PERFORMANCE MANAGEMENT IN A HYBRID UNIVERSITY: IMPACTS OF USING A MORE QUANTITATIVE PERFORMANCE MEASUREMENT SYSTEM

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by

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NPM	New Public Management
PMS	Performance Measurement System
USM	Universiti Sains Malaysia
PM	Performance Management
SOM	School of Management
SBS	School of Biological Sciences

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PENGURUSAN PRESTASI DI UNIVERSITI HIBRID: IMPAK PENGGUNAAN SISTEM UKUR PRESTASI YANG LEBIH KUANTITATIF

ABSTRAK

Pengukuran prestasi merupakan satu amalan yang meluas dalam sistem penyelidikan dan pengajaran di universiti awam di Malaysia. Secara tradisional, pengukuran prestasi dalam konteks universiti memainkan peranan pembangunan, iaitu membantu para akademik meningkatkan prestasi mereka pada masa hadapan. Walau bagaimanapun, amalan pengukuran prestasi yang baharu seperti yang diguna pakai oleh salah sebuah universiti awam di Malaysia dilihat lebih bersifat penilaian, formal dan berkuantitatif—iaitu bertujuan untuk menilai prestasi lepas secara kuantitatif. Kajian ini bertujuan untuk meneroka bagaimana dua buah sekolah di universiti awam tersebut menyeimbangkan antara objektif sosial dan komersial (organisasi hibrid). Pendekatan logik institusi telah digunakan sebagai lensa analitikal untuk meneliti pengaruh logik institusi terhadap tekanan yang dihadapi oleh pihak pengurusan sekolah dalam mengekalkan misi dwifungsi. Kajian ini direka bentuk melalui pendekatan kualitatif interpretif yang meneliti pengalaman para akademik serta perspektif rasional mereka dalam menangani pelbagai objektif. Amalan pengukuran prestasi baharu ini telah memberi kesan terhadap ramai akademik, terutamanya dari segi kesejahteraan emosi dan perkembangan kerjaya mereka. Meskipun amalan ini dilihat mempunyai ukuran kuantitatif yang jelas, ia secara tidak langsung telah menimbulkan tekanan dan ketidakpastian dalam pelaksanaannya di institusi pengajian tinggi. Oleh yang demikian, kebimbangan ini telah mendorong kepada penyelidikan lanjut, khususnya dalam bidang penyelidikan perakaunan. Kajian ini menggunakan kaedah analisis tematik berdasarkan temu bual separa berstruktur untuk meneliti impak penggunaan sistem pengukuran prestasi yang lebih berorientasikan kuantitatif dalam konteks Universiti Sains Malaysia (USM), dengan memfokuskan kepada reaksi pelbagai sekolah dan akademik terhadap pelaksanaan sistem PMS yang baharu. Dapatan kajian menunjukkan bahawa kedua-dua sekolah terlibat menggunakan penetapan sasaran prestasi yang sama bagi memenuhi tuntutan sosial dan komersial yang bertentangan. Bukti juga menunjukkan bahawa elemen komersial dalam bentuk penjanaan pendapatan yang diusahakan oleh setiap sekolah menyokong elemen sosial dalam usaha memberi khidmat kepada komuniti. Para akademik pula bertindak balas terhadap objektif yang bersaing ini dengan sedikit kompromi terhadap setiap objektif, di mana pihak sekolah mengenakan sekatan-sekatan tertentu bagi memastikan kedua-dua objektif tersebut dapat dicapai. Tambahan pula, kajian ini memberikan sumbangan yang baharu dan signifikan kepada literatur sedia ada berkenaan sistem pengukuran prestasi dalam organisasi hibrid, dan dapatan kajian ini menyokong teori institusi. Implikasi kajian ini juga penting kepada universiti awam di Malaysia dalam usaha mempertingkatkan kecekapan pengurusan prestasi yang mampu menyokong keberkesanan dan kejayaan keseluruhan institusi.

