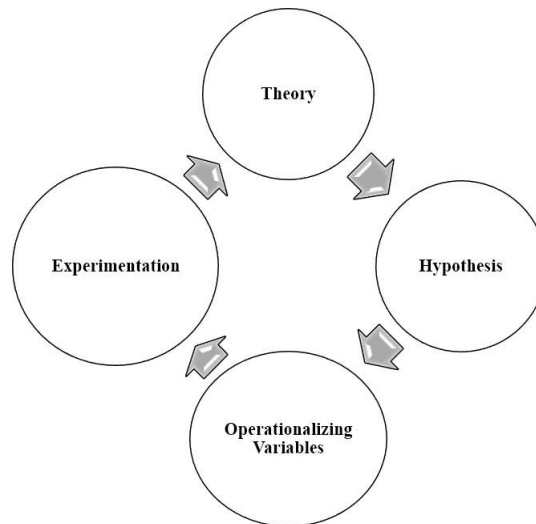


Figure 3.1: The Hypothetico-Deductive Model

Note: Popper (1935)

The results obtained from empirical studies can potentially fortify or enhance existing theories. For instance, when a hypothesis validates the efficacy of a teaching method for a new group of learners, it contributes to informing and refining the underlying theory.

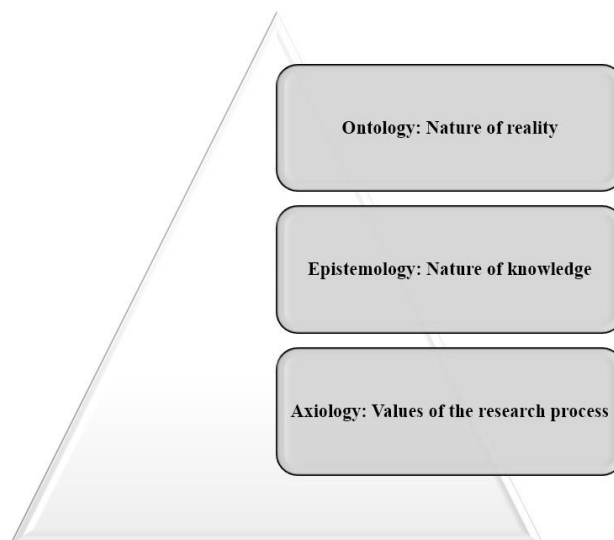


Figure 3.2: The Philosophical Foundations of the Positivist Paradigm

Note: Comte and Nelson (2014)

The positivist paradigm is based on believing in a single, observable reality that can be understood and quantified. It uses a causal framework relying on three principles: temporal precedence (X must occur before Y to cause Y), association (a correlation between X and Y), and the absence of confounders (ensuring that no other factors influence the outcome). Positivism minimises the role of subjective experiences, requiring researchers to avoid interactions with participants during data collection. While objectivity is easier to maintain in fields like physics, it is more challenging in social sciences, where rigorous protocols are needed to mitigate bias.

In this study, a quantitative approach aligned with positivism is employed to examine the influence of internal organisational factors on employee job commitment among academic staff in private universities in Sarawak, Malaysia. This method emphasises objectivity, effectively explores potential relationships, and provides an overview of the topic within a large target population.

3.3 Population and Sampling Procedure

This section presents the target population and the sampling procedure adopted in this study. It describes the characteristics of the population from which the sample was drawn and outlines the sampling technique employed to ensure the representativeness and credibility of the data obtained.

3.3.1 Population

The population of this study comprises academic staff employed in three selected private universities in Sarawak, Malaysia. These institutions were purposefully chosen due to their significance within the region's higher education landscape and their relevance to the study's focus on employee job commitment. The population includes both permanent and contract academic staff who are actively involved in teaching, research and academic-

related responsibilities. Table 3.1 presents the total number of academic staff in each of the selected institutions.

Table 3.1: Number of population of Academicians in Three Private Universities in Sarawak

Universities	Population
Swinburne University of Technology Sarawak	157
Curtin University Malaysia	150
University of Technology Sarawak	111
Total of population	418

To ensure a comprehensive representation of the target population, this study engaged with three private universities currently operating in Sarawak. The sampling frame was constructed using updated directories obtained from the official websites of these universities. Additionally, personal networks and referrals from initial contacts were employed to enhance the diversity and coverage of the sampling group. The study specifically targeted academicians whose roles corresponded to the research objectives.

The inclusion of only private universities was guided by the study's primary aim: to examine internal organisational factors influencing employee job commitment among academic staff employed in institutions formally recognised as universities. In Malaysia, higher education institutions are classified into public universities, private universities, university colleges, and colleges. According to the Malaysian Qualifications Register (MQR), maintained by the Malaysian Qualifications Agency (MQA), as of 2024, only three private higher education institutions in Sarawak possess full university status: Swinburne University of Technology Sarawak, Curtin University Malaysia, and University of Technology Sarawak. Other private institutions, such as university colleges and colleges, were excluded due to their differing governance frameworks, academic staffing policies, and resource allocations, which diverge significantly from the operational characteristics of full-

fledged universities. Consequently, the scope of this study was purposefully confined to private universities to preserve the relevance, focus, and comparability of the findings.

During data collection, it was critical to ensure that the data were obtained from a representative sample rather than attempting to survey the entire population (Rattan et al., 2012). A simplified formula was utilised to calculate the appropriate sample size, adopting a 95% confidence level and a precision level of 0.05 (Pourhoseingholi et al., 2013). As presented in Table 3.1, the total population of eligible academic staff across the three selected universities was 418.

Table 3.2: Table for Determining Sample Size of a Known Population, The Sample Size Formula Identified by Krejci and Morgan

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

Subsequently, employing the sample size equation outlined by Krejci and Morgan (1970), which maintains a 95% confidence level with a 5% error margin, the sample size was computed based on the data provided in Table 3.2 below. Considering the total

workforce in these three private universities, which consists of 418 individuals, and utilising the Krejci and Morgan (1970) table, a calculated sample size of 196 emerged. However, this figure was rounded to 200 for the study's purposes. These samples were then stratified according to the percentage of the population in each university, ensuring a minimum sample size of 30 from each area. This approach aids in acquiring more comprehensive data and insights from all universities. To achieve this, the proportion of each university population relative to the total population was calculated, ensuring a balanced and equitable representation across all universities.

Table 3.3: Sample Size Based on Krejci and Morgan Formula

Universities	N- Population	% of Population (N / Total N)	S-Sample size
Swinburne University of Technology Sarawak	157	37%	75
Curtin University Malaysia	150	36%	72
University of Technology Sarawak	111	27%	53
Total of population	418	100	200

3.3.2 Sampling Technique Procedure

In this study, stratified sampling is used to meet the research's needs, as the research aims to survey academicians. Stratified sampling divides the population into subgroups based on known variables and selects a random sample from each subgroup. This method accurately represents the entire population and specific groups.

To begin, segmenting the population into distinct, separate strata allows researchers to make specific subgroup inferences that might be overlooked in a broader random sample (Ahmad, 2014). Additionally, employing a stratified sampling method can result in more effective statistical estimates, given that the strata are chosen based on their relevance to the

specific criteria being studied rather than merely the availability of samples. Furthermore, data might be more accessible for individual existing strata within a population rather than for the population as a whole. As such, using a stratified sampling method might be more convenient than consolidating data across groups. Lastly, treating each stratum as an independent population allows for applying different sampling methods tailored to each subgroup within the population, potentially allowing researchers to choose the most suitable or cost-effective approach for each identified subgroup.

The research measures the influence of internal organisational factors and their impact on employee job commitment among academic staff in private universities in Sarawak, Malaysia. Therefore, the sample or unit of study chosen for the research are academicians from three private universities in Sarawak. Using industry-leading growth with these three internal organisation factors (technological adoption, job autonomy, and supervisor and coworker support) gives access to gathering data supporting the research objective.

The researcher used the G Power formula to determine the number of samples. The number of numerators is four (4). The number of denominators df is 115, while the sample size is 119. The sample size is 200 participants to address the research questions with adequate statistical rigour. The respondents of this research are full-time academicians in three private universities in Sarawak: University Technology Sarawak, Swinburne University of Technology, and Curtin University (Miri Branch).

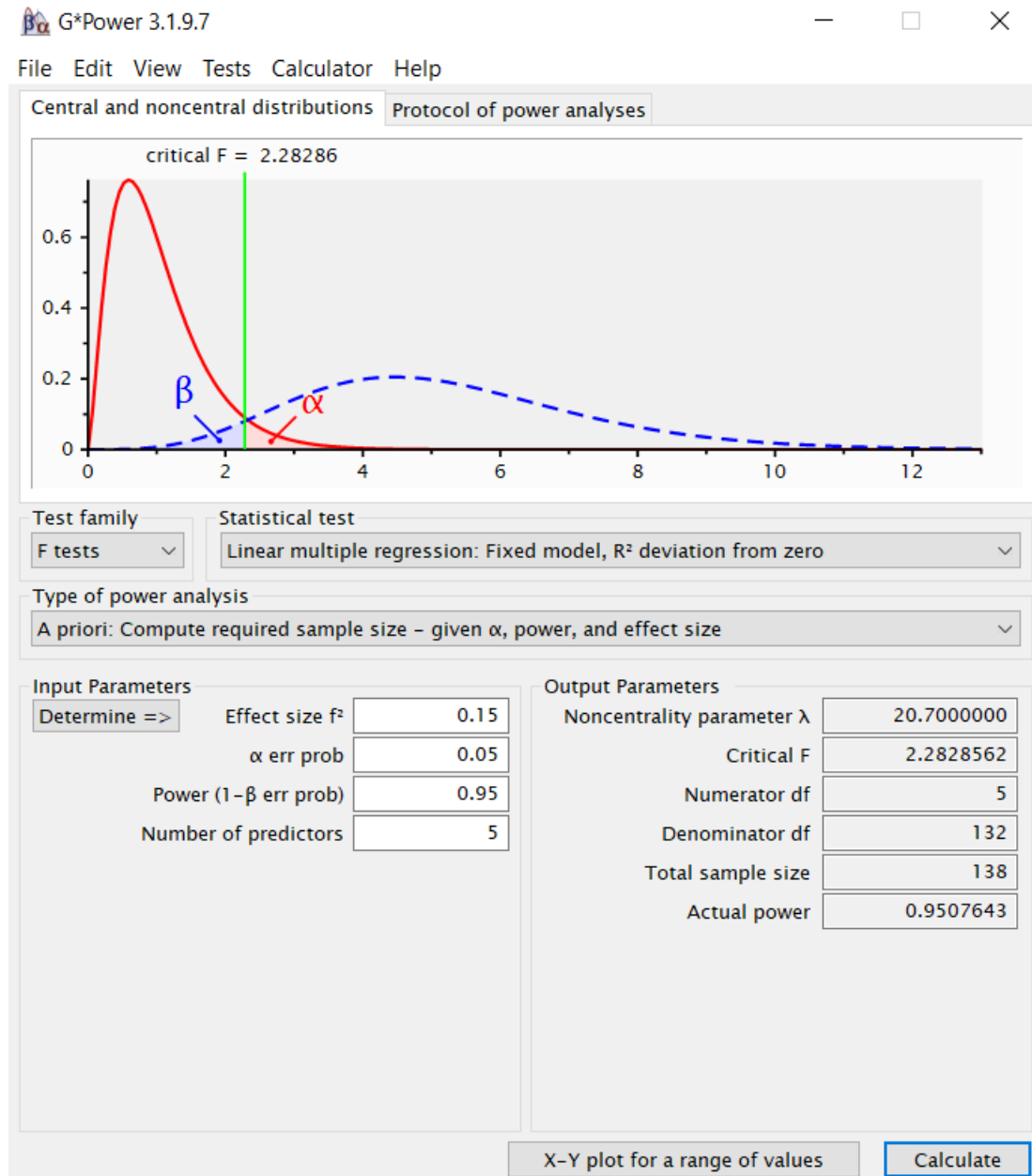


Figure 3.3: G*Power Analysis Showing the Minimum Sample Size Calculation by Power Analysis

Recent studies indicate the advantages of conducting a power analysis to determine the suitable sample size for a study (Hair et al., 2022; Kline, 2017; Hair et al., 2017; Ringle et al., 2019). Based on the study's model segment with the most predictors, this analysis is crucial in establishing the needed sample size (Hair et al., 2014). Essential information such as power, effect size, and significance level is required to calculate the minimum sample size

(Hair et al., 2017). G Power, representing the statistical ability to refute the null hypothesis when it is false correctly, is determined by the 1-error probability (Burns & Burns, 2008). It is crucial to establish the effect of F2 before analysis, with three effect size options: F2 0.02 for minor effects, F2 0.15 for medium effects, and F2 0.35 for significant effects. For a moderate effect size, 0.15 is commonly chosen to determine the appropriate sample size, which is considered suitable power (Hair et al., 2017).

The G*Power analysis screenshot illustrates the essential sample size requirement for this study. The F test within the test family was used, specifically employing multiple linear regression: fixed model, R2 deviation from zero. The chosen type of power analysis was a priori, computing the necessary sample size given α , power, and effect size. The input parameters consisted of an effect size f^2 set at 0.15, α error probability at 0.05, power ($1-\beta$ error probability) at 0.80, and four predictors based on the conceptual model specification, totalling three without a dependent variable. With a moderate effect size of 0.15 and a significance level of 0.05, the analysis indicated a minimum required sample size of 119.

Furthermore, the study adhered to Benter and Chou's (1987) guidelines for determining the minimum sample size. Their recommendation suggested 5 to 10 observations per item in SEM. Considering 55 items, the researcher aimed at seven responses per item to ensure excellent reliability. However, while collecting data, the researchers intended to maximise participant responses, planning to distribute the questionnaire to 300 individuals.

3.3.3 Unit of Analysis

The study aims to influence internal organisational factors and impact employee job commitment among academic staff in private universities in Sarawak, Malaysia. The unit of analysis in this study includes individuals from private universities in Sarawak, specifically:

Swinburne University of Technology of Sarawak representing the southern part of Sarawak, University of Technology Sarawak representing the middle region, and Curtin University representing the northern part of Sarawak. Research in private universities contributes to the broader academic landscape by fostering innovation, addressing specialised areas of study, and potentially driving more immediate practical applications from research outcomes.

3.4 Instrument Development

This pivotal stage involved developing the questionnaire to collect data supporting the study's objectives. The effectiveness, reliability, and response rate of the data were highly dependent on the questionnaire's design, the clarity and precision of the questions, and the thoroughness of the pilot testing process. Therefore, special attention was given to ensuring the validity and relevance of the items to obtain precise and dependable data. Clarity was essential to ensure that both respondents and the researcher could accurately interpret the questions and the corresponding responses. The majority of the questionnaire items were adapted from validated instruments identified during the literature review in Stage 1.

To minimise potential common method bias (CMB), several procedural remedies were implemented during the instrument development phase. First, the questionnaire design followed the recommendations of Podsakoff et al. (2003) to reduce item ambiguity and response bias by using clear, concise and neutral wording. Second, content and face validity were established through expert review by academic and methodological specialists, ensuring that items were conceptually distinct and clearly aligned with the study's constructs (MacKenzie & Podsakoff, 2012). Third, anonymity and confidentiality were assured in the survey instructions to reduce social desirability effects, enhancing the likelihood of candid responses (Podsakoff et al., 2012). Furthermore, the survey structure distributed predictor

and outcome variables across different sections to minimise context-induced bias and reduce potential consistency motifs.

The questionnaire was structured into six (6) sections, labelled Section A through Section B, Parts 1 to 6. Section A captured demographic information, including nine questions related to the respondent's workplace institution, highest educational attainment, and other background details. Importantly, Section A also included employment status as a key demographic variable, which formed the basis for the branching logic applied in the Google Form. Respondents were required to indicate whether they were employed under a permanent or contract full-time status. This selection automatically determined whether they would proceed to Section B, Part 6. Specifically, through Google Form's section-based logic settings, only respondents who identified as contract full-time academic staff were able to view and complete Section B, Part 6. This section included items exploring employment-related experiences specific to contract staff, such as job security, support, access to resources, work-life balance, and career outlook. Respondents who selected "permanent" were automatically directed to the end of the questionnaire, bypassing Section B, Part 6 entirely. This design ensured that only relevant respondents answered questions tailored to their employment context, thereby improving data accuracy and reducing respondent fatigue.

