

ENHANCING MCMC PERFORMANCE BY USING BALANCED SCORE
CARD: A DRIVE ON MALAYSIA'S DIGITAL ECONOMY

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**ENHANCING MCMC PERFORMANCE BY USING BALANCED SCORE CARD: A
DRIVE ON MALAYSIA'S DIGITAL ECONOMY**

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DEDICATION

This thesis is dedicated to my spouse, who has been with me through the journey of completing my study, both of my parents, who taught me that the best knowledge is knowledge gained for one's own benefit and that one can share and benefit others. It was also addressed specifically to my supervisor, who taught me that even the most difficult task can be completed with dedication and determination. Also, not to forget my family, who taught me the true meaning of life and not just based on theory.

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ABSTRACT

Performance Management is one of the important component for any Organisation and failure to manage it effectively leads to inability to measure its overall performance. This study was aimed to resolve the organisation problem in measuring its overall performance by using Balanced Score Card (BSC) and determine whether the Organisation's Overall Performance have any impact on the Digital Economy.

This study is importance in understanding the feasibility to implement BSC in Statutory Body in Malaysia. In the first cycle, Intervention Plan implemented by using all 4 BSC Perspective namely Financial, Customer, Internal Process and Learning Growth. For the first cycle, both Quantitative and Qualitative approaches employed in this research. This study able to ensure structured Performance Management System to measure Organisation's Overall Performance and identify its linkage to Digital Economy. This research has able to change the Organisation PMS by using strategic tool to measure Outcome based KPIs for the Organization as well as providing accurate PMS Reporting that reflect the Organization Overall Performance.

Since BSC is a Strategic Performance Management Tool, there is some gap when it implemented directly to the individual level. In order to complement the BSC, Agile Performance Management System knowing as Must Do, Should Do and Could Do (MSC) was employed in second cycle. The effectiveness of combination of BSC and MSC was verified by using Quantitative Approach and

results shows that BSC and MSC has increased the performance employees and Organisation as a whole.

ABSTRAK

Pengurusan Prestasi adalah satu komponen penting bagi mana-mana Organisasi dan kegagalan menguruskannya secara efektif akan menyebabkan ketidakbolehan untuk mengukur prestasi Organisasi berkenaan secara menyeluruh. Kajian ini bertujuan untuk menyelesaikan masalah Organisasi dalam mengukur prestasi keseluruhan dengan menggunakan Balanced Score Card dan menentukan samada prestasi keseluruhan Organisasi mempunyai sebarang impak kepada Ekonomi Digital.

Kajian ini penting dalam memahami kebolehlaksanaan BSC dalam Badan Berkanun di Malaysia. Dalam kitaran pertama, Pelan Intervensi dilaksanakan dengan menggunakan keempat-empat Perspektif BSC iaitu, Kewangan, Pelanggan, Proses Dalaman dan Pembelajaran dan Perkembangan. Dalam kitaran pertama, kedua-dua kaedah Kuantitatif dan Kualitative telah digunakan dalam kajian ini, Kajian ini telah berjaya memastikan Sistem Pengurusan Prestasi yang berstruktur dalam mengukur prestasi keseluruhan Organisasi dan perkaitannya dengan Ekonomi Digital. Kajian ini telah berjaya menukar proses Pengurusan Prestasi Organisasi dengan menggunakan perkakasan strategik untuk mengukur KPI berasaskan Outcome bagi organisasi dan juga memberikan pelaporan tepat berkenaan prestasi keseluruhan Organisasi.

Namun, BSC mempunyai sedikit kelemahan apabila dilaksanakan secara terus kepada individu. Bagi melengkapkannya, teknik Pengurusan Prestasi Anjal (MSC) dilaksanakan pada kitaran kedua dan keberkesanannya diukur menggunakan kaedah Kuantitatif dan gabungan BSC dan MSC ini telah berjaya meningkatkan prestasi pekerja dan Organisasi secara keseluruhan.

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LIST OF ABBREVIATIONS

BSC	-	Balanced Score Card
MSC	-	Must Do, Should Do and Could Do Agile Performance Management System
PMS	-	Performance Management System
RO	-	Research Objective
SPSS	-	Social Science Software

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Performance Management is one of the important component for any Organisation since it determine whether the Organisation is performing or not. Organisation that is performing well will always attract interest from investors and able to sustain in long run due to positive supports that they received from public. As part of Strategic Management, Performance Management will reflect effectiveness of the strategies implemented by the Organisation in achieving its Vision and Mission.