PERFORMANCE MANAGEMENT IN A HYBRID UNIVERSITY: IMPACTS OF USING A MORE QUANTITATIVE PERFORMANCE MEASUREMENT SYSTEM

ABSTRACT

Performance measurement is prevalent in the research and teaching system amongst Malaysian public universities. Traditionally, performance measurement in universities has had a developmental role—helping academics to improve their future performance. However, the new performance measurement practices adopted by one of the public universities in Malaysia seem to be more judgmental, formal, and quantified – i.e., seeking to evaluate past performance quantitatively. This study aims to explore how two schools at the public university strike a balance between social and commercial objectives (hybrid organisation). In this study, the institutional logics perspective is used as an analytical lens to probe the influence of institutional logics on the pressures confronting schools' management in sustaining dual missions. The research is designed from a qualitative interpretive approach to study academics' experiences and their rational perspectives in dealing with multiple objectives. Consequently, these new practices have affected many academics, impacting their emotional well-being and career progression. Even though these practices are deemed to have straightforward quantitative measures, they have inadvertently created stress and uncertainty regarding their implementation within universities. Thus, these concerns have prompted further investigation, particularly in the field of accounting research. This research, which employs thematic analysis from semi-structured interviews, aims to examine the impacts of using a more quantitative performance measurement system (PMS) within the context of Universiti Sains Malaysia (USM), examining the reactions of various schools and academics to the new PMS practices. The findings reveal that both schools use the same performance targets to accommodate the conflicting social and commercial demands. The evidence further suggests that the commercial attribute of income generation emerging from each school's initiative supports the social attribute of serving the community. The academic responds to the competing objectives with little compromise to each objective, whereby the schools impose restrictions to meet both objectives. Moreover, this study makes several new and meaningful contributions to the existing literature on performance measurement systems in hybrid organisations, and the findings support institutional theory. The findings also have important implications for Malaysian public universities, guiding their overall functioning and success through effective performance management.

CHAPTER 1
INTRODUCTION

1.1 Introduction of the Chapter

Performance measurement plays an essential role for the functioning of various organisations, be it a factory, business, hospital, or school (Bourne, Melnyk & Bititci, 2018). Magretta and Stone (2002) emphasise the importance of performance measurements as they improve communication and establish clear performance objectives which allows the organisation to tackle the essential question that may emerge such as- "Given our mission, how will our performance going to be defined?" This approach is relevant in both commercial sector and public sector. One public sector segment that has extensively employed performance measurement is tertiary education.

Performance measurement in all its numerous forms has emerged as a central aspect of much contemporary accounting research (ter Bogt & Scapens, 2012). In the context of Malaysia, 90 percent of the universities' operating budgets came from the government, while the remaining 10 percent was derived from tuition fees and other self-generated income (Abdullah, 2017), however, since 2007, the Malaysian government has reduced funding for higher education. Interestingly, different schools (faculties) in the public university appear to have pursued various Performance Measurement Systems (PMS) and developed them according to their needs and issues- the reduction of funds causes public university to be more proactive in generating their income. Yet, research in performance measurement in public universities have been rather limited. As a result, the effect of performance measurement on Malaysian public universities remains underexplored.

This chapter sets out to briefly introduce the overview of the research for further development of this thesis. The thesis is entitled '*Performance Management in a Hybrid Organisation: Impacts of a More Quantitative Performance Measurement System'*. It concerns the increasing use of formal and structured (i.e., quantitative) performance measurement practices in a Malaysian public university that carry both the public and private sectors' identities. This chapter is organised as follows: the *first* section introduces the background and issues of the research, the *second* section outlines the problem statement, the *third* section highlights on research objectives, the *fourth* section focuses on the research question, the *fifth* section explains the scope of the research, the *sixth* section shows the significant of the research, the *seventh* section outlines the definition of key terms, and the *final* section describes the structure of the thesis.

1.2 Background and Issues of the Research

Many organisations in the public sector especially education sector is experiencing various difficulties due to limited funding obtained from the government (Guraja et al., 2022). The most significant difficulty is to sustain and survive their organisation over an extended length of time with mounting financial strains (Ortiz-de-Mandojana & Bansal, 2016). Public sector organisations typically address these issues by prioritising demands, generating revenue, utilising a PMS and making effective use of resources (Lambert & Enz, 2012). For the most part, PMS has been thought of as a control instrument that shapes how companies accomplish their goals. To achieve their intended goals, this PMS is seen to be helpful for formulating and carrying out plans, coordinating actions, and assisting in decision-making (Janudin &

Maelah, 2016). Upon adopting the PMS in public sector organisations, changes in management practices are unavoidable.

Changes employees' everyday work habits, values, and behavioural norm is a component of management practice change (Abdul Khalil, 2008; Abdul Zalim, 2020). Both public and private sector organisations are being impacted by these reforms, especially those in the tertiary education sector better known as public universities. According to Pucciarelli and Kaplan (2016), teaching, research, and public service are the three main purposes of universities. Public universities today, however, must identify several revenue streams and start innovative capitalisation strategies (Abdul Kadir & Cotter, 2020). These missions have always been at conflict with each other (Pucciarelli & Kaplan, 2016; Altbach, Reisberg, & Rumbley, 2009). As a result, public universities must operate more like business organisations, prioritising financial gain over instruction. As societal value and corporate social responsibility have become more prominent in the public consciousness, even for business organisation are actually dealing with these conflicts more frequently (Pucciarelli & Kaplan, 2016). Likewise, the public university, which is the birthplace of graduates, is also facing the same conflicts. Therefore, in order to improve the quality of education, this sector needs to be regulated.