Section B, Part 1 assessed Technology Adoption (TA), covering three dimensions: Ease of Use and User Interface (EUUI), Reliability and Safety (RS), and Efficiency in Task Management. This section contained 18 items. Section B, Part 2 addressed Job Autonomy (JA) with 19 items related to Work Method (WM), Work Scheduling (WS), and Work Criteria Autonomy (WC). Section B, Part 3 focused on Supervisor Support (SS), consisting of nine items covering relationship building, supervisor support for growth, development,

recognition, and appreciation, communication, effective resource allocation, and involvement in decision-making. Section B, Part 4 measured Coworker Support (CS) with eight items emphasising assistance availability and willingness, recognition of accomplishments, empathy, and support for well-being and professional growth. Section B, Part 5 examined Employee Job Commitment (EJC) with 16 items reflecting dedication, satisfaction, and attachment to the organisation. Section B, Part 6, as noted, included 10 items specific to contract full-time academicians, covering perceptions of job security, fulfillment and satisfaction, support and recognition, access to resources, work-life balance, career opportunities, optimism, and motivation.

Responses for all items in Section B (Parts 1 to 6) were rated on a 7-point Likert scale, ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). Table 3.4 summarises the breakdown of the questionnaire items by section and construct.

Table 3.4: The Elements of the Questionnaire

No.	Section	No. of Question	Subtotal
1	Section A		
	Demographic		9
2	Section B Part 1 (Technology Adoption)		18
	I. Ease of Use and User Interface (EUUI)	13	
Table 3.4	Continued		
	II. Reliability and Safety (RS)	2	
	III. Efficiency and Task Management	3	
3	Section B Part 2 (Job Autonomy)		19
	I. Work Method Autonomy (WMA).	7	
	II. Work Scheduling Autonomy (WSA)	5	
	III. Work Criteria Autonomy (WCA)	7	
4	Section B Part 3 (Supervisor Support)		9
	I. Relationship Building	1	
	II. Support From a Supervisor for Growth, Development, Recognition and Appreciation.	3	
	III. Communication	1	
	IV. Effective Resource Allocation	2	
	V. Involvement in Decision-Making.	2	

Table 3.4 continued

5	Section B Part 4 (Coworker Support)	8
I.	Assistance Availability and Willingness	3
II.	Recognition of Accomplishments	2
III.	Showing Care, Empathy and Support for the Well-Being of Personal Development and Professional Growth	3
6	Section B Part 5 (Employee Job Commitment)	16
I.	Dedication	7
II.	Satisfaction	2
III.	Attachment	7
7	Section B Part 6 (Employment Status)	10
I.	Security, Fulfillment and Satisfaction	3
II.	Support, Recognition and Access to Resources	2
III.	Work-Life Balance of Contract Staff	2
IV.	Career, Optimism and Motivation	3
	Total	89

3.4.1. Operational Construct

The technology adoption constructs are operationalised using validated measurement items adapted from Gao et al. (2011) to suit the context of academic staff in private universities in Sarawak.

For example, Ease of Use and User Interface (EUUI) refers to the degree to which users perceive that using the technology requires minimal effort and is easy to comprehend or operate.

Table 3.5: Operational Constructs of Ease of Use and User Interface

EUUI	The digital tools used can enhance my teaching and learning work.	Gao et al. (2011)
	The digital tools used can enhance my consultancy work.	
	The digital tools used can enhance my research and publication work.	
	The digital tools used can enhance my corporate social responsibility work.	
	The digital tools used can enhance my marketing work.	
	The digital tools used can enhance self-education.	
	The digital tools used allow me to complete tasks more quickly.	
	The digital tools are useful for me as an academician.	
	I find digital tools easy to use from anywhere for my teaching and learning work.	
	I find digital tools easy to use from anywhere for my consultancy work.	
	I find digital tools easy to use from anywhere for my research and publication work.	
	I find digital tools easy to use from anywhere for my corporate social responsibility work.	
	I find digital tools easy to use from anywhere for my marketing work.	

Reliability and Safety (RS) refers to the user's beliefs or faith in the degree to which a specific service can be regarded to have no security and privacy threats.

Table 3.6: Operational Construct of Reliability and Safety

RS	I use digital tools because they are secure.	Gao et al. (2011)
	I used the digital tool because I feel confident that the data returned by the system is reliable.	

Efficiency and task management (ETM) is the degree to which the user believes that using such technology would enhance user's performance on a task.

Table 3.7: Operational Constructs of Efficiency and Task Management

ETM	I can easily acquire the skills needed to use any digital tools.	Gao et al. (2011)
	The digital tool makes it easier to keep track of my weekly tasks.	
	I used multiple digital tools to search for data, if necessary.	

The job autonomy constructs are operationalised using measurement items adapted from Pearson and Hall (2016) to reflect the relevant dimensions within the context of this study.

Work Method Autonomy (WMA) is the degree of discretion/choice individuals have regarding the procedures (methods) they utilise in their work.

Table 3.8: Operational Constructs of Work Method Autonomy

WMA	I am free to be creative in my teaching and learning work.	Pearson and Hall. (2016)
	I am free to be creative in my consultancy work.	
	I am free to be creative in my research and publication work.	
	I am free to be creative in my corporate social responsibility work.	
	I am free to be creative in my marketing work.	
	The selection of student-learning activities in my class is under my control.	
	My tasks primarily follow approaches specified by the university.	

Work Scheduling Autonomy (WSA) refers to the extent to which employees perceive they have control over the scheduling, sequencing and timing of their work activities.

Table 3.9: Operational Constructs of Work Scheduling Autonomy

WSA	The scheduling of my teaching and learning time is under my control.	Pearson and Hall. (2016)
	The scheduling of my consultancy time is under my control.	
	The scheduling of my research and publication time is under my control.	
	The scheduling of my corporate social responsibility time is under my control.	
	The scheduling of my marketing activity time is under my control.	

Work Criteria Autonomy (WCA) is how workers can modify or choose the criteria for evaluating their performance.

Table 3.10: Operational Constructs of Work Criteria Autonomy

WCA	Instructional planning is guided by the university's needs.	Pearson and Hall. (2016)
	Teaching and learning do not allow for much flexibility on my part.	
	Consultancy does not allow for much discretion on my part.	
	Research and publication do not allow for much discretion on my part.	
	Corporate social responsibility does not allow for much discretion on my part.	
	Marketing activities do not allow for much discretion on my part.	
	In my situation, I have only limited flexibility in resolving major problems.	

The supervisor support constructs are operationalised using measurement items adapted from Irawan et al. (2019) to capture the relevant dimensions within the context of this study.

Relationship building refers to the supervisor's interpersonal efforts to build trust, offer guidance, and support subordinates in fulfilling their responsibilities through individual attention and constructive feedback.

Table 3.11: Operational Constructs of Relationship Building

RB	My coordinator fosters trusting relationships among staff at the university.	Irawan et al. (2019)
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Support from a supervisor for growth, development, recognition, and appreciation means they help their team members learn and grow, acknowledge their efforts, and show gratitude for their work. This involves offering opportunities for learning and advancement, praising good work, and ensuring employees feel valued and recognised.

Table 3.12: Operational Constructs of Support from a Supervisor for Growth, Development, Recognition and Appreciation

SGDRA	My coordinator supports my career growth within the university.	Irawan et al. (2019)
	My coordinator helps me learn from challenges by turning them into opportunities for improvement.	
	My coordinator recognizes my contributions to the university community.	

Communication refers to exchanging information, ideas, feedback, and instructions to facilitate understanding and collaboration in the workplace. Effective communication ensures clarity of expectations, promotes transparency, resolves conflicts, builds trust, and fosters a positive working relationship between supervisors and employees.

Table 3.13: Operational Constructs of Communication

C	My coordinator rewards me in a manner that makes me feel appreciated for my contributions to the university.	Irawan et al. (2019)
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Effective resource allocation by supervisors involves balancing competing demands, optimising resource utilisation, and adapting allocation strategies to changing circumstances to maximise productivity and outcomes.

Table 3.14: Operational Constructs of Effective Resource Allocation

RA	My coordinator routinely communicates with me to ensure I can develop professionally within the university.	Irawan et al. (2019)
	My coordinator assists me in accessing the necessary resources to perform effectively in my job responsibilities within the university.	

Involvement in decision-making by a supervisor refers to the extent to which they engage their team members in the process of making important decisions that affect their work, roles, and the organisation's overall objectives. This involvement can range from seeking input and feedback from employees to collaboratively making decisions together.

Table 3.15: Operational Constructs of Involvement in Decision-Making

IDM	My coordinator is aware of my career aspirations within the university.	Irawan et al. (2019)
	My coordinator seeks my input when making decisions that impact academic matters within the university.	

The coworker support constructs are operationalised using measurement items adapted from Mandy (2016) to reflect the interpersonal dynamics among academic staff in private universities.

Assistance availability and willingness to help from colleagues refer to the readiness and eagerness of coworkers to provide support, guidance, and resources to each other in the workplace

Table 3.16: Operational Constructs of Assistance Availability and Willingness

AAWH	My colleagues at the university are supportive of my job responsibilities.	Mandy (2016)
	When I encounter challenges, help is readily available from my colleagues at the university.	
	Colleagues at the university are willing to offer assistance to help me excel in my responsibilities to perform the best of my ability.	

Recognition of accomplishments by colleagues refers to acknowledging and appreciating the achievements, contributions, and successes of fellow team members within the workplace.

Table 3.17: Operational Constructs of Recognition of Accomplishments

RA	My colleagues at the university acknowledge my achievements.	Mandy (2016)
	Even if I excel in my responsibilities, my colleagues at the university may not always acknowledge my efforts.	

Showing care, empathy, and support for coworkers' well-being, personal development, and professional growth within the workplace.

Table 3.18: Operational Constructs of Showing Care, Empathy and Support For Well-Being, Personal Development and Professional Growth

CI	My colleagues at the university genuinely care about my overall well-being.	Mandy (2016)
	I sometimes feel that my colleagues at the university show very little concern for my personal well-being.	
	My colleagues at the university respect my opinions.	

The employee job commitment constructs are operationalised using measurement items adapted from Aziz et al. (2021) to capture the key dimensions of commitment among academic staff in private universities in Sarawak.

Dedication refers to the commitment, loyalty, and perseverance an individual demonstrates towards their job or role within the university. It involves being fully engaged, motivated, and invested in performing job duties to the best of one's ability, regardless of challenges or obstacles.

Table 3.19: Operational Constructs of Dedication

D	I am committed to performing my teaching and learning duties to the best of my ability.	Aziz et al. (2021)
	I am committed to performing my consultancy work duties to the best of my ability.	
	I am committed to performing my research and publication work duties to the best of my ability.	
	I am committed to performing my corporate social responsibility work duties to the best of my ability.	
	I am committed to performing my marketing work duties to the best of my ability.	
	I am dedicated to advancing in my career within my current job position at this university.	
	I see myself continuing to grow and develop professionally within my current job role at this university.	

Satisfaction in an individual's job role within the university refers to the degree of contentment, fulfilment, and pleasure experienced from work performed and the overall job environment. It encompasses feelings of accomplishment, pride, and enjoyment derived from completing tasks and achieving goals within the job role.

Table 3.20: Operational Constructs of Satisfaction

S	I feel satisfied with the work I do in my current job position at this university.	Aziz et al. (2021)
	I take pride in the work I accomplish within my job role at this university	

Attachment relates to the emotional connection, sense of belonging, and identification an individual feels towards their specific job or role within the university. It involves feeling emotionally invested in success, progress, and outcomes associated with the job responsibilities and experiencing a sense of connection and loyalty to the organisation and its objectives.

Table 3.21: Operational Constructs of Attachment

A	I feel emotionally invested in the progress of my teaching and learning.	Aziz et al. (2021)
	I feel emotionally invested in the progress of my consultancy work.	
	I feel emotionally invested in the progress of my research and publication work.	
	I feel emotionally invested in the progress of my corporate social responsibility work.	
	I feel emotionally invested in the progress of my marketing work.	
	The thought of leaving my current job position at this university concerns me because of the impact it would have on my career progression.	
	I feel motivated to contribute positively to the goals of my job role within this university.	

The contract full-time employment status related experience constructs are operationalised using measurement items adapted from Simpkin et al. (2019) to reflect the unique challenges and perceptions of contract academic staff in private universities in Sarawak.

Overall satisfaction and well-being as a contract academic staff member related to the sense of security, fulfilment, and satisfaction with the academicians' current position.

Table 3.22: Operational Constructs of Security, Fulfilment and Satisfaction

WJSF	I feel secure in my current contract academic position.	Simpkin et al. (2019)
	I feel respected in my role as a contract academician.	
	I am optimistic about my future career prospects despite being in a contract position.	

The level of support, recognition, and access to resources academicians receive from their colleagues and supervisors in their contract academic role.

Table 3.23: Operational Constructs of Support, Recognition and Access to Resources

SRAR	I experience a sense of fulfilment in my work as a contract academician.	Simpkin et al. (2019)
	I have access to adequate resources to fulfil my duties as a contract academician.	

This point explains the ability to maintain a healthy work-life balance and cope with the demands and pressures of academicians' contract academic roles.

Table 3.24: Operational Constructs of Work-Life Balance of Contract Staff

WLBCS	I am able to maintain a healthy work-life balance as a contract academician.	Simpkin et al. (2019)
	I am able to cope effectively with the demands as a contract academician.	

Optimism is about future career prospects despite being in a contract position and academicians' motivation and engagement in their contract academic position.

Table 3.25: Operational Constructs of Career, Optimism and Motivation

COM	I feel supported by my supervisors as a contract academician.	Simpkin et al. (2019)
	I feel supported by my colleagues in my contract academician role.	
	I feel motivated in my job responsibilities as a contract academician.	

3.5 Data Collection

Online methods were employed to gather information from academics at three private universities in Sarawak. A team of experts validated the study's questionnaire designed for this research. A comprehensive literature review collected secondary data from previous studies and research. The information acquired during this review process was meticulously documented throughout the study, notably in chapter two, where the structured literature review is the foundation for this research.

After developing the questionnaire, a pilot study was conducted involving 30 individuals from the sample population. Simultaneously, it was shared with supervisors and field experts for their insights. The data underwent SmartPLS analysis to assess its effectiveness. Despite the small pilot sample size, all results fell within acceptable ranges, ensuring questionnaire reliability and validity. Feedback received will inform modifications before online availability. This analysis aimed to evaluate the following:

- Individual reliability, testing the loading of each questionnaire item.
- Internal consistency reliability, assessing how effectively the constructs were measured.
- Convergent validity, determining whether the indicators accurately measured the intended variables.

To ensure participant comprehension and reduce exhaustion, the researcher used concise, clear questions and guidance to eliminate ambiguity. Representatives from the three private universities participated in this pilot test. Statistical inference was applied to analyse the reliability and validity of reflective constructs in the model. Two university professors sought expert opinions to validate the questionnaire before formal data collection.

The research needed to adapt and employ innovative methods and tools for data collection. Communication predominantly relied on various channels such as telephone, WhatsApp, Microsoft Teams, and emails. These mediums were utilised to reach out to both universities and individuals, inviting their participation in the survey. A total of 300 questionnaire links was distributed to secure 200 responses. These links were disseminated across multiple e-communication channels within the three private universities in Sarawak.

3.5.1 Online Surveys

Participants chosen to join the population are academicians from three private universities in Sarawak. Participants completed the questionnaire using online platforms for social media platforms, including WhatsApp. They were presented with a survey link. This method allows for a broad reach and convenient participation, as individuals can complete the survey at their own pace and from various locations. The recruitment might involve sending out WhatsApp invitations, sharing the survey link on social media, or collaborating with the academicians from these three universities.

3.5.2 Institutional Collaboration

The participants were recruited based on institutional collaboration. The researchers collaborated with institutions or organisations with access to the desired participant pool. For instance, in this study, the researchers collaborated with University of Technology Sarawak, Swinburne University of Technology, and Curtin University (Miri Branch). It is essential to ensure a specific demographic representation.