1.2 Information about the Company

Malaysian Communications and Multimedia Commission (“MCMC”) is a Government Agency whose regulates Communications and Multimedia (“C&M”) Industry in Malaysia as per power conferred under Communications and Multimedia Commission Act 1998 (“CMCA 1998”) and Communications and Multimedia Act (“CMA 1998”).

Formation of MCMC leads to the establishment of 10 National Policies Objectives (“NPO”) which comprises of following:

- i) Promote a civil society where information-based services will provide the basis of continuing enhancements to quality of work and life;
- ii) Grow and nurture local information resources and cultural representation that facilitate the national identity and global diversity;
- iii) Regulate for the long-term benefit of the end user;
- iv) Promote a high level of consumer confidence in service delivery from the industry;
- v) Ensure an equitable provision of affordable services over ubiquitous national infrastructure;
- vi) Create a robust applications environment for end users;
- vii) Facilitate the efficient allocation of resources such as skilled labour, capital, knowledge and national assets;
- viii) Promote the development of capabilities and skills within Malaysia's convergence industries; and
- ix) Ensure information security and network reliability and integrity

The NPO are the regulatory basis of MCMC Regulatory Framework which include Economic Regulation, Technical Regulation, Consumer Protection and Social Regulation. On top as Regulator for C&M Industry, MCMC has also assuming Regulatory Functions of the Postal Services Act 1991 and the Digital Signature Act 1997. With these additional functions, MCMC has also become the Regulator for the Postal and E-Commerce (P&E) Industry for Malaysia.

MCMC functions as the Regulator of multi-discipline industry leads to implementation of various initiatives in order to facilitate organic growth of each of the respective industry.

1.3 Problem Statement

In the past few years, MCMC had implemented lot of key initiatives for C&M and P&E Industry which cover various areas namely:

- i) Infrastructures;
- ii) Cyber Securities;
- iii) Digital Services;
- iv) Communities and Industry Development;
- v) Postal and E-Commerce and
- vi) Others

As a Regulator of C&M, MCMC also plays a vital roles in ensuring Digital Infrastructure Readiness in order to support Malaysia's Digital Economy. Therefore, it is important for MCMC to be able to measure the Organisation's Overall Performance and determine its contribution to Malaysia's Digital Economy. However, currently there is no mechanism to measure the Organisation's Overall Performance which subsequently leads to unavailability to determine the Organisation's contribution on Malaysia's Digital Economy.

Current Performance Management Process ("PMS") only measure employee's performance at individual level is insufficient to provide holistic view on Organisation's Performance since there is no direct linkage between them.

1.3.1 Fishbone Diagram

The problematic situation which is currently faced by the Organisation is unable to measure the Organisation's overall performance and its contribution to Malaysia's Digital Economy.

Fishbone Diagram provides avenue to establish cause-effect relationship of the problem. Therefore, it will assist in identifying the root causes of the current problem and summary as shown below:

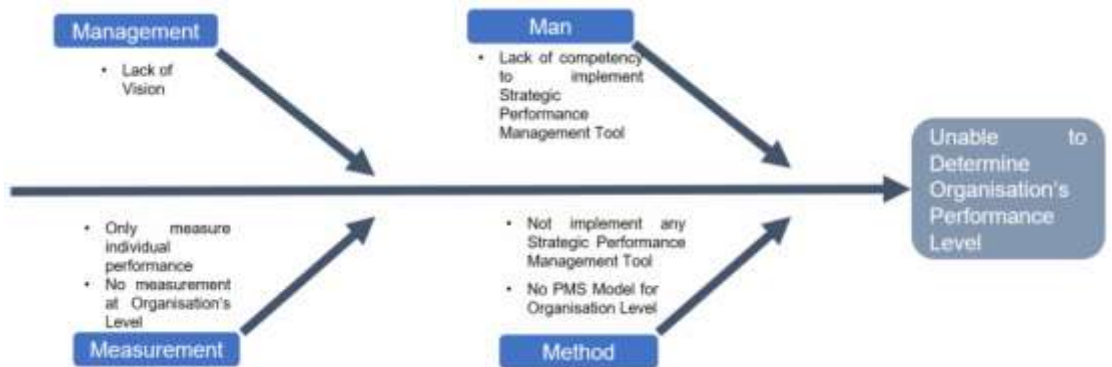


Figure 1.1: Fishbone Diagram

Figure 1 classified the causes into 4 categories which are Management, Man, Measurement and Method. All the causes contributed to unavailability in determining the Organisation's Performance Level.