Public universities must follow the education blueprint[1] or guidelines from the government to strengthen the education system and in tandem to ensure the education system continuously progresses. For example, the Malaysia Education Blueprint 2013-2025 (MEB) is the major policy document driving reform. The MEB makes it clear

[1] Education blueprint is a policy that is made by the government to continuously improve the education system (Ministry of Education Malaysia, 2013).

that Malaysian students' performance is measured against global standards (Bush, Abdul Hamid, Ng, & Kaparou, 2018). By doing so, the country will continue to produce good and competitive students in an increasingly competitive global economy. Upon producing good and competitive students, effective PMS is becoming increasingly challenging due to the growing need for a PMS that evaluates research, teaching, and income-generating activities. (Manes-Rossi, Mussari, & Cepiku, 2022).

Prior to this, PMS was simple—it showed the public university's performance (ter Bogt & Scapens, 2012). However, as performance management (PM) becomes more formal, strict, judgemental, and quantitative, it is becoming more demanding and difficult, especially in public universities (Jusoh, Rudyanto, & Abu Hasan, 2012). The government's decision to cut off funding for the education sector is the reason for this change in direction (Abdul Kadir & Cotter, 2020). The shift from traditional to modern universities has resulted in major changes at public universities in recent years (ter Bogt & Scapens, 2012). Furthermore, a considerable decrease in government funding has coincided with a very notable increase in the number of students (Jongbloed & Salerno, 2003). As a result, the PMS becomes more quantified as public universities are concerned with income generation (Martin & Whitley, 2010).

Academics and schools experience managerial changes as a result of the implementation of PMS in public universities. In order to continually track their outcomes and attain organisational objectives, public universities will assess their performance using performance indicators and targets (Rabovsky, 2014). Academics and schools now play a more important role in monitoring and evaluating the overall performance of their departments. They need to develop operational objectives, multidimensional indicators, and attainable goals as a result of these developments.

(Andersen, 2008; Dal Molin, Turri & Agasisti, 2017). However, the increased relevance of workload has led to conflicts among schools and academics. As a result, schools and academics have adopted New Public Management (NPM) techniques in their day-to-day activities.

Since the rise of the so-called NPM in the 1980s, performance measurement in the public sector has received considerable attention in many countries worldwide. A lot of scholarly research has been done on it (Pollit & Bouckaert, 2008). NPM can be defined as a technique that applies private sector approaches to the public sector. Value-for-money and performance audits are among the many assessments and audits that have significantly increased in number in an effort to improve accountability and transparency. Income generation, which has taken the spotlight in public universities while performing traditional function of public universities that favours social perspectives, is another example of NPM adoption. A decade ago, public universities had focused only on the social perspective, which is only to provide education. However, there are a few changes in the finance setting. A reduction in funding by the government has forced public universities to include an income-generation approach in the management. As a result, public universities are experiencing a hybridisation of social and income objectives.

Public universities have traditionally operated with a primary focus on public service, emphasising education, research and societal development (Compagnucci & Spigarelli, 2020). However, these public universities are also expected to be financially sustainable, innovative, and globally competitive (Borbalan & Claude, 2024). As a result, many public universities are now operating as hybrid organisations, where they try to balance their traditional social objectives with commercial objectives (Grossi, Dobija & Strzelcyzk, 2020; Xia, Zhang, Zhu & Fan, 2024).

A public university with hybrid objectives is a creative combination of two traditionally distinct models: an income generation model that aims to create wealth through commercial endeavours and a social welfare model that pursues its objective of societal contributions (Battilana et al., 2012; Haigh & Hoffman, 2012; Taylor & Rosca, 2022). This combination does not mean that public universities are becoming businesses. Instead, it means they are learning to blend public values like inclusion, access, and community service with private-sector styles, such as generating income, forming industry partnerships, and offering market-driven programs (Grossi et al., 2020). Therefore, this hybrid concept refers to the integration of both social (public-good) and commercial (market-oriented) objectives within a single institutional framework (Pinz, Englert & Helmig, 2024).

As the public universities are becoming hybrid organisations, the way they are structured, operated and managed education is also changing (Perkmann, Phillips & Greenwood, 2022). They added that, from a structural perspective, public universities use public governance mechanisms with managerial and entrepreneurial elements that often found in the private sector. Besides that, getting fund from the government alone is not enough. Thus, public universities are now relying on multiple income streams—from students' tuition fees, research contracts, and business partnership (Jongbloed, McGrath, Boer & Gayardon, 2023). In addition, public universities have created new centres or new units that focus on entrepreneurship, innovation, or commercial services, while the academic core remains focused on teaching and research (Borbalan & Claude, 2024).