3.5.3 Ethical Considerations

This study adhered to ethical guidelines, obtaining approval from three private universities in Sarawak, namely University of Technology Sarawak, Swinburne University of Technology, and Curtin University (Miri Branch). Informed consent was obtained from

all participants before being included in the study. This is to ensure confidentiality and voluntary participation in this study.

3.6 Data Analysis

This study employed both descriptive and inferential statistical techniques to analyse the data collected. Descriptive statistics were performed using IBM SPSS to summarise respondents' demographic profiles. Inferential analysis was conducted using Partial Least Squares Structural Equation Modelling (PLS-SEM) via SmartPLS 4.0, enabling the evaluation of measurement validity, structural relationships, and hypothesis testing within the proposed model.

3.6.1 Statistical Technique

All questionnaires were checked to ensure no missing responses and values. After the data was cleaned, IBM-SPSS version 22.0 and Smart PLS were used to input each questionnaire's data. Both descriptive and inferential analyses were conducted on the data. A descriptive analysis was used to examine the information from Section A: Demographic Profile. The analysis included calculating the number of respondents as a percentage, mean, and other descriptive analyses. The data was also analysed using inferential analysis.

The data was analysed using the SmartPLS software, which employs Partial Least Squares and Structural Equation Modelling (PLS-SEM). This software, as noted by Lohmoller (2013), can simultaneously estimate relationships between constructs and between indicators and their corresponding latent constructs. Given that the research involves hypothesis testing, PLS is preferred, as highlighted by Henseler et al. (2009) and Hair et al. (2011). Its user-friendly interface, easy navigation, and graphical tools make it accessible. The present study opted for PLS-SEM due to its widespread use in contemporary research. PLS-SEM is a causal modelling method that maximises the explained variance for

independent variables. It is particularly well-suited for accurately and efficiently testing relationships between latent variables (Hair et al., 2017) and is primarily employed for theory testing and predicting research outcomes. Before inputting the data into SmartPLS, it will undergo filtering and cleansing based on descriptive and demographic information using spreadsheet software.

Structural Equation Modeling (SEM) harmonises diverse multivariate processes within a single framework, merging fields such as psychology, statistics, epidemiology, biology, and econometrics. It employs measurement theory, factor analysis (latent variables), path analysis, regression, and simultaneous equations, culminating in a comprehensive research tool. The application of SEM in behavioural and social sciences, highlighted by Bollen (1989), elucidates theoretical concepts by revealing connections and insights into their relationships. Additionally, Tenenhaus et al. (2005) outlined two SEM variants, composite-based and covariance-based, which significantly contribute to social and behavioural sciences.

SEM proves beneficial when examining complex multifaceted models that involve measurement errors, offering the capacity to rectify these errors. In PLS-SEM analysis, the initial step involves the measurement model, as the structural model can only proceed once the measurement model establishes appropriate measures (Hair et al., 2017). Within SmartPLS, the measurement model is utilised to assess each item, applying four different measurements within the software.

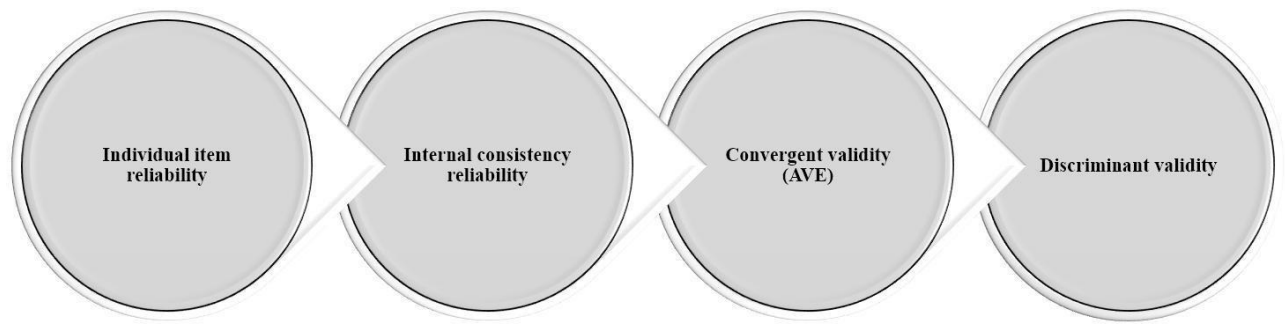


Figure 3.4: Four different measurements analysis

Note: Hair et al., 2014

The initial stage of the measurement analysis involves assessing the individual item's reliability or loading. Urbach and Ahleman (2010) highlight the importance of reliability tests to ensure that items and variables accurately measure their intended constructs. Researchers have suggested a range of acceptable loading indicators, emphasising the maintenance of Average Variance Extracted (AVE) at 0.5 or higher. Failure to meet this criterion will undermine the constructs' convergent validity. Various scholars suggest loading ranges from 0.4 to 0.9 (Hamid et al., 2017) to address this. Hair et al. (2006) introduced a table suggesting that loadings between 0.3 and 0.75 could be acceptable depending on the sample size. They specified a minimum sample size of 350 to accept loadings as low as 0.3. SmartPLS necessitates the execution of outer loading for each construct, enabling the calculation and evaluation of individual reliability, as outlined by Hair et al. (2012) and Hair et al. (2014).

The second phase of the measurement model analysis involves evaluating internal consistency reliability, ensuring that the instrument accurately measures within its designated domain. De Vaus (2002) clarifies that individual responses concerning other scale items are gauged to verify consistency. Cronbach's alpha is a commonly utilised method to assess internal consistency reliability, employing unweighted items (McNeish,

2017). However, Sijtsma (2009) argues that Cronbach's alpha tends to overestimate internal consistency reliability by assuming that all variables are uniformly measured by all indicators, thereby potentially providing less reliable measures (Gortz et al., 2010). In this study, composite reliability, assessed in SmartPLS, was employed to measure internal consistency reliability. This approach evaluates each item individually based on the outer loadings of each construct (Hair et al., 2017).

Next, the evaluation focuses on convergent validity, using the Average Variance Extracted (AVE) as the measurement criterion (Hair et al., 2013). Convergent validity specifically examines whether items measure intended variables unidimensionally and correlate with all other items and latent variables (Urbach & Ahlemann, 2010; Sarstedt et al., 2014; Henseler et al., 2016). According to Hair et al. (2019) and Hair et al. (2013), an accepted AVE value should ideally reach 0.50 or higher to demonstrate satisfactory convergent validity.

The concluding assessment within the measurement model analysis involves examining discriminant validity, which aims to ascertain the uniqueness of each construct, ensuring they do not resemble other constructs (Duarte & Raposo, 2010). The discriminant validity assessment commonly employs the Heterotrait-Monotrait (HTMT) ratio test (Henseler et al., 2015). Urbach and Ahlemann (2010) clarify that, in contrast to convergent validity, discriminant validity evaluates the extent to which one construct unintentionally measures another.

Additionally, collinearity was examined to gauge the correlation levels between indicators. As per Hair et al. (2011), an outer VIF (Variance Inflation Factor) below five indicates an absence of collinearity issues. Comprehensive details and analyses of all these results are documented and deliberated upon in Chapter 4.

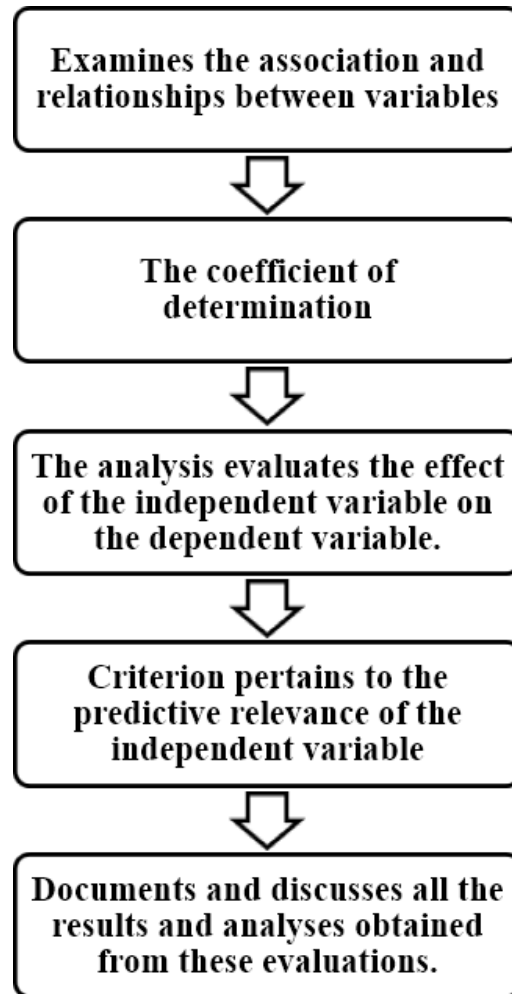


Figure 3.5: Evaluation of the structural model

Note: Kay Wong (2013) and Hair et al., (2019)

The evaluation of the structural model is followed by utilising the software's structural modelling functions in conjunction with the five criteria outlined by Kay Wong (2013) and Hair et al. (2019). Initially, the analysis examines the association and relationships between variables, determining the direction and impact (positive/negative). The T statistic is recorded, with a value exceeding 1.96, indicating the presence of a significant relationship. The corresponding P value verifies the hypothesis. The second measure, the coefficient of determination (R^2), assesses the explained variance between dependent and independent variables. A value of 0.67 signifies a substantial relationship.

Subsequently, the analysis evaluates the effect of the independent variable on the dependent variable. An effect measuring or equalling 0.35 signifies a significant effect. In contrast, an effect greater than or equal to 0.15 is considered medium, and an effect less than or equal to 0.03 is categorised as minor. The fourth criterion pertains to the predictive relevance of the independent variable. A result greater than 0 indicates that the independent variables possess predictive power or relevance for the dependent variable, enabling the forecasting or predicting of future trends. Chapter 4 comprehensively documents and discusses all the results and analyses obtained from these evaluations.

3.7 Chapter Summary

The study explored how internal organisational factors impact employee job commitment among academic staff in Private Universities in Sarawak, Malaysia. Three hypotheses were assessed through a quantitative approach, adopting a positivist perspective with an objectivist ontology employing deductive reasoning to test these hypotheses. Both primary and secondary data were collected, encompassing survey responses and previous research findings from the private universities in Sarawak. A meticulously planned approach was followed to ensure efficient data collection. The survey questionnaire was crafted using similar questions found in previous studies related to independent and dependent variables rigorously tested for reliability and validity during a pilot phase. A total of 300 questionnaires were distributed according to the sampling plan. Subsequently, Smart PLS software was utilised to analyse the collected data and test the hypotheses, culminating in the final chapters of the research.

CHAPTER 4

RESULT

4.1 Introduction

In this chapter, the result of the descriptive test is presented. Subsequently, the methodology outlines the implementation and detailed presentation of the determined test result. This systematic process will bolster the comprehensive analysis of all the research hypotheses, laying a strong foundation to guide the discussion of the research findings in the next chapter.

4.2 Descriptive Statistics

This section provides a comprehensive descriptive analysis of each variable utilised in the study, which focuses on the influence of internal organisational factors on employee job commitment among academic staff in private universities in Sarawak, Malaysia. The analysis is based on data from questionnaires distributed to academic staff respondents.

Descriptive statistics were conducted using IBM-SPSS version 22.0, employing mean, median, maximum, and minimum values to assess the data distribution. The variables included in this study are Job Autonomy (JA), Technological Adoption (TA), Supervisor Support (SS), Coworker Support (CS), Employment Status (ES), and Employee Job Commitment (EJC).

The study utilised SmartPLS (PLS-SEM) to evaluate the structural and measurement models for inferential analysis and hypothesis testing. This approach ensures a robust assessment of the relationships between internal organisational factors and employee job commitment.

These analyses provide vital insights into the organisational factors influencing employee job commitment and enhance our understanding of the dynamics within private universities in Sarawak, Malaysia.

Table 4.1: Descriptive Statistics Analysis

Demographic Factor	Category/Range	Frequency	Per cent
Ethnicity	Bidayuh	1	0.5
	Chinese	136	68.0
	Iban	20	10.0
	Indian	4	2.0
	Malay	33	16.5
	Melanau	4	2.0
	Other	2	1.0
Age	20-29	2	1.0
	30-39	77	38.5
	40-49	107	53.5
	50-59	14	7.0
Gender	Female	129	64.5
	Male	71	35.5
Religion	Buddha	33	16.5
	Christian	125	62.5
	Hindhu	4	2.0
	Islam	37	18.5
	Other	1	0.5
Education Background	Degree	2	1.0
	Doctor of Business Administration (DBA)	2	1.0

Table 4.1 continued

	Doctor of Philosophy(PhD)	122	61.0
	Master's degree	74	37.0
Marital Status	Married	137	68.5
	Single	63	31.5
University	Curtin University	53	26.5
	Swinburne University of Technology Sarawak	115	57.5
	University of Technology Sarawak	32	16
Employment Type	Permanent	153	76.5
	Contract (full-time)	47	23.5
Administrative Position	Yes	36	18.0
	No	164	82.0

Table 4.1 offers a comprehensive overview of the key descriptive statistics for a study dataset involving respondents from diverse backgrounds, with the following key demographic details.

The majority of respondents' ethnicities are Chinese (68.0%), followed by Malay (16.5%) and Iban (10.0%). Smaller groups include Indian (2.0%), Melanau (2.0%), and other ethnicities such as Bidayuh and Other, each contributing 0.5%. This reflects the multi-ethnic composition of Sarawak, with Chinese and Malay ethnic groups being dominant.

The largest age group is 40–49 (53.5%), followed by 30–39 (38.5%), indicating that most respondents are mid-career professionals. The remaining respondents are 50–59 (7.0%) and 20–29 (1.0%).

Female respondents make up 64.5%, while males represent 35.5%. This highlights a higher participation rate among female academic staff in the study.

The majority of respondents identify as Christian (62.5%), followed by Islam (18.5%) and Buddhism (16.5%). A smaller proportion of respondents identify as Hindu (2.0%) or belong to other religious groups (0.5%).

Most respondents hold a Doctor of Philosophy (PhD) (61.0%), followed by a Master's degree (37.0%). A small number of respondents have a Degree (1.0%) or a Doctor of Business Administration (DBA) (1.0%). This indicates that the sample primarily consists of highly qualified academic professionals.

Most respondents are married (68.5%), while 31.5% are single. This distribution reflects a typical demographic trend among working professionals.

Respondents are distributed across three private universities in Sarawak, with the majority (57.5%) from Swinburne University of Technology Sarawak, followed by Curtin University (26.5%) and University of Technology Sarawak (16.0%). This distribution reflects a balanced representation of academic staff from the major private universities in the region.

Most respondents hold permanent employment positions (76.5%), with a smaller group on contractual full-time positions (23.5%). This distribution reflects employment stability among academic staff.

Most respondents (82.0%) do not hold administrative positions, while 18.0% hold administrative positions. This indicates that most participants are focused on academic rather than managerial roles.

The demographic profile highlights the diversity and professional characteristics of the academic staff in Sarawak's private universities. The sample predominantly includes mid-career professionals of Chinese ethnicity who are highly educated and mostly hold permanent positions. This provides a rich context for exploring the influence of organisational factors on employee job commitment.

4.3 Inferential Statistics

This section presents the inferential statistical analyses undertaken using Partial Least Squares Structural Equation Modelling (PLS-SEM) via SmartPLS. The analyses were conducted to test the study's hypotheses and to examine the relationships between the constructs. In order to ensure the reliability, validity and overall robustness of the model, appropriate assessments of both the measurement and structural models were performed. These included evaluations of model fit, explanatory power and the presence of moderating effects. Collectively, the results offer a comprehensive insight into the significance and strength of the proposed relationships within the research model.

4.3.1 Reliability and Validity Assessment

The reliability and validity of the measurement model, Cronbach's alpha, composite reliability (ρ_A and ρ_C), and average variance extracted (AVE) were assessed for each construct.

Table 4.2: Reliability and Validity Assessment

Construct	Cronbach's Alpha	Rho_A	Composite Reliability (rho_C)	AVE	Note
Technology Adoption	0.938	0.950	0.946	0.503	High reliability, meets AVE threshold.
Job Autonomy	0.863	0.865	0.893	0.513	Reliable and valid
Supervisor Support	0.920	0.936	0.933	0.609	Excellent reliability and validity
Coworker Support	0.853	0.871	0.892	0.584	Reliable, strong convergent validity
Employee Job Commitment	0.872	0.905	0.897	0.525	Robust reliability and validity

Note. AVE = average variance extracted; ρ_{C} = composite reliability. Reliability is deemed adequate if Cronbach's alpha and ρ_{C} exceed 0.70. AVE values above 0.50 indicate convergent validity.

The results indicate that all constructs achieve acceptable internal consistency and reliability levels. Coworker Support demonstrates strong reliability with Cronbach's alpha = 0.853, rho_A = 0.871, and rho_C = 0.892. The AVE value of 0.584 exceeds the recommended threshold of 0.50, indicating adequate convergent validity. Employee Job Commitment shows robust reliability, with Cronbach's alpha = 0.872, rho_A = 0.905, and rho_C = 0.897. The AVE value of 0.525 also supports convergent validity. Job Autonomy yields reliability values of Cronbach's alpha = 0.863, rho_A = 0.865, and rho_C = 0.893, with an AVE of 0.513, further confirming the construct's reliability and validity. Supervisor

support has excellent reliability scores, with Cronbach's alpha = 0.920, rho_A = 0.936, and rho_C = 0.933. An AVE of 0.609 highlights its strong convergent validity. Technology adoption achieves high reliability with Cronbach's alpha = 0.938, rho_A = 0.950, and rho_C = 0.946. Although its AVE (0.503) is close to the minimum threshold, it meets the criteria for convergent validity. These results confirm the constructs' internal consistency, reliability and convergent validity, meeting the criteria for measurement model adequacy in structural equation modelling.

4.3.2 Fornell-Larcker Criterion

According to the Fornell-Larcker criterion, discriminant validity is established when the square root of a construct's AVE (diagonal values) is more significant than its correlations with other constructs (off-diagonal values). Table 4.3 presents the Fornell-Larcker Criterion matrix used to assess discriminant validity.

Table 4.3: Fornell-Larcker Criterion Matrix for Discriminant Validity

Construct	Coworker Support	Employee Job Support	Job Autonomy	Supervisor Support	Technology Adoption
Coworker Support	0.764	0.245	0.180	0.599	0.338
Employee Job Commitment	0.245	0.724	0.511	0.311	0.465
Job Autonomy	0.180	0.511	0.716	0.354	0.536
Supervisor Support	0.599	0.311	0.354	0.780	0.427
Technology Adoption	0.338	0.465	0.536	0.427	0.710

Note. Diagonal values (in bold) represent the square roots of AVE. Off-diagonal values represent correlations between constructs. Discriminant validity is confirmed when diagonal values exceed the corresponding inter-construct correlations.

The diagonal values (square roots of AVE) are more significant than the corresponding inter-construct correlations, confirming that all constructs exhibit adequate discriminant validity. For the coworker support, the square root of its AVE is 0.764, which is greater than its correlations with other constructs (e.g., 0.245 with Employee Job Commitment and 0.599 with Supervisor Support). This indicates strong discriminant validity. Regarding employee commitment, the square root of its AVE is 0.724, more significant than its correlations with other constructs (e.g., 0.245 with Coworker Support and 0.511 with Job Autonomy).

Discriminant validity is satisfied. For job autonomy, the square root of its AVE is 0.716, more significant than its correlations with other constructs (e.g., 0.511 with Employee Job Commitment and 0.354 with Supervisor Support). Discriminant validity is established.

For the supervisor's support, the square root of its AVE is 0.780, exceeding correlations with all other constructs (e.g., 0.599 with Coworker Support and 0.427 with Technology). This satisfies discriminant validity. For adopting technology, the square root of its AVE is 0.710, which is higher than its correlations with other constructs (e.g., 0.338 with Coworker Support and 0.465 with Employee Job Commitment). Discriminant validity is confirmed. All the constructs satisfy the Fornell-Larcker criterion, indicating that they are sufficiently distinct from one another.

4.3.3 Heterotrait-Monotrait Ratio (HTMT)

The Heterotrait-Monotrait (HTMT) ratio was used to assess discriminant validity. As shown in Table 4.4, all HTMT values are below the conservative threshold of 0.85, indicating that discriminant validity is established among all constructs.

Table 4.4: HTMT Results for Discriminant Validity

Construct Pair	HTMT Value
Employee Job Commitment ↔ Coworker Support	0.268
Job Autonomy ↔ Coworker Support	0.217
Job Autonomy ↔ Employee Job Commitment	0.549
Supervisor Support ↔ Coworker Support	0.676
Supervisor Support ↔ Employee Job Commitment	0.295
Supervisor Support ↔ Job Autonomy	0.382
Technology ↔ Coworker Support	0.404
Technology ↔ Employee Job Commitment	0.456
Technology ↔ Job Autonomy	0.585
Technology ↔ Supervisor Support	0.444

Note. The table presents the Heterotrait-Monotrait (HTMT) ratio values for assessing discriminant validity. Discriminant validity is established when HTMT values fall below the recommended thresholds: $HTMT < 0.90$ for conceptually distinct constructs and $HTMT < 0.85$ for more stringent criteria. All reported HTMT values are within acceptable limits, supporting adequate discriminant validity between constructs.

All HTMT values are well below the threshold of 0.85, with the highest value being 0.676 (Supervisor Support ↔ Coworker Support). This indicates that the constructs are distinct and do not exhibit excessive overlap. Therefore, discriminant validity is supported according to the HTMT criterion.

4.3.4 Structural Model Assessment (Inner Model) Structural Model Results

Figure 4.1 presents the structural model results for the full sample, showing the direct relationships between technology adoption, job autonomy, supervisor support, coworker support, and employee job commitment.

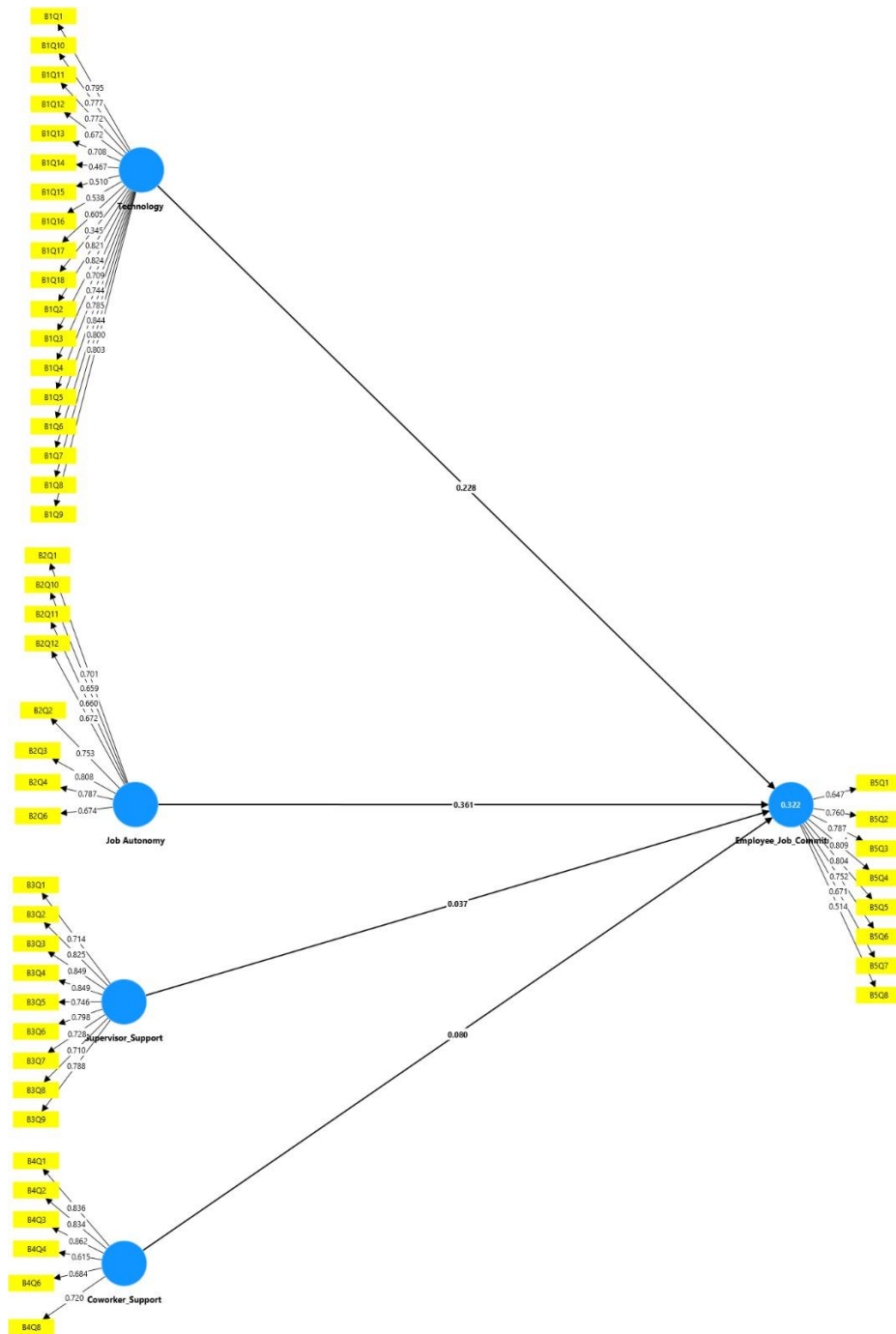


Figure 4.1: Structural Model Results (Full Sample) showing Standardized Path Coefficients and indicator loadings. The model was estimated using PLS-SEM. Path coefficients represent the strength of the direct relationships between technology adoption, job autonomy, supervisor support, coworker support and employee job commitment. The R^2 value indicates the variance explained in Employee Job Commitment.

The standardised path coefficients are displayed on the arrows connecting the constructs, indicating the strength and direction of each relationship. The R^2 value for Employee Job Commitment is 0.322, meaning that 32.2% of the variance in job commitment is explained by the four predictors. The results highlight that technology adoption and job autonomy have stronger positive effects, while supervisor support and coworker support show smaller effects.

Table 4.5: Results of Structural Model Analysis: Path Coefficients, Significance, and Moderation Effects of Employment Status on Employee Job Commitment

Predictor	Path Coefficient (β / β)	t-value	p-value	Results
The adoption of technology significantly influences the level of employee job commitments.	0.228	2.328	0.020	Significant positive effect
Job autonomy has a positive effect on employee job commitment.	0.361	3.79	< .001	Significant positive effect
Supervisor support is positively linked to employee job commitment.	0.037	0.285	0.776	Not significant
Coworker support has a positive relationship with employee job commitment.	0.08	0.811	0.418	Not significant

Table 4.5 continued

Employment status moderates the relationship between technology adoption and employee job commitment.	0.261	3.266	0.001	Moderate effect observed
	0.479	1.373	0.170	No Moderation
Employment status moderates the relationship between job autonomy and employee job commitment.	0.312	3.420	0.001	Moderate effect observed
	0.137	0.462	0.644	No Moderation
Employment status moderates the relationship between supervisor support and employee job commitment.	0.160	1.315	0.188	No Moderation
	0.215	0.465	0.642	No Moderation
Employment status moderates the relationship between coworker support and employee job commitment.	0.065	0.580	0.562	No Moderation
	0.143	0.624	0.533	No Moderation

The relationships between predictors (coworker support, job autonomy, supervisor support, and technology adoption) and employee job commitment were tested. The moderation effects of employment status (contract full-time vs. permanent) on the relationships between predictors (coworker support, job autonomy, supervisor support, and technology adoption) and employee job commitment were tested using PLS-SEM. Path

coefficients (β), standard errors, t-values, and p-values were computed using bootstrapping with 5,000 resamples.

Technology adoption has a significant positive relationship with employee job commitment ($\beta = 0.228$, $t = 2.328$, $p = .020$). This indicates that greater technology adoption is moderately associated with higher employee job commitment.

Job autonomy has a significant positive relationship with employee job commitment ($\beta = 0.361$, $t = 3.79$, $p < .001$). This suggests that increased job autonomy is associated with a more significant employee job commitment.

The relationship between supervisor support and employee job commitment is insignificant ($\beta = 0.037$, $t = 0.285$, $p = .776$). This finding suggests that supervisor support does not significantly predict employee job commitment.

Furthermore, the relationship between coworker support and employee job commitment is insignificant ($\beta = 0.08$, $t = 0.811$, $p = .418$). This indicates that coworker support does not directly impact employee job commitment.

For permanent employees, the relationship between technology adoption and employee job commitment is significant ($\beta = 0.261$, $t = 3.266$, $p = .001$). However, for contract full-time employees, the relationship is not significant ($\beta = 0.479$, $t = 1.373$, $p = .170$). This suggests that the moderating effect of employment status is evident in this relationship, with technology adoption having a more substantial influence on job commitment for permanent employees.

For permanent employees, the relationship between job autonomy and employee job commitment is significant ($\beta = 0.312$, $t = 3.420$, $p = .001$). In contrast, for contract full-time employees, the relationship is not significant ($\beta = 0.137$, $t = 0.462$, $p = .644$). This indicates

that employment status moderates this relationship, with job autonomy having a stronger impact on job commitment among permanent employees.

For permanent employees, the relationship between supervisor support and employee job commitment is insignificant ($\beta = 0.160$, $t = 1.315$, $p = .188$). Similarly, for contract full-time employees, the relationship is not significant ($\beta = 0.215$, $t = 0.465$, $p = .642$). These results indicate that employment status does not moderate the relationship between supervisor support and employee job commitment.

For permanent employees, the relationship between coworker support and employee job commitment is insignificant ($\beta = 0.065$, $t = 0.580$, $p = .562$). Similarly, for contract full-time employees, the relationship is not significant ($\beta = 0.143$, $t = 0.624$, $p = .533$). These findings suggest that employment status does not moderate the relationship between coworker support and employee job commitment.

Technology adoption and job autonomy positively influence employee job commitment, supporting their hypotheses. However, supervisor and coworker support do not significantly impact employee job commitment, resulting in unsupported hypotheses for these predictors. Technology adoption and job autonomy positively influence employee job commitment. However, employment status moderates these relationships, with significant effects observed only for permanent employees. In contrast, employment status does not moderate the relationship between supervisor or coworker support and employee job commitment.

4.3.5 R-square and adjusted R-square

The coefficient of determination (R^2) and the adjusted R^2 are employed to evaluate the overall explanatory power of the model. These statistics reflect the extent to which variance in the dependent variable is accounted for by the independent variables.

Table 4.6: R-square and adjusted R-square

	R-square	R-square adjusted
Employee Job Commitment	0.322	0.308

The coefficient of determination (R^2) for the dependent variable, employee job commitment, is 0.322, indicating that approximately 32.2% of the variance in employee job commitment can be explained by the predictor variables (coworker support, job autonomy, supervisor support, and technology adoption). The adjusted R^2 value is 0.308, which accounts for the number of predictors in the model and provides a more accurate measure of the explanatory power, adjusting for potential overfitting. This suggests that the model has a moderate level of explanatory power.

4.3.6 f-square values

The f^2 effect sizes for the relationships between the independent variables and employee job commitment were calculated to assess the relative impact of each predictor on the dependent variable.

Table 4.7: f-square Values

	f-square
Technology -> Employee Job Commitment	0.049
Coworker Support -> Employee Job Commitment	0.006
Job Autonomy -> Employee Job Commitment	0.132
Supervisor_Support -> Employee Job Commitment	0.001
Coworker Support -> Employee Job Commitment	0.006

According to Cohen's (1988) guidelines for f^2 values (0.02 = small effect, 0.15 = medium effect, 0.35 = large effect), the results are as follows: Coworker support has a negligible effect on employee job commitment ($f^2 = 0.006$). Job autonomy demonstrates a small to medium effect on employee job commitment ($f^2 = 0.132$). Supervisor support has a

negligible effect on employee job commitment ($f^2 = 0.001$). Technology adoption shows a small effect on employee job commitment ($f^2 = 0.049$). These findings indicate that job autonomy had the most substantial relative impact on employee job commitment, followed by technology adoption. The effects of coworker support and supervisor support are minimal.