Furthermore, from operational perspective, the daily work inside the public universities need to serve for both social and commercial objectives (He & Ismail, 2023). In measuring the success of the public university, it is no longer about traditional teaching method, research, or publication metric (Argento & van Helden, 2021). This is because public universities are now judged based on external performance indicators, such as publication rankings and student enrollment (Sarpong, 2023; ter Bogt & Scapens, 2012) Besides, the role of staff and academic are has fundamentally changed, with growing demands for administrative and expansion of managerial roles (Croucher & Woelert, 2022). Even though, the main core of academic is to teach, conduct research and publish papers, they are expected to seek funding by commercialising the result of their research and some even creating new companies (academic spinoffs) based on their knowledge and expertise (Kirby, 2006; Pacheco et al., 2023).

In term of educational perspective, the hybrid term also changes the student experience, offering both opportunities and challenges (Adlemo, Al-Musaed, Conway, Hansen & Rico-Cortez, 2023). For the opportunity part, hybrid universities offer more short courses (e.g. micro-credentials courses), certificates, and online learning for adults and working professionals (Selvaratnam & Sankey, 2021). These courses generally offer in more flexible time spans and tend to be more narrowly focused (Kazin & Clerkin, 2018). In contrast, while universities still aim to be inclusive, some programs—especially professional or international ones—may come with higher fees, which can raise questions about equality and access (Sung, 2025).

Public universities which include hybrid objectives are constantly trying to balance tradition with innovation, values with viability, and public service with practical needs (Thomas et al., 2023). It is not always easy. There are tensions—over about what should be prioritised, how to fund education fairly, deciding whether to prioritise equitable access or revenue-generating programs, and must remain committed to their public mission while adapting to a competitive world(Alibašić et al., 2024). To understand how public universities have included hybrid objectives in their daily activities, this subtopic will be discussed further in Chapter 2.

Performance management in public universities which simultaneously pursue social impact and commercial viability, face distinct challenges and benefits (Jay, 2013; Pache & Santos, 2013). One of the biggest challenges is to balance social objective and commercial objective (Battilana, 2018). The pressure to meet financial goals can cause the organisation to prioritise commercial objectives, risking deviation from its social objective (Ebrahim, Battilana & Mair, 2014; Xu, 2024). Therefore, performance management must be designed to safeguard the organisation's social and commercial objective (Pache & Santos, 2013).

On the other hand, the benefit of performance management in hybrid organisations is able to explore innovation for both social and commercial objectives (Skelcher & Smith, 2015). As the public universities need to accommodate both social and commercial objectives, they may develop deeper insights from tracking individual performance targets, leading to more reflective and adaptive strategies (Barrachina-Palanca & Gonzalez-Sanches, 2023). This cross-functional learning becomes embedded in the organisation's culture, improving responsive and resilience (Kraatz & Block, 2008).

The performance management topic has become increasingly popular in accounting research as academics working in universities are subjected to and affected by PMS. However, there appears to be minimal research on PM in public universities. In a hybrid objective organisation, the use of quantitative PMS and NPM—which are meant to be formal, transparent, and provide clarity—causes stress and pressure because they are new forms of performance measurement (ter Bogt & Scapens, 2012). Hence, there is a need to investigate the effects of the more quantitative PMS in public university with hybrid objectives (social and commercial).

1.2.1 PMS in Malaysia

Given its bright future, Malaysia places a high priority on its tertiary education system, earning it the World Bank's "Malaysia Economic Monitor: Smart Cities 2011" award. However, the global ranking places Malaysian universities in an unsatisfactory position. Therefore, Malaysian Public Research Universities have been using PMS and NPM to actively plan and execute strategic actions (Janudin & Maelah, 2016). In Malaysia, government funding has become contingent on their performance. However, in 2015, the government cut public universities' budgets. Under Budget 2017, the budget was slashed by about 19%, or RM1.5 billion, from the former budget. It was a massive cut, and about twenty public universities in Malaysia were affected extensively. Thus, public universities are proactive in raising their funding while maintaining quality education. This situation has led public universities to use private sector style such as cost reduction in their management.

Public universities must function more like businesses in order to increase revenue (using private sector style). Nonetheless, public universities are still bound by conventional structures and investments because they were founded under the University and University Colleges Act of 1971 (modified in 2009) (Abdullah, 2017). This private style allows public universities to engage in market-related activities such as entrepreneurship activities. Even though, public universities in Malaysia are still receiving the funding from government, however, they are still responsible for their expenditure. Public universities are forced by this circumstance to come up with ways to make additional revenue, including charging full tuition to international students, providing research grants, charging fees for the use of university facilities, offering educational programs, and commercialising research (Lee, Chang & Sirat, 2017).