4.3.7 Collinearity Assessment VIF Results Across Models

The VIF values for the overall (complete) model range between 1.458 and 1.780. These values are well below the critical threshold of five, indicating no multicollinearity concerns across the predictors (coworker support, job autonomy, supervisor support, and technology adoption). This suggests the predictors are independent and do not show significant redundancy in explaining the dependent variable, employee job commitment.

Table 4.8: Collinearity Assessment VIF Results for Permanent, Contract Full-time and Complete Models

Path (Variable)	Complete Model VIF	Permanent Employees VIF	Contract Full-time VIF	Collinearity Status
Coworker Support → Employee Job Commitment	1.598	1.497	2.830	No collinearity issues
Job Autonomy → Employee Job Commitment	1.458	1.462	2.144	No collinearity issues
Supervisor Support → Employee Job Commitment	1.780	1.578	3.369	No collinearity issues (but moderate in contract full-time)

Table 4.8: continued

Technology →	1.577	1.419	3.803	No collinearity issues
Employee Job				(but moderate in
Commitment				contract full-time)

Similar to the complete model, the VIF values for the permanent employee group range between 1.419 and 1.578. These results confirm that no multicollinearity issues exist for this subgroup, ensuring that the relationships between predictors and employee job commitment can be interpreted confidently. In the contract full-time employee group, the VIF values are higher, ranging from 2.144 to 3.803. Although still below the threshold of five, the relatively higher values for "supervisor support" (VIF = 3.369) and "technology adoption" (VIF = 3.803) indicate moderate multicollinearity. Researchers should consider this potential overlap when interpreting these predictors' effects on employee job commitment. Across all models (complete, permanent, and contract full-time), the VIF values remain below the threshold of five, suggesting no severe multicollinearity issues. However, the contract full-time group shows moderate multicollinearity for specific predictors, which should be considered in interpreting results. The predictors demonstrate sufficient independence in their contributions to employee job commitment.

4.3.8 Hypothesis Testing

The results of hypothesis testing are presented to assess the significance and direction of the relationships proposed in the research model. Structural equation modelling via SmartPLS was employed to determine the statistical support for each hypothesis.

Table 4.9: Result of the Hypothesis Testing

Predictor	Path Coefficient (β / β)	t-value	p-value	Interpretation	Conclusion
H1	0.228	2.328	0.020	Significant positive effect	Supported
H2	0.361	3.79	< .001	Significant positive effect	Supported
H3	0.037	0.285	0.776	Not significant	Not supported
H4	0.08	0.811	0.418	Not significant	Not supported
H5	0.261	3.266	0.001	Yes	Supported
	0.479	1.373	0.170	No	Not supported
H6	0.312	3.420	0.001	Yes	Supported
	0.137	0.462	0.644	No	Not supported
H7	0.160	1.315	0.188	No	Not supported
	0.215	0.465	0.642	No	Not supported
H8	0.065	0.580	0.562	No	Not supported
	0.143	0.624	0.533	No	Not supported

Note. Significant: $p < .05$. Not significant: $p \geq .05$. Supported: The hypothesis is considered supported when the path coefficient is statistically significant.

Hypothesis 1: Adoption of technology significantly influences the level of employee job commitments.

Technology adoption demonstrates a statistically significant positive relationship with employee job commitment ($\beta = 0.228$, $t = 2.328$, $p = .020$). H1 is supported. The findings indicate that adopting technology contributes to higher levels of job commitment among employees.

Hypothesis 2: Job autonomy has a positive effect on employee job commitment.

Job autonomy has a statistically significant positive relationship with employee job commitment ($\beta = 0.361$, $t = 3.790$, $p < .001$). H2 is supported. Employees who experience higher job autonomy tend to exhibit greater levels of job commitment, aligning with existing autonomy and engagement theories.

Hypothesis 3: Supervisor support is positively linked to employee job commitment.

The relationship between supervisor support and employee job commitment is not statistically significant ($\beta = 0.037$, $t = 0.285$, $p = .776$). H3 is not supported. This implies that supervisor support does not significantly predict employee job commitment in this context.

Hypothesis 4: Coworker support has a positive relationship with employee job commitment.

The relationship between coworker support and employee job commitment is not statistically significant ($\beta = 0.080$, $t = 0.811$, $p = .418$). H4 is not supported. This suggests that coworker support does not significantly influence employee job commitment in this study.

Hypothesis 5: Employment status moderates the relationship between technological adoption and employee job commitment.

For permanent employees, the relationship between technological adoption and employee job commitment is significant ($\beta = 0.261$, $t = 3.266$, $p = .001$). However, for contract full-time employees, the relationship is not significant ($\beta = 0.479$, $t = 1.373$, $p = .170$). This indicates that the moderating effect of employment status is evident in this relationship.

Hypothesis 6: Employment status moderates the relationship between job autonomy and employee job commitment.

For permanent employees, the relationship between job autonomy and employee job commitment is significant ($\beta = 0.312$, $t = 3.420$, $p = .001$). In contrast, for contract full-time employees, the relationship is not significant ($\beta = 0.137$, $t = 0.462$, $p = .644$). This suggests that the influence of job autonomy on employee job commitment is moderated by employment status.

Hypothesis 7: Employment status moderates the relationship between supervisor support and employee job commitment.

For permanent employees, the relationship between supervisor support and employee job commitment is insignificant ($\beta = 0.160$, $t = 1.315$, $p = .188$). Similarly, for contract full-time employees, this relationship is also not significant ($\beta = 0.215$, $t = 0.465$, $p = .642$). Therefore, no moderating effect of employment status is observed in this relationship.

Hypothesis 8: Employment status moderates the relationship between coworker support and employee job commitment.

For permanent employees, the relationship between coworker support and employee job commitment is insignificant ($\beta = 0.065$, $t = 0.580$, $p = .562$). Similarly, for contract full-time employees, this relationship is also not significant ($\beta = 0.143$, $t = 0.624$, $p = .533$). Thus, there is no evidence of moderation by employment status for this relationship.

These results highlight that job autonomy and technology adoption significantly predict employee job commitment, while coworker support and supervisor support do not exhibit significant effects. These findings partially support the theoretical framework and emphasise the role of workplace autonomy and technological resources in fostering employee commitment. Employment status was found to moderate the relationships between technological adoption and job autonomy with employee job commitment but did not moderate the relationships involving supervisor support or coworker support. This highlights

the differing impacts of employment status on how certain work-related factors influence employee commitment.

4.3.9 Multigroup Analysis (MGA)

Multigroup Analysis (MGA) was conducted to assess whether the relationships between the independent variables (coworker support, job autonomy, supervisor support, and technology adoption) and employee job commitment differed between permanent and contract full-time employees.

Table 4.10: Multigroup Analysis (MGA) Results: Differences in Path Coefficients
Between Permanent and Contract Full-Time Employees

Predictor	Path Coefficient Difference (Permanent - Contract Full-Time)	One- Tailed p-value	Two- Tailed p-value	Conclusion
Technology Adoption → Employee Job Commitment	-0.217	0.752	0.496	No significant difference between groups.
Job Autonomy → Employee Job Commitment	0.175	0.269	0.539	No significant difference between groups.
Supervisor Support → Employee Job Commitment	-0.055	0.591	0.819	No significant difference between groups.
Coworker Support → Employee Job Commitment	-0.077	0.664	0.671	No significant difference between groups.

Technology Adoption → Employee Job Commitment: The difference in path coefficients is -0.217, with a one-tailed p-value of 0.752 and a two-tailed p-value of 0.496,

indicating that the relationship between technology adoption and employee job commitment does not differ significantly between permanent and contract full-time employees.

Job Autonomy → Employee Job Commitment: The path coefficient difference is 0.175, with a one-tailed p-value of 0.269 and a two-tailed p-value of 0.539, suggesting no significant difference in the effect of job autonomy on employee job commitment between the two groups.

Supervisor Support → Employee Job Commitment: The difference in path coefficients is -0.055, with a one-tailed p-value of 0.591 and a two-tailed p-value of 0.819. This result indicates that supervisor support does not significantly impact employee job commitment differently across the two groups.

Coworker Support → Employee Job Commitment: The difference in path coefficients between permanent and contract full-time employees is -0.077, with a one-tailed p-value of 0.664 and a two-tailed p-value of 0.671. This indicates that the relationship does not differ significantly between the two groups.

The results of the MGA indicated no significant differences in the relationships between the predictors (coworker support, job autonomy, supervisor support, and technology adoption) and employee job commitment for both permanent and contract full-time employees.

Although the MGA revealed no significant group differences, the structural model demonstrated notable moderation effects within the full sample, particularly for permanent employees, requiring further explanation.

The structural model analysis indicated that employment status moderated the relationships between technology adoption and job autonomy with employee job commitment, particularly among permanent employees. However, the Multi-Group

Analysis (MGA) did not identify statistically significant differences between permanent and contract full-time employees. This divergence may be attributed to the differing statistical foundations of interaction-based moderation testing and MGA within the PLS-SEM framework.

Moderation testing using interaction terms evaluates whether the relationship between an independent variable and a dependent variable varies as a function of a moderator variable across the full sample (Hair et al., 2021). In contrast, MGA examines whether the path coefficients differ significantly between predefined groups (e.g., permanent versus contract employees), a process that often necessitates substantial differences in path strength or balanced group sizes to achieve statistical significance (Henseler, 2012; Sarstedt et al., 2011).

While the structural model revealed significant moderation effects within the full sample, highlighting stronger influences of technology adoption and job autonomy among permanent employees, the absence of statistically significant differences in the MGA suggests that these effects, although varying in magnitude, operate in a similar directional pattern across employment types.

This finding implies that internal organisational factors, such as technology adoption and job autonomy, may exert a stronger practical influence on permanent employees but do not differ statistically when comparing the two employment groups (Hair et al., 2021; Matthews, Hair, & Matthews, 2018).

4.4 Chapter Summary

This chapter examined the relationships between key predictors, including coworker support, job autonomy, supervisor support, and technology adoption, and their impact on employee job commitment. Additionally, it explored the moderating role of employment

status (contract full-time vs. permanent) in these relationships. The analysis used advanced statistical techniques to test both direct and moderating effects. The chapter aimed to understand the influence of workplace factors on employee job commitment, focusing on how employment status might alter these effects. A series of hypotheses were tested, revealing that job autonomy and technology adoption significantly impacted permanent employees' job commitment. At the same time, coworker and supervisor support did not show significant relationships.

Furthermore, employment status significantly moderates the relationships between job autonomy and technology adoption with employee job commitment, but only for permanent employees. The moderation effects for coworker support and supervisor support were not supported. The chapter also reported the variance inflation factor (VIF) values, which indicated no multicollinearity issues among the predictors, ensuring the model's reliability. The R^2 value indicated that the model explains approximately 32.2% of the variance in employee job commitment, suggesting a moderate explanatory power.

These results provide valuable insights into the factors that influence employee job commitment and highlight the importance of considering employment status when evaluating the impact of workplace dynamics. The analysis contributes to a deeper understanding of how various workplace factors interact and influence job commitment, offering insights that employers and policymakers can apply to improve employee engagement and retention strategies.

CHAPTER 5

DISCUSSION OF THE FINDINGS

5.1 Introduction

This chapter presents a detailed analysis and interpretation of the study's findings, focusing on the relationships between internal organisational factors and employee job commitment, as well as the moderating role of employment status. The results of hypothesis testing are summarised, followed by a comprehensive discussion of each hypothesis about existing theories and prior empirical research. The chapter highlights how technology adoption and job autonomy significantly influence job commitment, while also examining the nuanced effects, or lack thereof, of supervisor and coworker support. Special attention is given to how employment status differentiates these relationships, offering insights into the diverse experiences of permanent and contract full-time academics within private universities.

5.2 Summary of the Study

The findings of this study revealed intricate dynamics between internal organisational factors and employee job commitment, with a specific focus on the moderating role of employment status. Technology adoption and job autonomy significantly influenced job commitment, particularly among permanent employees. In contrast, the expected roles of supervisor and coworker support did not show statistically significant effects, suggesting that their influence might be context-dependent or mediated by other organisational dynamics.

The moderating role of employment status was highlighted in this study. Specifically, employment status significantly influenced the relationships between technology adoption

and job commitment, as well as between job autonomy and job commitment. These moderating effects indicate that permanent employees respond more positively to technological adoption and autonomy than their contract counterparts. The results indicate disparities in how organisational initiatives impact employees with different employment arrangements.

Further analysis revealed that employment status did not moderate supervisor and coworker support relationships. This unexpected result challenges traditional assumptions regarding the uniform importance of social support in fostering job commitment and calls for a deeper exploration of organisational culture and individual preferences.

These findings offer valuable insights for organisations seeking to enhance employee job commitment through tailored strategies. By considering the employment status of their workforce, organisations can better align their technological investments, job designs, and managerial practices to meet the distinct needs of permanent and contract full-time employees. Furthermore, the results significantly contribute to the academic literature on job commitment, expanding the understanding of moderating variables within organisational settings. Table 5.1 presents a consolidated summary of the hypothesis testing results, highlighting which hypotheses were supported and outlining the key insights derived from the findings.

Table 5.1: Summary of Hypotheses, Empirical Results and Theoretical Insights on Job Commitment

Hypotheses		Result	Key Insight
Technology adoption positively influences employee job commitment.		Supported	Technology adoption significantly increases commitment, especially when integrated into task workflows and supported by organisational resources.
Job autonomy positively influences employee job commitment.		Supported	Job autonomy enhances intrinsic motivation and ownership, with stronger effects among permanent employees.
Supervisor support positively influences employee job commitment.		Not Supported	Supervisor support has minimal effect on job commitment, possibly due to the autonomous nature of academic roles.
Coworker support positively influences employee job commitment.		Not supported	Coworker support has limited influence, with autonomy and self-driven achievement taking precedence.
Employment status moderates the relationship between technology adoption and employee job commitment.		Supported	Stronger positive effect of technology adoption for permanent staff due to stability and better access to technological resources.

Table 5.1 continued

Employment status	Supported	Permanent employees benefit more from autonomy due to higher perceived trust and security, reinforcing commitment.
moderates the relationship between job autonomy and employee job commitment.		
Employment status	Not supported	Supervisor support influences both groups similarly; employment status does not significantly change this relationship.
moderates the relationship between supervisor support and employee job commitment.		
Employment status	Not supported	Coworker support has uniformly low influence on commitment, regardless of employment type, due to independent work roles.
moderates the relationship between coworker support and employee job commitment.		

5.3 Discussion

This section provides an interpretation of the study's key findings in relation to the proposed hypotheses and existing literature. The results are discussed with reference to theoretical perspectives, prior empirical evidence and the study's research objectives.

5.3.1 Hypothesis 1: Technology Adoption Positively Influences Employee Job Commitment

The findings of this study confirmed that technological adoption significantly influences employee job commitment. This result supports Hypothesis 1 and emphasises the

critical role of technological resources in shaping employee attitudes and behaviours in the workplace.

These results align with previous research by Abilash and Siju (2021), who observed that adopting technology during critical situations empowers employees to perform optimally, thereby enhancing job satisfaction and commitment. Technology adoption resonates with the Job Demands-Resources (JD-R) Model, which posits that resources provided by organisations, such as technological tools, act as job resources that enhance employee engagement and reduce job-related stress. When employees are equipped with advanced technological resources, their task efficiency improves, leading to greater satisfaction and organisational commitment. Moreover, seamless integration of technology in daily operations minimises unnecessary job demands, enabling employees to focus on meaningful and productive work.

This finding is also consistent with the work of Juyumaya and Torres (2020), who applied an updated JD-R framework to understand the effects of digital technologies on employee work commitment. They emphasised new mechanisms involving the use of big data and predictive analytics (BDPA), proposing that technological adoption introduces novel job and personal resources that reinforce employee engagement. Building on their insights, the present study reinforces the importance of technological adoption in strengthening organisational commitment by enhancing employees' digital competencies and perceived value to the organisation.

Aligned with the research of Hsieh and Vergne (2023), this study further highlights that technological adoption transforms managerial perceptions of markets and human-machine interactions. Consistent with Scholze and Hecker (2023), it is advocated that organisations must leverage digital resources while proactively managing job demands,

ensuring that digitisation serves as a valuable workplace asset without creating undue stress on employees.

In addition to the JD-R model, this study's findings are also underpinned by the Resource-Based View (RBV) theory. RBV emphasises that technology is a strategic organisational resource that enhances employee capabilities and overall firm performance. Employees who perceive technology as a tool for skill enhancement, task efficiency, and achieving superior outcomes are more likely to exhibit higher levels of engagement and commitment. According to RBV, organisational resources such as advanced IT systems must be rare, valuable, and difficult to imitate to contribute to sustained competitive advantage (Liang et al., 2010; Tomomitsu et al., 2016). Further developments of RBV highlight the importance of integrating IT with core competencies, strategic assets, and distinctive capabilities (McGee, 2015), positioning employee engagement itself as an intangible organisational capability (Bhatnagar & Biswas, 2010).

Building on these theoretical frameworks, the findings underscore the need for organisations to strategically prioritise the adoption and integration of technological resources to enhance employee job commitment. It is crucial to ensure that employees receive adequate training to build their confidence in using technological tools, foster a conducive work environment before the introduction of new technologies (Hye, 2021), and continually upgrade systems to meet industry standards and employee expectations. Tailored digital literacy programs should be implemented, particularly for contract employees who may face additional challenges, to ensure equitable access and integration of technological resources. Furthermore, organisations should actively communicate the role of technology in supporting employees' roles, thereby reinforcing its value and fostering a more efficient, satisfying work environment.

5.3.2 Hypothesis 2: Job Autonomy Positively Influences Employee Job Commitment

The study found that job autonomy significantly influences employee job commitment, supporting Hypothesis 2. This result highlights autonomy's critical role as a driver of positive workplace outcomes.

Autonomy empowers employees by giving them control over their tasks and decisions, fostering intrinsic motivation. When employees perceive they have the freedom to manage their work, they are more likely to experience job satisfaction and develop a stronger sense of ownership over their responsibilities.

This finding aligns with the Job Demands-Resources (JD-R) Model, which identifies autonomy as a crucial job resource that alleviates demands and enhances engagement (Albrecht et al., 2021). Organisations that minimise micromanagement and empower employees naturally strengthen commitment levels. Autonomy also contributes to employees' sense of competence and self-direction, which are essential in reducing burnout and improving overall psychological well-being (Giorgi et al., 2023).

Supporting these findings, Roy (2024) demonstrated that employee empowerment through autonomy significantly enhances job satisfaction and organisational commitment. Similarly, Social Exchange Theory (SET) offers a relational perspective, where autonomy is interpreted as a reciprocal benefit signalling organisational trust (Clausen et al., 2021). When employees perceive that trust, they reciprocate with loyalty and commitment. Thus, autonomy serves not only as a motivational resource but also as a relational factor strengthening the employer-employee bond.

Recent studies have also reinforced the growing relevance of job autonomy in post-pandemic and hybrid work settings. Nguyen et al. (2023) reported that autonomy is a key enabler of self-leadership and job satisfaction, particularly in knowledge-based roles. In

virtual or flexible work environments, autonomy has become even more critical as employees manage their workloads independently, making it a core driver of affective commitment and performance.

Moreover, Park and Kim (2022) emphasised that job autonomy mediates the relationship between ethical leadership and employee engagement, showing how autonomy connects organisational practices to behavioural outcomes. Their findings further confirm the dual motivational and relational functions of autonomy anchored in both JD-R and SET frameworks.

Additionally, in the context of academia, this study particularly values autonomy. Academic staff often operate within flexible, research-driven roles requiring self-direction, making autonomy not just beneficial but necessary for commitment. Ramli and Saleh (2022) noted that perceived academic freedom, as a proxy for autonomy, significantly influences job commitment, productivity, and retention in higher education.

Given these findings, it is clear that fostering job autonomy is not merely a matter of improving employee satisfaction but is a strategic tool to reinforce organisational commitment. In practical terms, institutions should consider designing roles that allow for greater decision-making authority, reduce bureaucratic oversight, and enable flexibility in how tasks are completed. Management practices that support goal-setting autonomy, time management, and personalised work methods can sustain high levels of commitment, particularly among professional employees such as academic staff.

5.3.3. Hypothesis 3: Supervisor Support Positively Influences Employee Job Commitment.

This study found that supervisor support does not significantly influence employee job commitment, and thus Hypothesis 3 was not supported. This finding aligns with Nedim

and Suzan (2020), who reported that supervisor support had minimal impact on employee commitment in contexts where role clarity and resource availability were prioritised over supervisory relationships. In knowledge-intensive environments such as academia, employees often emphasise autonomy, goal attainment, and research productivity over interpersonal support (Zhenjing et al., 2022).

Previous studies, such as Meng and Ma (2015), similarly noted that while supportive environments may improve performance outcomes, supervisor support alone may not directly drive commitment in highly independent or self-managed professions. Academic staff typically operate with considerable autonomy, making supervisor relationships more peripheral in their daily work routines.

Although Social Exchange Theory (SET) suggests that supervisor support fosters commitment through reciprocal trust and emotional investment, its influence may be context-dependent. In hierarchical or role-driven environments such as universities, the expected relational exchange may be weakened by formal academic structures (Middleton et al., 2018). As a result, employees may not perceive supervisor support as a meaningful "resource" worth reciprocating with increased commitment.

Furthermore, Rhoades and Eisenberger (2002) argue that when employees place greater importance on tangible resources such as job security, autonomy, or research funding, the influence of relational resources like supervisor support becomes diluted. This may explain why in academic institutions, particularly those facing funding constraints or high workloads, employees prioritise access to instrumental resources over relational support.

Recent literature continues to support these contextual explanations. Wang et al. (2023) found that in higher education, perceived organisational support and autonomy are

stronger predictors of academic staff commitment than supervisor interactions. Similarly, Heffernan and Bosetti (2022) observed that supervisory relationships in universities are often seen as administrative rather than developmental, which weakens their impact on emotional attachment to the institution.

Additionally, Chatterjee et al. (2022) emphasised that in post-pandemic academic environments, digital transformation and hybrid working have further distanced academic employees from supervisors, shifting the focus toward self-directed learning and personal accountability.

Although the results indicate a limited effect of supervisor support on job commitment, this does not imply that supervisory roles are unimportant. Instead, it highlights the need for universities to reframe supervisory relationships to be more developmental and facilitative. Supervisors can still play a valuable role by helping academic staff navigate institutional expectations, providing mentoring for research and teaching excellence, and advocating for resources on their behalf.

Structured supervisor training programs focused on transformational and empowering leadership may help bridge the gap between formal authority and relational support. Periodic feedback mechanisms and inclusive decision-making processes can also foster more collaborative environments where academic staff feel genuinely supported.

5.3.4 Hypothesis 4: Coworker Support Positively Influences Employee Job Commitment

Coworker support was found to have limited influence on employee job commitment, and Hypothesis 4 was thus not supported. This finding suggests a shift from traditional expectations of interpersonal dynamics toward a stronger emphasis on autonomy and self-driven achievement, particularly in academic environments (Middleton et al., 2018;

Meng & Ma, 2015). Academic staff typically operate within individualised roles that require independence in teaching, research, and publication. In such contexts, the reliance on peer interaction for motivation and commitment may be secondary to intrinsic goals and professional autonomy.

Consistent with Van Rossenberg et al. (2022), the results highlight the complex, multi-target nature of organisational commitment, where academics prioritise personal obligations, such as student outcomes, research productivity, and publication performance over collegial relationships. Similarly, Daweti et al. (2024) and Abu Orabi et al. (2024) observed that in specialised, self-managed roles, coworker support may have a more peripheral influence compared to job resources that affect individual achievement and role clarity.

From the perspective of Social Exchange Theory (SET) (Blau, 1964), coworker support can be interpreted as a form of socio-emotional resource exchange among peers. However, in knowledge-intensive settings, this form of exchange may be undervalued compared to tangible organisational support or developmental resources. Moreover, when professional goals are measured through individual achievements (e.g., research output or teaching evaluations), employees may place less importance on peer interactions unless they directly contribute to those outcomes.

Recent studies have reinforced this interpretation. Han et al. (2023) found that coworker support has a stronger impact on job satisfaction than on commitment, particularly in environments where collaboration is not structurally embedded into job roles. Ahmed et al. (2022) similarly argued that peer support contributes more to affective well-being than to long-term commitment in professions with high individual task ownership, such as academia.

The lack of direct influence does not diminish the value of peer interaction altogether. As Chiaburu and Harrison (2008) earlier emphasised, coworker support can still foster a sense of belonging, psychological safety, and affective well-being—factors that, while not directly linked to commitment in this study, can indirectly influence performance and morale.

Although coworker support did not show a significant direct effect on employee job commitment, academic institutions should still consider it as part of a broader engagement strategy. Fostering structured opportunities for peer support, such as collaborative research projects, co-teaching assignments, or interdisciplinary working groups, can promote informal knowledge sharing and emotional support.

Creating peer mentoring programs, particularly for early-career academics or contract staff, can help foster professional relationships, mitigate isolation, and indirectly support commitment through improved well-being. Additionally, promoting inclusive academic cultures that recognise both individual excellence and collaborative contribution can help balance the independence-driven culture of academia with supportive peer dynamics.

5.3.5 Hypothesis 5: Employment status moderates the relationship between technology adoption and employee job commitment.

The study found that employment status significantly moderates the relationship between technological adoption and employee job commitment, thus supporting Hypothesis 5.

Specifically, technological adoption had a stronger positive effect on job commitment among permanent employees compared to contract employees. This result is consistent with the Job Demands-Resources (JD-R) Model (Bakker & Demerouti, 2007),

which posits that access to job resources such as advanced technologies enhances engagement and commitment when matched with employee needs. Permanent staff, who generally experience greater job security and resource continuity, are better positioned to leverage technological tools as performance-enhancing assets, thereby increasing their organisational commitment.

Similarly, the Resource-Based View (RBV) (Barney, 1991) supports this finding by emphasising that technological tools are strategic resources that contribute to sustained competitive advantage. Permanent staff may perceive these investments as part of a broader developmental trajectory, enhancing their identification with organisational goals and deepening commitment. In contrast, contract full-time staff may view the same technological expectations as burdensome, especially if access to training or long-term usage is uncertain or inconsistent with their employment terms.

Further reinforcing this, the Technology-Organization-Environment (TOE) Framework (Tornatzky & Fleischer, 1990) explains how the organisational context and resource availability affect the adoption and impact of technology. In this case, permanent employees benefit from greater technological infrastructure and support systems, while contract full-time employees may experience limitations in both access and perceived ownership of technological assets.

Recent literature affirms these disparities. Alam and Imran (2023) found that contract full-time workers in higher education settings reported lower satisfaction with digital transitions due to limited training, lack of continuity, and minimal involvement in decision-making processes. Barker et al. (2022) also demonstrated that contract employees tend to view technological changes with scepticism if they are not accompanied by equitable access and inclusive implementation strategies.

Additionally, Jabeen et al. (2022) observed that digital transformation initiatives are more successful when they are perceived as supportive rather than punitive, something more easily achieved among permanent employees who feel more invested in long-term organisational success. For contract full-time staff, short-term contracts may hinder the formation of such perceptions, weakening the motivational impact of technological investment.

To address these disparities and ensure equitable outcomes, organisations should take deliberate steps to standardise access to technological tools and training across all employment types. This includes ensuring that contract employees receive the same onboarding, technical support, and system access as their permanent counterparts.

Moreover, leadership must communicate the strategic intent behind technological adoption, especially to contract full-time employees who may otherwise perceive it as an additional burden without tangible personal benefit. Initiatives such as certification-linked training programs, open-access digital learning platforms, and career advancement pathways tied to technology use can help demonstrate the organisation's investment in all staff, regardless of employment status.

It is also essential to monitor disparities through regular audits and employee feedback systems to ensure inclusive digital transformation. Contract employees' insights should be included in the design and deployment of new technologies, promoting a sense of ownership and aligning with principles of fairness and empowerment (Barker et al., 2022).

5.3.6 Hypothesis 6: Employment Status Moderates the Relationship Between Job Autonomy and Employee Job Commitment

The study found that employment status significantly moderates the relationship between job autonomy and employee job commitment, thus supporting Hypothesis 6.

Permanent employees derive greater benefits from job autonomy, resulting in increased engagement and organisational commitment. This can be attributed to the stability and psychological safety associated with permanent positions, which enables employees to view autonomy as a meaningful resource. In contrast, contract full-time employees, who may face employment uncertainty and reduced access to institutional support, are less able to fully leverage autonomy as a motivational or relational resource (Bakker & Demerouti, 2007; Schaufeli, 2015).

According to Social Exchange Theory (SET) (Blau, 1964), permanent employees are more likely to interpret job autonomy as an indicator of trust, empowerment, and organisational investment. This perceived investment leads them to reciprocate with higher levels of affective commitment. For contract full-time staff, the absence of long-term security may hinder the perception of autonomy as a true benefit, thereby weakening the reciprocity mechanism. As a result, the relational impact of autonomy is diminished, and its effects on job commitment are less pronounced.

This interpretation is supported by Pocnet et al. (2015), who found that job resources, including autonomy, are more impactful when employees feel stable in their roles. Galanakis and Tsitouri (2022) further emphasise that job autonomy positively affects engagement and well-being, particularly when individuals perceive alignment between their values and long-term role security.

Recent studies echo these findings. Alzyoud and Mahasneh (2023) observed that job autonomy had a significantly stronger effect on commitment and satisfaction among permanent employees in public and academic sectors. Kim and Kang (2022) similarly found that contract workers exhibited lower engagement levels despite comparable levels of

autonomy, primarily due to concerns about continuity and recognition. These studies reinforce the need to contextualise the effect of autonomy by employment arrangement.

Furthermore, Qureshi et al. (2024) highlight that without mechanisms that convert autonomy into perceived empowerment, such as clear advancement paths or performance-linked extensions, contract full-time employees may experience autonomy as a burden rather than a privilege, especially when role expectations are high but support is limited.

To maximise the positive effects of job autonomy across employment groups, organisations must address the different psychological and structural realities faced by permanent and contract staff.

For permanent employees, organisations should continue to promote decision-making flexibility and role-based autonomy, reinforcing their investment in long-term development. For contract full-time employees, efforts must be made to strengthen job security signals such as clearer career progression pathways, fair performance evaluations, and visibility in institutional planning.

Support mechanisms such as structured feedback systems, mentoring arrangements, and autonomy-supportive leadership styles can also help both groups perceive autonomy as a tool for growth rather than a source of pressure. Furthermore, offering contract full-time staff participation in strategic initiatives or innovation committees can enhance their sense of inclusion and autonomy, reinforcing commitment even in the absence of permanent status.

5.3.7 Hypothesis 7: Employment Status Moderates the Relationship Between Supervisor Support and Employee Job Commitment

The study found that employment status does not significantly moderate the relationship between supervisor support and employee job commitment, and thus Hypothesis 7 was not supported.

This suggests that both permanent and contract full-time employees respond similarly to supervisor support in terms of its influence on their job commitment. The statistical result implies that employment status, while important in other contexts, does not significantly alter how employees perceive or internalise supervisory support when it comes to shaping their commitment levels.

This outcome contrasts with expectations based on Social Exchange Theory (SET) (Blau, 1964), which would predict that supervisor support perceived as a relational resource should influence employees differently depending on their job security and perceived organisational investment. Typically, permanent employees might be expected to experience and reciprocate supervisor support more strongly due to their longer-term affiliation and trust in institutional structures. However, the current finding indicates a more uniform response across employment categories.

A possible explanation lies in the contextual characteristics of academic work. In higher education institutions, employees often function with substantial autonomy and independently defined responsibilities, which may reduce the centrality of supervisory relationships (Middleton et al., 2018). In such environments, support from supervisors may be viewed as more administrative or procedural rather than relational or developmental. Consequently, the exchange mechanism proposed by SET may not be triggered in the same way it might be in corporate or hierarchical settings.