Before this, public universities were concerned with social objectives (to provide the best education to society). However, public universities are now becoming organisation with hybrid objectives (commercial objectives while maintaining social objectives). The combination of two distinct objectives can create challenges. These challenges have provided an interesting context for further exploration as the school in public university has embedded multiple objectives and institutional logic within an organisation to achieve both social mission and financial sustainability. Thus, it is interesting to study the performance measurement in public universities with hybrid objectives.

1.3 Problem Statement

It should not be surprising that the education sector is expanding globally in an era characterised by globalisation in a wide range of organisations, sectors, technology, and social movements. It goes without saying that private interests' involvement in education is not a recent development (Verger, Lubienski & Steiner-Khamsi, 2016). Private and public universities have different funding sources and public perceptions, which affects how they view, perceive, and approach sustainable development (Wang, Yang & Maresova, 2020).

While it is broadly known that a business's purpose is to maximise profit and produce income—especially in the lens of the private sector to act in the interest of shareholders, the education sector places a different emphasis on meeting social expectations. According to Wan, Sirat, & Razak (2015), since the goal of the education sector is to impart knowledge in order to meet societal demands and social objectives, universities are important institutions for every part of society (Guttman, 1987; Chan, 2016).

Since public universities only rely on government funding and student tuition fees, they may be about to see a decline in profits (ter Bogt & Scapens, 2012). The sustainability of public university seems worrying and they may require a fundamental transformation in terms of the ways public university is managed. Thus, public university is now focusing more on income generation (commercial objectives) in order to sustain.

Public university has been embodying multiple objectives from social and commercial mechanisms. However, combining such disparate social and financial objectives poses serious challenges for any management due to the possibility of mission drift. Conflict of interest and divergent priorities are now frequent problems in Malaysia's education sector. The management of schools is forced to make choices that may jeopardise both financial benefits and social impact due to two seemingly incompatible expectations and the limitations that accompany them (Dees, 2008).

Furthermore, public universities must consider the interests of the larger community rather than just their own institutional interests (Schulz & Johnson, 1983). By focusing on the social sides from the schools' objective, the management will face greater capital constraints to achieve financial sustainability. However, social enterprises will not be able to fulfil their objectives of providing social value to their beneficiaries if they lose sight of their social mission (Ebrahim et al., 2014)

Nevertheless, since public universities rely on commercially generated revenue to fund their operations, the commercial mechanisms may dominate their operations (Ebrahim et al., 2014). According to Ebrahim et al. (2014), schools run the risk of prioritising their commercial endeavours, which allow them to make money and so survive, over their charitable endeavours, which help them fulfil their mission.

The studies by Pache and Santos (2013), Nachum et al. (2018) acknowledge the difficulty of achieving balance among competing aims in practice. The education sector faces challenges in reconciling divergent perspectives on generating value with a robust moral foundation and the conflicting requirements of economic performance and sustainability, making it difficult to ascertain the appropriate business model to adopt (Nachum, 2018).

Consequently, this investigation into the concerns is essential to establish a definitive set of objectives that elucidate how a non-profit public university, or analogous institutions, confronts comparable challenges in managing their diverse aims. Thus, this research aims to provide insights that demonstrate how a non-profit public university or any other similar organisations face similar challenges or problems in managing multiple objectives.

1.4 Research Objectives

Based on the problem statement above, this thesis sets out to have three research objectives related to the empirical setting where a case study will be conducted in Universiti Sains Malaysia (USM). There will be two schools from USM involved in this research as the researchers aim to see the use of PMS practices in the science school and the art school (non-science school).

Science school like the School of Biological Sciences (SBS) easily receives more grants compared to non-science schools as they need to commercialise their product (Louis, Jones, Anderson, Blumenthal, & Campbell, 2001) which may be conceived as a durable public good: the exclusion of its use is expensive, non-rival and cumulative (Chudnovsky, López, Rossi, & Ubfal, 2008). Meanwhile, non-science schools like the School of Management (SOM) are more likely to be secretive about their research as they are involved in translating their research into potentially marketable knowledge (Louis et al., 2001). Thus, the following research objectives are potent for this research.

1. To examine the use of performance targets in two schools of USM (the SOM and the SBS).

2. To analyse the reactions of academics from the SOM and the SBS regarding PMS practices.

3. To investigate the effects of the more quantitative PMS on the two schools and their academics (with the dominance of commercial measures).

1.5 Research Questions

Based on the three research objectives above, this research is guided by the following research questions.

1. How has the PMS, which emphasises quantitative performance targets, been used in two schools of USM (the SOM and the SBS)?

2. What are the reactions of academics from the SOM and the SBS regarding PMS practices?

3. What are the effects of the more quantitative PMS on the two schools and their academics in USM (with the dominance of commercial measures)?