In addition, the nature of supervisor-employee interaction in academia often involves minimal day-to-day oversight, particularly for experienced faculty. This structural distance may dilute the perception of supervisor support as a distinctive resource, making its effect on commitment weaker and more homogenous across employment types.

Recent studies support this interpretation. For instance, Yusof and Lim (2023) found that among Malaysian academics, supervisor support had a weak or non-significant effect on organisational commitment when compared to institutional support and role clarity. Similarly, Thompson and Sanderson (2022) argued that in the post-pandemic academic context, academic staff increasingly evaluate their commitment based on systemic enablers (e.g., access to research resources, workload policies) rather than supervisory relationships. Fernandez et al. (2024) further reported that in high-autonomy settings, perceived support from direct supervisors becomes diffuse and less impactful on emotional attachment to the institution, regardless of employment status.

In summary, the non-significant moderating effect observed in this study reflects the reduced salience of supervisor support in academic environments where autonomy, professional identity, and resource access carry more weight in shaping job commitment. The findings emphasise that relational leadership resources, such as supervisor support, may play a less differentiated role across employment categories in professional settings characterised by independence and self-directed performance.

5.3.8 Hypothesis 8: Employment Status Moderates the Relationship Between Coworker Support and Employee Job Commitment

The study found that employment status does not significantly moderate the relationship between coworker support and employee job commitment. Therefore, Hypothesis 8 was not supported.

This result suggests that both permanent and contract employees are similarly influenced, or more precisely, not significantly influenced, by coworker support in the context of job commitment. The lack of moderation effect may reflect the nature of academic

work, which is often individualised, autonomy-driven, and task-focused, with reduced reliance on peer collaboration in day-to-day operations.

As noted by Melhem (2023) and Daweti et al. (2024), academic staff in higher education institutions often operate in roles where intrinsic motivation, professional autonomy, and individual outputs (e.g., publications, teaching effectiveness) dominate the work environment. In such settings, coworker support, while potentially beneficial for social belonging or emotional well-being, may play a limited role in shaping deeper organisational commitment.

From the perspective of Social Exchange Theory (SET), coworker support is typically considered a form of informal, reciprocal exchange among peers that fosters mutual respect and emotional attachment. However, in highly specialised, independent roles, these social exchanges may hold less instrumental or symbolic value in determining job commitment. Both permanent and contract academic staff may perceive coworker interactions as socially pleasant but not essential to their professional identity, autonomy, or advancement.

The statistical result indicating no significant moderation by employment status further reinforces the idea that perceptions of coworker support are consistent across contract types and do not substantially alter how such support relates to commitment. This uniformity may reflect shared values within the academic profession, such as discipline-specific expertise, self-regulated work, and role clarity, which minimise variance in coworker influence regardless of employment type.

Recent studies support this interpretation. Alshahrani and Ahmed (2022) found that in academic environments, coworker support had only a weak relationship with commitment, with no significant differences across employment types. Van Rossenberg et

al. (2022) emphasised that in decentralised professional roles, interpersonal support is often superseded by job design factors such as autonomy, career clarity, and performance recognition. Zhou and Zhao (2023) similarly observed that in environments emphasising self-managed roles, employees are more likely to develop commitment through goal congruence and institutional alignment rather than peer bonding.

In summary, the non-significant moderating effect of employment status in this relationship reflects the universal peripheral role of coworker support in academic settings. Whether contract or permanent, academic employees tend to form commitment based more on individual task-related and organisational factors than on horizontal relational dynamics.

5.4 Chapter Summary

In summary, Chapter 5 provided an in-depth examination of how internal organisational factors impact employee job commitment, with particular emphasis on the moderating role of employment status. The findings confirmed the significant positive effects of technology adoption and job autonomy on job commitment, especially for permanent employees. However, the expected influences of supervisor and coworker support were not supported, suggesting the need to reconsider their roles within academic environments characterised by autonomy and self-direction. The analysis also revealed that employment status moderated the effects of technology adoption and job autonomy but did not significantly influence the impact of supervisor or coworker support. These insights contribute both theoretical and practical implications, informing how universities can tailor engagement strategies and resource allocation to meet the diverse needs of their academic workforce.

CHAPTER 6

CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter presents a detailed discussion on translating the study's findings into practical applications for talent management. In light of the study's findings and the broader implications for managing a diverse academic workforce, it is essential to translate theoretical insights into actionable talent management strategies. As workforce compositions become more varied, encompassing different employment statuses, skill sets, and career aspirations, private universities and similar institutions must adopt nuanced, evidence-based practices to effectively attract, develop, and retain talent.

6.2 Limitations of the Study

This study has several limitations in terms of sample scope. The study focuses exclusively on private universities in Sarawak, Malaysia, meaning that the findings may not apply to universities in other regions, countries, or types of institutions (e.g., public universities, international universities). Cultural, organisational, or regional differences could significantly affect how supervisor support, coworker support, and employment status influence job commitment. As a result, the study's conclusions should be cautiously generalised to broader contexts or different settings.

The research uses a cross-sectional design, where data is collected simultaneously. This approach helps understand relationships between variables at a particular moment but does not allow observing changes over time. It limits the ability to conclude the causal direction between variables (e.g., whether supervisor support causes job commitment or if employees with higher commitment tend to perceive more support). Long-term trends or the

impact of variables over time, such as how supervisor support might influence job commitment after several months or years, cannot be captured with this design.

The study relies on self-reported questionnaires, subject to biases such as social desirability bias (where respondents answer in ways they believe are socially acceptable or expected) or recall bias (where respondents may not accurately remember past events or experiences). Additionally, respondents may overestimate their commitment or the level of support they receive from supervisors and coworkers. These biases can distort the accuracy of the data, potentially affecting the validity of the conclusions drawn from the study.

The study employs a quantitative methodology, which is well-suited to measuring relationships between variables and making statistical inferences. However, this approach might miss the nuanced, more profound insights from qualitative research methods, such as interviews or focus groups. Qualitative approaches allow for a richer understanding of individual experiences, perceptions, and motivations, providing context and details that quantitative methods may not capture. The reliance on quantitative data may limit the understanding of complex, subjective factors that influence job commitment in a more detailed or personal way.

6.3 Recommendations

This section presents a detailed set of recommendations aimed at addressing the key findings of the study and enhancing employee job commitment within private universities. Drawing upon the empirical results and guided by relevant theoretical frameworks, particularly Social Exchange Theory (SET), the recommendations seek to provide actionable strategies for academic institutions. The proposed initiatives focus on strengthening job autonomy, enhancing supervisor and coworker support, promoting inclusive technological adoption, and using employment status data strategically. These targeted interventions are

designed to meet the diverse needs of both permanent and contract full-time academic staff, fostering a more committed, motivated, and resilient workforce.

6.3.1 Recommendations to Enhance Employee Job Commitment

Based on the study's findings, several key recommendations can be made to organisational leaders and HR professionals within private universities to enhance employee job commitment. These recommendations are derived from the factors analysed in the study, namely technological adoption, job autonomy, supervisor support, and coworker support. It takes into account the differences in employment status (permanent vs. contract full-time staff).

6.3.1.1 Strengthen Job Autonomy Through Structured Empowerment

Job autonomy emerged as a significant positive predictor of employee job commitment, a finding consistent with previous research by Deci and Ryan (2000) and Gagné and Deci (2005), who highlight the role of autonomy in fostering intrinsic motivation and engagement. In response, institutions should prioritise the design of roles and responsibilities that offer structured autonomy, striking a balance between flexibility and clearly defined expectations.

One effective strategy involves job redesign initiatives that grant academic staff the discretion to determine their teaching styles, research agendas, and schedules while aligning with broader institutional goals. Complementing this, training programs focused on self-leadership, time management, and decision-making can equip staff with the competencies required for autonomous work, as advocated by Hackman and Oldham (1976). Furthermore, the adoption of performance metrics that evaluate outcomes rather than processes would provide employees with the freedom to determine how to best achieve the desired results.

Actively involving academic staff in governance and decision-making processes can also enhance their sense of ownership and strengthen institutional identification (Kim & Cho, 2020). These strategies cultivate a culture of trust and self-efficacy, particularly benefiting permanent staff who generally perform best when afforded greater job control.

6.3.1.2 Elevate Supervisor Support Through Leadership Development

Although supervisor support did not achieve statistical significance in this study, existing literature consistently underscores its critical role in fostering employee commitment (Eisenberger et al., 2002; Schyns & Schilling, 2013). In light of this, management should prioritise initiatives that strengthen supervisory practices and leadership qualities. Leadership development programmes focusing on coaching, mentoring, active listening, and empathy can equip supervisors with essential relational skills (Yukl, 2012).

Additionally, incorporating relational leadership goals into supervisors' performance evaluations would ensure accountability for employee development and support. Establishing formal feedback mechanisms can further promote open and constructive dialogue between academic staff and their supervisors. Moreover, the implementation of supervisor accountability frameworks would reinforce inclusive leadership practices and contribute to staff well-being. Supervisors must be viewed not merely as evaluators but as facilitators of growth and providers of psychological safety, an approach particularly important for supporting early-career and contract staff (Kahn, 1990).

6.3.1.3 Enhance Coworker Support Through Institutional Collaboration Mechanisms

Coworker support did not emerge as a significant predictor in the model; previous research recognises its value as a source of emotional and instrumental support (Chiaburu & Harrison, 2008). To strengthen coworker relationships and foster a supportive work environment, institutions can implement various collaborative initiatives. Cross-departmental activities such as collaborative research teams, teaching partnerships, and interdisciplinary seminars can encourage interdependence and shared goals.

Establishing peer mentorship programmes that pair senior and junior academic staff across departments would further promote professional development and knowledge transfer (Allen et al., 2004). Additionally, regular team-building workshops or retreats can help build a sense of community and shared identity among academic staff. The introduction of recognition and reward systems that celebrate collaborative accomplishments would further reinforce a collegial culture. By promoting these strategies, institutions can enhance knowledge sharing and cultivate a stronger sense of professional identity within the academic community.

6.3.1.4. Promote Inclusive Technological Adoption

This study reaffirmed that technological adoption exerts a significant positive influence on employee job commitment, consistent with recent research highlighting technology as a vital enabler of employee engagement and performance (Miah et al., 2023; Wang et al., 2020). Nonetheless, disparities in digital access and proficiency, particularly among contract staff, pose challenges that may hinder the full potential of technological interventions if left unaddressed.

To promote inclusive technological adoption across all employment categories, management should implement several strategic initiatives. First, tailored digital literacy

programs should be provided, focusing on contract staff and others who may lack equitable access to technological resources. Such programs ensure that all employees, regardless of employment status, possess the necessary skills to effectively utilise institutional technologies (Venkatesh et al., 2003; Marler & Boudreau, 2017). Additionally, incentivising technological innovation by recognising and rewarding academic staff who creatively integrate new tools into their teaching, research, and service activities can cultivate a culture that values continuous technological advancement (Cascio & Montealegre, 2016).

Establishing dedicated IT support units exclusively for academic staff can offer timely troubleshooting, targeted training sessions, and user experience enhancements, thereby reducing frustration and encouraging sustained technology use (Tarhini et al., 2019). Furthermore, the formation of peer-led digital learning communities, where tech-savvy academic staff mentor their colleagues through workshops, forums, or informal sharing sessions, can mitigate resistance and foster collective digital competence (Huang & Teo, 2023). Developing a technologically competent workforce not only enhances operational efficiency and teaching effectiveness but also strengthens overall job commitment while supporting the institution's broader modernisation objectives.

6.3.1.5. Use Employment Status Data Strategically

This study revealed nuanced differences in how employment status moderates the relationship between internal organisational factors and employee job commitment. Prior literature consistently underscores that perceived job security and organisational support are pivotal in shaping employee attitudes and behaviours (De Cuyper & De Witte, 2007; Jiang & Lavaysse, 2018). Contract staff, who often face uncertainty and limited developmental opportunities, may exhibit lower levels of commitment compared to their permanent counterparts unless proactive strategies are implemented (Connelly et al., 2022).

In response to these insights, management should adopt targeted interventions to cultivate commitment across different employment groups. First, support programmes should be tailored to address the distinct needs of contract and permanent staff, ensuring equitable access to training, mentorship, and professional development resources. Research indicates that developmental support positively correlates with employee commitment and reduces turnover intentions among contingent workers (Shoss et al., 2021). Additionally, implementing retention and recognition strategies, such as clear pathways toward permanency for high-performing contract employees or structured recognition systems, including awards and promotions, can sustain motivation and strengthen organisational attachment (Hom et al., 2022). Regular engagement and commitment surveys, segmented by employment status, should also be conducted to identify emerging issues promptly and facilitate targeted interventions.

Monitoring differentiated experiences has been associated with enhanced workforce resilience and organisational performance (Saks, 2022). Furthermore, embedding diversity, equity, and inclusion (DEI) principles into human resource practices ensures that all employees, regardless of employment type, have fair access to career advancement, benefits, and institutional resources (Sharma et al., 2020; Greenhaus & Powell, 2006). Promoting equitable treatment fosters perceived organisational justice, which is a key determinant of employee commitment across diverse workforce segments. By implementing these strategies, organisations can mitigate disparities between contract and permanent staff, fostering a more committed, engaged, and resilient academic workforce. Recognising and addressing the unique needs of both permanent and contract employees ultimately builds equity, cohesion, and sustainable engagement.

6.3.2 Recommendations for Future Research

Recognising the limitations of the current research and the need to further advance theoretical and empirical knowledge on employee job commitment, this study proposes several recommendations for future investigation.

6.3.2.1 Broaden the Sample Scope

Future studies should expand the sample to include private universities from other regions in Malaysia as well as international higher education institutions. A broader geographic scope would enhance the external validity and generalisability of findings, allowing researchers to conduct meaningful cross-cultural comparisons. Such comparisons could uncover how cultural, economic, and institutional contexts influence the dynamics of job commitment (Taras, Steel, & Kirkman, 2016; Triandis, 2001). Understanding these contextual differences is essential for developing globally relevant organisational practices.

6.3.2.2 Adopt Longitudinal Research Designs

Longitudinal studies, where data are collected over multiple time points, offer critical advantages in tracking the development and sustainability of job commitment. They allow researchers to detect patterns of change, assess temporal relationships, and infer causality between variables (Ployhart & Vandenberg, 2010; Spector, 2019). By adopting longitudinal designs, future research could provide stronger evidence on how factors such as autonomy, support, and technology influence job commitment over an employee's career trajectory.

6.3.2.3 Incorporate Mixed-Methods Approaches

Integrating both quantitative and qualitative methodologies can yield richer and more comprehensive insights. While surveys allow for large-scale generalisations, qualitative methods such as interviews and focus groups can explore the nuanced, subjective experiences that underlie observed statistical patterns (Creswell & Creswell, 2018; Johnson,

Onwuegbuzie, & Turner, 2007). Mixed-methods designs can therefore offer a more holistic understanding of the multifaceted nature of employee commitment, capturing both breadth and depth.

6.3.2.4 Explore Additional Organizational Variables

Future studies should incorporate other organisational variables that may impact job commitment, such as perceived workload, organisational justice, career development opportunities, leadership style, and work-life balance. These factors are frequently cited as critical predictors of organisational outcomes and could provide a more integrative model of employee engagement and retention (Colquitt et al., 2013; Podsakoff, LePine, & LePine, 2007). Including these variables would create a more holistic framework for understanding commitment drivers across different institutional settings.

6.3.2.5 Evaluate Intervention-Based Strategies

There is a pressing need for future research to move beyond correlational analyses and evaluate specific interventions designed to enhance job commitment. Intervention-based studies such as those assessing the effects of supervisor leadership training, job redesign initiatives, flexible work policies, or structured peer-support programmes can offer actionable, evidence-based recommendations for HR practitioners (Gruman & Saks, 2011; Knight, Patterson, & Dawson, 2019). These applied studies would contribute practical insights into how organisational initiatives can be optimised to foster stronger and more enduring commitment.

6.3.3 Linking Recommendations to Social Exchange Theory (SET)

To ensure theoretical coherence, the proposed strategies are anchored within the principles of Social Exchange Theory (SET). SET posits that social behaviour is the result of an exchange process aimed at maximising benefits and minimising costs, where positive

treatment by an organisation elicits reciprocal positive attitudes and behaviours from employees (Cropanzano & Mitchell, 2005; Blau, 1964). In this context:

6.3.3.1 Job Autonomy and Reciprocity

Enhancing job autonomy reinforces the core reciprocity mechanism in SET. When institutions demonstrate trust by granting employees greater control over their tasks, scheduling, and decision-making, employees perceive this autonomy as a valued resource and reciprocate through increased affective commitment, organisational loyalty, and discretionary effort (Deci, Olafsen, & Ryan, 2017; Cropanzano & Mitchell, 2005).

6.3.3.2 Supervisor and Coworker Support as Social Exchanges

Meaningful supervisor and coworker support exemplify high-quality social exchanges. When interpersonal interactions are characterised by trust, support, and fairness, they satisfy employees' socio-emotional needs, strengthening their affective commitment and reducing turnover intentions (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Blau, 1964). Equitable and consistent social support fosters a culture of mutual obligation and enhances the relational quality between employees and the organisation.

6.3.3.3 Technological Investment as a Resource-Based Exchange

Investments in technological infrastructure and employee digital readiness can be interpreted through SET as resource-based exchanges. When employees feel well-equipped with the necessary tools, training, and technological support to perform their roles efficiently, they are more likely to perceive the organisation as supportive. This perception strengthens their felt obligation to reciprocate through heightened engagement, innovation, and loyalty (Venkatesh, Thong, & Xu, 2016; Wayne, Shore, & Liden, 1997).

6.3.3.4 Consideration of Employment Status and Perceived Fairness

Addressing differences in employment status, such as providing equitable access to resources, development opportunities, and recognition, aligns with SET's emphasis on perceived fairness and support in exchange relationships. Ensuring that both permanent and contract employees experience fair treatment and inclusion enhances their perception of organisational support, which in turn bolsters their organisational commitment (Colquitt et al., 2013; Shore et al., 2009).

By grounding these recommendations in SET, the study emphasises that fostering positive, fair, and resourceful exchanges between institutions and employees is essential for building sustainable commitment and organisational success.

6.4 Implications for Management and Business Context

The findings of this study extend beyond the academic context and provide valuable insights for strategic management, particularly in sectors that employ knowledge workers under varied employment terms.

6.4.1 Employment Status as a Strategic HR Variable

The moderating role of employment status highlights that a one-size-fits-all approach to human resource management is inadequate in contemporary organisations. Differences in job security, career expectations, and organisational identification between permanent and contract employees necessitate more differentiated strategies. Research indicates that employment status significantly shapes employees' psychological contracts and, consequently, their attitudes and behaviours at work (De Cuyper et al., 2008; Jiang & Liu, 2020).

Thus, management must adopt complex HR strategies that recognise the distinct motivations, needs, and constraints of both permanent and contract staff. Tailoring

professional development initiatives, career progression pathways, and engagement programmes based on employment status can lead to improved retention, enhanced employee well-being, and greater organisational cohesion (Bal & Cheng, 2022). For permanent employees, strategies may focus on long-term career growth and leadership development, while for contract employees, initiatives might prioritise skill enhancement, recognition, and opportunities for contract renewal or permanency.

Moreover, fostering an inclusive environment where both categories of employees feel valued and supported can mitigate potential divisions and strengthen overall organisational commitment (Kraimer et al., 2019). A differentiated yet integrated HR approach ensures that diverse employee groups remain aligned with the organisation's goals, promoting both individual and institutional success.

6.4.2 Reframing Autonomy as a Strategic Lever

Autonomy should not merely be regarded as a workplace perk; rather, it is a strategic resource that organisations can leverage to enhance employee commitment, innovation, and productivity. In contemporary business environments, granting employees greater autonomy, such as allowing team leaders to design their own workflows, empowering research and development (R&D) teams with control over budget allocations, or enabling flexible work arrangements, has been linked to higher job satisfaction, intrinsic motivation, and organisational loyalty (Deci, Olafsen, & Ryan, 2017; Parker, Wang, & Liao, 2021).

However, for autonomy to be truly effective, it must be intentionally supported by organisational structures that include targeted training, trust-building initiatives, and clear outcome-based evaluation frameworks. Without such support, autonomy can become overwhelming or misdirected, ultimately reducing its positive effects (Gagné, Tian, Soo, & Zhang, 2019). A strategic approach to fostering autonomy not only promotes employee well-

being but also drives sustained organisational performance, especially in knowledge-intensive and innovation-driven industries.

6.4.3 Technology as a Commitment Driver

Investing in digital tools alone is insufficient to drive meaningful change within organisations; equal emphasis must be placed on ensuring accessibility, usability, and employee readiness. Merely acquiring advanced technologies without considering the human factors can lead to underutilisation, resistance, and even technology fatigue. As a result, effective digital transformation strategies must align information technology (IT) investments with human capital development initiatives (Kane et al., 2019). This requires organisations to proactively integrate technological training into onboarding processes, leadership development programmes, and continuous professional development initiatives to cultivate a digitally fluent workforce (Vial, 2019).

Furthermore, fostering a supportive culture that encourages experimentation, provides psychological safety, and addresses employees' varying levels of digital competence is essential for maximising returns on digital investments (Venkatesh, Thong, & Xu, 2016). By holistically addressing both technological and human dimensions, organisations can achieve sustainable digital transformation and enhance employee engagement and productivity.

6.4.4 Building a Commitment Culture

Organisational culture plays a crucial role in shaping and sustaining employee commitment. Business leaders must actively cultivate a culture where commitment is not only encouraged but also consistently recognised, rewarded, and reinforced. This involves implementing mechanisms such as clear communication of organisational values, robust recognition and reward systems, inclusive leadership practices, and the creation of

psychologically safe environments where employees feel respected and empowered to contribute (Edmondson, 2019; Groysberg, Lee, Price, & Cheng, 2018).

Moreover, achieving cultural alignment where employees' personal values resonate with the organisation's core values is fundamental to fostering long-term engagement and retention (Schein & Schein, 2017). Without deliberate efforts to embed these cultural elements, organisations risk cultivating disengagement, high turnover, and weakened organisational loyalty. In today's dynamic business landscape, nurturing a strong, inclusive, and value-driven culture is not merely an HR initiative but a strategic imperative for sustainable success.

6.4.5 Practical Applications in Talent Management

Effective talent management requires organisations to move beyond generic strategies and develop targeted approaches that recognise the diverse needs of their workforce. Tailoring initiatives to address varying employment statuses, roles, and employee expectations is essential to cultivate a committed and high-performing workforce.

Retention efforts should particularly focus on high-performing contract employees, who often represent valuable organisational assets but face greater job insecurity. Offering performance-linked contract extensions or creating clear, merit-based pathways to permanent employment can significantly enhance commitment, reduce turnover, and build a stronger talent pipeline (De Cuyper & De Witte, 2011; Kalleberg, 2020). These practices not only reward excellence but also send strong signals of organisational investment in employee growth.

Leadership development programmes should increasingly emphasise the cultivation of emotional intelligence, inclusivity, and adaptability. Emotional intelligence, encompassing self-awareness, empathy, and interpersonal skills, has been shown to be a

critical determinant of effective leadership and employee engagement (Goleman, Boyatzis, & McKee, 2013). Moreover, in diverse and rapidly changing work environments, inclusive leadership and adaptability enable leaders to manage multicultural teams, navigate uncertainty, and foster psychological safety among employees (Randel et al., 2018).

Organisations should conduct regular employee engagement surveys that disaggregate findings by employment type (e.g., permanent, contract full-time). This approach allows Human Resource (HR) teams to identify specific challenges and opportunities faced by different workforce segments, thereby enabling more precise and effective HR interventions (Saks, 2022). A data-driven refinement of engagement strategies ensures that organisations remain responsive to evolving employee expectations and fosters a more inclusive work environment.

By integrating these practices into their talent management strategies, organisations can strengthen workforce stability, improve leadership effectiveness, and foster a culture of inclusivity and responsiveness that supports long-term organisational success. These implications help organisations not only manage but also strategically invest in their people, ensuring both high performance and high commitment in increasingly competitive environments.

6.5 Chapter Summary

In summary, adopting a strategic and differentiated approach to talent management enables organisations to address the unique challenges and opportunities associated with varied workforce segments. By focusing on retention, leadership development, and data-driven engagement strategies, institutions can foster an inclusive, committed, and high-performing workforce. These practices not only enhance individual and organisational

outcomes but also position institutions to remain competitive and resilient in the evolving private university landscape.

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APPENDICES

Appendix A: Questionnaire

The questionnaire will be divided into sections. The answer given in this study is confidential and only for academic purposes. Your sincerity and honesty in answering this questionnaire will be much appreciated. Read the question carefully, and please mark (✓) for the answer you think is appropriate for the question.

Student: Dyg Nurli Azwani Binti Awang Anwa

Supervisor: Prof. Dr. Kartinah Ayupp

Please mark your answer according to your degree of approval based on the scales below.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Agree	Strongly Agree

Section A: Demographic Profile of The Respondents

1. Ethnicity

Malay ()

Chinese ()

Iban ()

Bidayuh ()

Orang Ulu ()

Melanau ()

Kedayan ()

Other ()

2. Age

20-29 () 30-39 () 40-49 () 50-59 () 60-69 () >69 ()

3. Gender

Female () Male ()

4. Religion

Islam ()

Christian ()

Buddha ()

Hindhu ()

Other()

5. Education Background

Diploma ()

Degree ()

Master Degree ()

Doctor of Philosophy (PhD) ()

Doctor of Business Administration (DBA)

Others () Please Specify: _____

6. Marital Status

Single ()

Married()

Divorced ()

7. Name of University

Swinburne University of Technology Sarawak ()

Curtin University, Miri ()

University of Technology Sarawak ()

Other ()

8. Employment Type

Permanent ()

Contract (full-time) ()

If contract (full-time) status, please state the duration of the contract _____.

9. Holding Administrative Position

Yes () No ()

If yes, please state the position _____.

Section B Part 1 (Technological Adoption)

Please mark your answer according to your degree of approval based on the scales below.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Agree	Strongly Agree

No.	Items	1	2	3	4	5	6	7
1.	The digital tools used can enhance my teaching and learning work.							
2.	The digital tools used can enhance my consultancy work.							
3.	The digital tools used can enhance my research and publication work.							
4.	The digital tools used can enhance my corporate social responsibility work.							
5.	The digital tools used can enhance my marketing work.							
6.	The digital tools used can enhance self-education.							
7.	The digital tools used allow me to complete tasks more quickly.							
8.	The digital tools are useful for me as an academician.							
9.	I find digital tools easy to use from anywhere for my teaching and learning work.							
10.	I find digital tools easy to use from anywhere for my consultancy work.							

11.	I find digital tools easy to use from anywhere for my research and publication work.							
12.	I find digital tools easy to use from anywhere for my corporate social responsibility work.							
13.	I find digital tools easy to use from anywhere for my marketing work.							
14.	I use digital tools because they are secure.							
15.	I used the digital tool because I feel confident that the data returned by the system is reliable.							
16.	I can easily acquire the skills needed to use any digital tools.							
17.	The digital tool makes it easier to keep track of my weekly tasks.							
18.	I used multiple digital tools to search for data, if necessary.							

Section B Part 2 (Job Autonomy)

Please mark your answer according to your degree of approval based on the scales below.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Agree	Strongly Agree

No.	Items	1	2	3	4	5	6	7
1.	I am free to be creative in my teaching and learning work.							
2.	I am free to be creative in my consultancy work.							
3.	I am free to be creative in my research and publication work.							
4.	I am free to be creative in my corporate social responsibility work.							
5.	I am free to be creative in my marketing work.							
6.	The selection of student-learning activities in my class is under my control.							
7.	My tasks primarily follow approaches specified by the university.							
8.	The scheduling of my teaching and learning time is under my control.							
9.	The scheduling of my consultancy time is under my control.							

10.	The scheduling of my research and publication time is under my control.							
11.	The scheduling of my corporate social responsibility time is under my control.							
12.	Instructional planning is guided by the university's needs.							
13.	Teaching and learning do not allow for much flexibility on my part.							
14.	Consultancy does not allow for much discretion on my part.							
15.	Research and publication do not allow for much discretion on my part.							
16.	Corporate social responsibility does not allow for much discretion on my part.							
17.	Marketing activities do not allow for much discretion on my part.							
18.	In my situation, I have only limited flexibility in resolving major problems.							

Section B Part 3 (Supervisor Support)

Please mark your answer according to your degree of approval based on the scales below.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Agree	Strongly Agree

No.	Items	1	2	3	4	5	6	7
1.	My supervisor fosters trusting relationships among the staff at the university.							
2.	My supervisor supports my career growth within the university.							
3.	My supervisor helps me learn from challenges by transforming them into opportunities for improvement.							
4.	My supervisor recognizes my contributions to the university community.							
5.	My supervisor rewards me in a way that makes me feel appreciated for my contributions to the university.							
6.	My supervisor routinely communicates with me to ensure I							

	can develop professionally within the university.							
7.	My supervisor assists me in accessing the necessary resources to perform effectively in my job responsibilities within the university.							
8.	My supervisor is aware of my career aspirations within the university.							
9.	My supervisor seeks my input when making decisions that impact academic matters within the university.							

Section B Part 4 (Coworkers support)

Please mark your answer according to your degree of approval based on the scales below.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Agree	Strongly Agree

No .	Items	1	2	3	4	5	6	7
1.	My colleagues at the university support me in my job responsibilities.							
2.	When I encounter challenges, help is readily available from my colleagues at the university.							
3.	My colleagues at the university are willing to offer assistance to help me excel in my responsibilities to perform the best of my ability.							
4.	My colleagues at the university acknowledge my achievements.							
5.	Even if I excel in my responsibilities, my colleagues at the university may not always acknowledge my efforts.							
6.	My colleagues at the university genuinely care about my overall well-being.							
7.	I sometimes feel that my colleagues at the university show							

	very little concern for my personal well-being.							
8.	My colleagues at the university respect my opinions.							

Section B Part 5 (Employee Job Commitment)

Please mark your answer according to your degree of approval based on the scales below.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Agree	Strongly Agree

No.	Items	1	2	3	4	5	6	7
1.	I am committed to performing my teaching and learning duties to the best of my ability.							
2.	I am committed to performing my consultancy work duties to the best of my ability.							
3.	I am committed to performing my research and publication work duties to the best of my ability.							
4.	I am committed to performing my corporate social responsibility work duties to the best of my ability.							
5.	I am committed to performing my marketing work duties to the best of my ability.							
6.	I am dedicated to advancing in my career within my current job position at this university.							
7.	I see myself continuing to grow professionally within my current job role at this university.							

8.	I feel satisfied with the work I do in my current job position at this university.							
9.	I take pride in the work I accomplish within my job role at this university.							
10.	I feel emotionally invested in the progress of my teaching and learning.							
11.	I feel emotionally invested in the progress of my consultancy work.							
12.	I feel emotionally invested in the progress of my research and publication work.							
13.	I feel emotionally invested in the progress of my corporate social responsibility work.							
14.	I feel emotionally invested in the progress of my marketing work.							
15.	The thought of leaving my current job position at this university concerns me because of the impact it would have on my career progression.							
16.	I feel motivated to contribute positively to the goals of my job role within this university.							

Section B Part 6 (Continuation of employment status)

Please mark your answer according to your degree of approval based on the scales below.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Agree	Strongly Agree

No.	Items	1	2	3	4	5	6	7
1.	I feel secure in my current contract academic position.							
2.	I feel respected in my role as a contract academician.							
3.	I am optimistic about my future career prospects despite being in a contract position.							
4.	I experience a sense of fulfilment in my work as a contract academician.							
5.	I have access to adequate resources to fulfill my duties as a contract academician.							
6.	I am able to maintain a healthy work-life balance as a contract academician.							
7.	I am able to cope effectively with the demands as a contract academician.							
8.	I feel supported by my supervisors as a contract academician.							
9.	I feel supported by my colleagues in my contract academician role.							

10.	I feel motivated in my job responsibilities as a contract academician.							
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Thank you very much for your participation.