1.6 Scope of the Research

There are twenty public universities in Malaysia. However, this research discusses PM in one particular public university (i.e., USM) as a research subject. USM was established in 1969 as Universiti Pulau Pinang, making it the second university to be founded in the Malaysia. The research on this topic is restricted to USM because of the empirical nature of this research concerning PM in USM that promotes APEX University's agenda, hence the tangible performance targets and expectations. APEX is a rapid development program designed to help universities become regarded as top-tier organisation, and USM is the only university that has been chosen for it. The program's objectives are to help the university to compete internationally, as well as to inspire and contribute to the improvement of higher education's quality. "A pioneering, trans-disciplinary research-intensive university that empowers future talents and enables the bottom billions to transform their socio-economic well-being" is the research focus of USM, which was recognised as a

Research-Intensive University by the Ministry of Higher Education Malaysia (MOHE) in 2007.

Figure 1.1 APEX Facts and Figures
Source: USM website

USM continues to drive its APEX 2024 vision of transforming higher education for a sustainable tomorrow. The university's strategic thrusts emphasise four key pillars which are connect-engaged-synergy, learn-lead-succeed, research redefined and rise and lead. The first key pillar, connect-engaged-synergy focuses on strengthening industry and community network. Meanwhile, the second key pillar, learn-lead-succeed promotes academic excellence. The third key pillar, research redefined highlights innovation and impactful research outputs. The fourth key pillar, rise and lead, supports student development and alumni engagement. These pillars reflect USM's commitment to leadership, engagement, and redefining education in alignment with its APEX agenda.

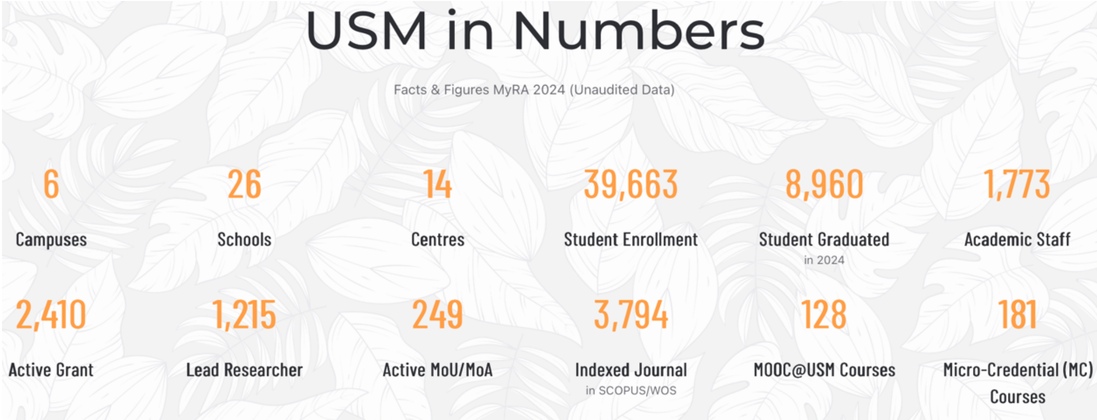

Figure 1.2 USM in Numbers
Source: USM website

According to the USM in Numbers (Facts & Figures MyRA 2024, unaudited data), USM operates across 6 campuses and comprises 26 schools and 14 centres. As of 2024, the university boasts a student enrolment of 39,663, with 8,960 students having graduated in the same year. Supported by 1,773 academic staff and 1,215 lead researchers, USM remains a hub for research excellence, securing 2,410 active grants and maintaining 249 active Memorandum of Understanding and Memorandum of Agreement (MoU/MoA) collaborations. The institution also contributes significantly to academic literature with 3,794 indexed journals listed in SCOPUS and WOS. In terms of learning innovations, USM offers 128 MOOC@USM (online learning) courses and 181 Micro-Credential courses, reflecting its commitment to accessible and flexible education.

Moreover, the PM will be observed from two schools, the SBS, and the SOM. The reason why the researcher chose these two schools is to see the comparison or similarity between the science school and the non-science school regarding PMS practices. This research recognises that it is just a piece of the whole view of PM in Malaysia. This research also involves an analysis of the management team from each school's perspectives on how PM is used and how PMS has impacted the management staff and academics.

1.7 Significance of the Research

The topic of PM has become prevalent in the accounting research as all organisations, in particular, the public university needs to monitor and measure the effectiveness in fulfilling the schools' missions and visions. However, there is limited research on PMS in public universities, specifically in Malaysia. Thus, this research is concerned with providing insights into such research areas. In other words, this research will enhance our understanding of PMS practice in Malaysian public university. This research explores the practice of more quantitative PMS in USM. The expected result from this research will contribute new knowledge in the PM field in Malaysia's public university.

In terms of theoretical contributions, this research is expected to provide a better understanding of PMS from an institutional perspective in hybrid universities. Discoveries from institutional theory will aid the research's data collection and investigate the real-world PMS practices in Malaysia. Moreover, this research uses a qualitative approach through interviews and document reviews to ensure the reliability of the data collected. The researcher believes this research can provide new input that can benefit others. In other words, the accuracy of the findings gives a better understanding for analysis.

1.8 Definition of Key Terms

There are a few terms that need to be addressed in this research. This subsection discusses the key terms to provide readers with the necessary information and comprehension of key terminologies used in this research.

1.8.1 Performance Measurement System (PMS)

A PMS is a systematic process for enhancing individual and team performance in order to improve organisational performance (Armstrong, 2021). On the other hand, PMS is feasible for strategy implementation, behaviour alignment, and decision support in order to achieve desired results, claim Janudin & Maelah (2016). Following the definition of PMS by Armstrong, in this research context, both definitions are being used in this research. This is due to my focus on exploring and investigating the effects of using PMS in a Malaysian public university.

Based on the definition provided above, this research intends to explore PMS by breaking it into two types of PMS which are quantitative and qualitative. However, this research intends to focus more on quantitative PMS as per the research objectives and questions in the above section. PMS has become more quantitative because of the growth of managerialism in public universities.

1.8.2 New Public Management (NPM)

According to ter Bogt and Scapens (2012), NPM is a collection of management techniques used in the public sector that are primarily taken from the private sector. Public universities are adopting private sector management practices like mission statements, strategic planning, ISO certification, total quality management, right-sizing, and benchmarking (Lee et al., 2017).

1.8.3 Hybrid University

According to Lee et al. (2017), the term "hybrid" describes a combination of phenomena that are thought to be distinct and different. Stated differently, the term "hybrid" describes how public, private, and civil society interact through different ownership structures and institutional and social control mechanisms (Kreps & Monin, 2011; Skelcher & Smith, 2015; Grossi, Vakkuri & Sargiacomo, 2022). In this research, however, the term "hybrid" refers to an organisation's fusion of political and social goals with the principles of profit maximisation within the framework of diverse accountability regimes and intricate social structures (Guthrie, 1993; Grossi et al., 2022).

1.9 Thesis Organisation

To achieve the research objectives, this thesis will be organised into six chapters. Chapter 1 will provide an overview of the research background, problem statement, research objectives, research questions, the scope of the research, the significance of the research, and the key research objectives that guide this thesis. The objectives of this thesis concern exploring PM in a Malaysian public university using dual objectives, which involve social and financial objectives. In addition, the research questions in this chapter also highlight the effects of using more quantitative PMS in schools and academics in USM. This chapter follows by explaining the scope of the research and the significance of this research. Lastly, this chapter discusses the key terms for this research and includes them in the thesis organisation.

Chapter 2 reviews the literature on PM in public universities. Specifically, the review involves the use of PMS and NPM in the public universities. As mentioned above, most public university is now becoming hybrid universities due to the adaptation of commercial objectives in management while maintaining the social objective. Thus, in this chapter, there will be a review of the pieces of literature regarding the hybrid objectives concept.

Chapter 3 discusses the development of institutional theory that will be used in this thesis. Institutional theory is a theory that focuses more on social structure. It includes the processes such as rules, routines, policies, and governance that shape authorities' guidelines and actions. In simple words, these processes show how they diffuse and what role they play in giving back to social behaviour. Thus, in this chapter, there will be a discussion on the institutional theory.

Chapter 4 describes the research methodologies used in this thesis. This chapter illustrates how an interpretive case study technique is used for better understanding PM in USM. This chapter is important since it explains the methodology employed in this thesis.

Chapter 5 poses the case organisations' findings and supporting documentation. The organisational structure and pertinent statistics of the schools are shown after a brief history of each school. The conclusions regarding the business models of the schools, which were created to accommodate the various goals within each institution and the roles that their departments played in achieving those goals, are presented after this. The chapter concludes with a summary of how the schools handled their conflicting goals.

Chapter 6 examines and analyses the findings from Chapter 5 around the key themes and research objectives. This chapter concludes on the main findings and provides conclusions based on the findings and discussion. This chapter also addresses the major theoretical and practical contributions of the research, followed by the limitations and recommendations for the future research at the end of this chapter.

1.10 Summary

Public universities, like USM, are increasingly facing financial pressure due to limited government funding and reliance on tuition fees. As funding becomes tighter, many universities are shifting towards more commercial approaches to stay financially sustainable. This has led to a stronger focus on PMS that rely heavily on quantitative targets. While these systems may help track efficiency and outcomes, they also raise important questions about their impact on academic work, values, and the broader mission of universities.

Public universities are being pushed to juggle both social and commercial goals—something that is difficult to manage. This research focuses on two schools within USM: the SOM and the SBS. The main objective is to explore how PMS is being used in these schools. To guide the study, three research objectives and research questions were developed. In order to enhance clear understanding, Table 1.1 below shows the research objectives and research questions.

Table 1.1 Research Objectives and Research Questions

Research Objectives	**Research Questions**
To examine the use of performance targets in two schools of USM (the SOM and the SBS).	How has the PMS, which emphasises quantitative performance targets, been used in two schools of USM (the SOM and the SBS)?
To analyse the reactions of academics from the SOM and the SBS regarding PMS practices.	What are the reactions of academics from the SOM and the SBS regarding PMS practices?
To investigate the effects of the more quantitative PMS on the two schools and their academics (with the dominance of commercial measures).	What are the effects of the more quantitative PMS on the two schools and their academics in USM (with the dominance of commercial measures)?

CHAPTER 2
LITERATURE REVIEW

2.1 Introduction of the Chapter

Chapter 2 sets out an extensive review of the extant literature. Given that little research has been written about the practical issues concerning PM in public universities, particularly in Malaysia, this chapter will review issues related to the PM of public universities. The non-profit sector is receiving more attention globally, and business-like practices are becoming more prevalent there; it will specifically focus our attention on this sector. Upon the implementation of business-like practices in public universities, this research focuses on the multiple objectives or obligations concerning social and commercial perspectives simultaneously. Therefore, this chapter will further explore the emerging business structure of hybrid organisations and their conflicting demands.

The *first* section starts with how PMS and NPM work in the public sector, particularly in public universities; the *second* section explains the conceptualisation of PM; the *third* section discusses hybrid universities with multiple objectives; and the *final* section outlines the conflicts in hybrid universities that will be used in this research. The research aims to investigate the impact of using quantified PMS in public universities, and the literature below aligns with this focus. This chapter concludes with a summary of the reviewed literature.

2.2 PMS in the Public Sector and Public Universities

The PMS is well-established concept that traces its origins to workplace environments, gaining popularity during 18th century. PMS serves as essential instruments utilised in diverse fields to assess, analyse, and enhance organisational effectiveness. PMS has become increasingly popular in management accounting literature (Ibrahim, 2019; Yap & Ferreira, 2011) and performance measurement of universities has been discussed in several papers (Ahrens & Khalifa, 2015; Conrath-Hargreaves & Wüstemann, 2019; Dobija, Górska, Grossi, & Strzelczyk, 2019; Kallio, Kallio, & Grossi, 2017). By offering structured frameworks, PMS provide organisations with the means to set objectives, track progress, and realign strategies for optimal outcomes. According to Manes-Rossi, Mussari, and Cepiku (2022) PMS coupled with reporting systems, have been deemed able to increase public sector organisation accountability in the use of the public with extensive use of performance targets and league tables amongst universities. Study by Nazaruddin, Sofyani & Utami (2024) stated that study aimed to analyze the factors influencing effectiveness of PMS implementation and explore the impact of the concept on lecturers' motivation to enhance performance. Harefa, Santoso & Fuadah (2024) underscores the strategic evolution of PMS from a retrospective evaluation tool to a forward-looking system designed to enhance engagement, clarify expectations, and foster alignment with institutional missions. This transformation is especially crucial for hybrid universities where staff must meet both academic and commercial performance indicators. Although changing over time and varying from country to country, the PMS is increasingly common within public universities (Kallio et al., 2017). Adaptability has become a defining feature of effective PMS, allowing institutions to respond to changing priorities and diverse performance contexts (Nguyen, Liu, Haslam & Mclaren, 2023). This is particularly relevant in universities, where workloads and expectations vary across disciplines and roles. Studies by Awan, Habib, Shoaib Akhtar & Naveed (2020) and Muhammad, Khan & Hameed (2021) demonstrate the link between PMS and employee engagement, highlighting the importance of regular feedback, goal-setting, and alignment with institutional goals. Beyond their technical functions, PMS frameworks have social implications. For example, Vainieri, Noto, Ferre & Rosella (2020) show how adaptable PMS models in healthcare settings address seasonal and contextual demands. This mirrors the academic environment, where PMS must consider factors like research cycles, teaching periods, and service roles. The implementation of PMS in hybrid university must strike a balance between structure and flexibility to accommodate these varying demands.

There are 5 components for success that been mentioned in the study of Siraj and Hágen (2023) which includes goal-setting, performance measurement, feedback mechanisms, evaluation, and development. When these components are personalized and engagement-oriented, they can foster academic excellence without sacrificing institutional identity or mission. To sum up, including recent studies on PMS helps strengthen the foundation of this research by showing how higher education is changing. Today's performance systems need to be flexible, inclusive, and balanced between academic goals and financial needs in order to effectively support hybrid public universities.

PMS encompassing various strategies such as management by objectives, budgeting, and evaluation were implemented during the 1960s and 1970s (ter Bogt &