The organisation has not implement any Strategic Performance Management Tool like Balanced Score Card (BSC) at the organisational level which is the main root cause of this problem. The missing of PMS for Organisational leads to inability to link the Organisation's Mission and Vision with specific Focus Area, Strategic Objective and KPIs.

Current PMS Measurement only focus on individual performance and no initiative taken to measure the performance at organisational level which leads to the problem. Therefore, in order to resolve the problem the current measurement system must be enhanced by benchmarking to the best practice globally and localise it based on the suitability of the organisation's culture.

In term of Management perspective, the cause identified is due to lack of vision from the Management. It is utmost important for the Management to understand the importance to have system that able to measure organisation's overall performance. This is critical aspect since Management is responsible to provide leadership to achieve the organisation's vision and mission. In order to implement any Strategic Performance Management tool that able to measure the organisation's performance, approval from Management is a must.

For the Man perspective, lack of competency to implement Strategic Performance Management Tool is the cause of the problem. In order for the employee who is responsible to undertake the initiative in measuring the organisation's overall performance to perform their task well, they must build certain set of competencies on how to implement it, otherwise it will never success.

Based on the Fishbone Diagram it can be conclude that there are many causes that leads to this problem with regards to various perspective. However, inability to implement any Strategic Performance Management Tool at the organisational level is identified as the main root cause that leads to this problem.

1.4 Research Questions

Therefore, formulation of Research Question is important in order to provide clear view on the problem and how it should look like in future. Following Research Question has been developed in order to understand the issue further:

RQ1: What is the current problem faced by the Organisation in order to measure its overall performance? (Qualitative);

RQ2: Is the current BSC able to elevate the organisation performance as a whole and does it have impact on Malaysia Digital Economy? (Quantitative and Qualitative).

RQ3: What are the additional criteria need to be incorporated in order to enhance the current BSC? (Qualitative).

Identifying the correct Action Research (“AR”) Questions are important in ensuring right context setting for this project. By formulating AR Questions, information that is critical for this project can be identified which covers both quantitative and qualitative aspects of this research.

1.5 Researchers Role

In this project, researcher is responsible to conduct research and propose the most suitable Strategic Performance Management Tool, conduct survey and interview, compile and analyse data from survey and interview develop the MCMC’s Digital Economy Framework and Index. On top of that, the researcher also require to conduct interview with relevant Head of Division/Department in order to understand more on the organisation’s perspective towards the Digital

Economy. In addition to that, the researcher will also need to identify Key Initiatives that is relevant to Malaysia's Digital Economy.

Since this research is an action research that being conducted during the researcher's employment in the organisation, researcher need to conduct this research with an assistance from manager in Organisational Development Department of the Organisation. In this research, the researcher plays a pivotal role in ensuring the effectiveness and accuracy of this research.

This research requires researchers to acquire knowledge in research methodology especially on Strategic Performance Management Tool, identify methods for data collection, compile and analyse data, and ensuring that all data is properly documented. The researcher then formulated the research questions together with the manager in the Organisational Development Department and decides on the research design and implement strategy to build awareness among the relevant stakeholders and designing the appropriate intervention process. Though the action research is time consuming, by having full support from the manager helps the researcher to overcome any roadblock during the research implementation.

1.6 Research Ethics

In conducting this research, it is utmost important to maintain high level of research ethics especially in ensuring credibility of the data that will be used. Moreover, there are a various ethical standards that should be consider. One of the important criteria for a research it should not only focus to achieve good findings

but it must be conducted in a way that would not jeopardize the participant's credibility and protect their confidentiality. This is critical aspect since failing to deliver this criteria will leads to criticism on the research and give negative effects to the participants.

Therefore, to ensure the participants are well aware of the risk of their involvement in this research, the researcher has conducted detailed briefing to the participants so that the participants understand the flow and direction of the research.

In addition to that, the researcher has obtained well-informed consent from the participants so that they are fully aware their level of involvement in the research. The details acknowledgement received from the participants includes the purpose of the research, the techniques employed in conducting the research, the potential results of the research. This also includes issues that might arose like discomforts, inconveniences and risks that the participants could encounter due to the research.

Moreover, the researcher also maintains the privacy and confidentiality of participants during the data collection process. All sensitive data that could jeopardize the participant's credibility are classified as confidential.

Lastly, participants are also granted with rights to withdraw their participations in this research shall they are comfortable with the research. Researcher would also not put pressure on the participants when they have decided to withdraw from the research.

1.7 Significance/Importance of the Proposed Research

This research will contribute in implementing the Balanced Score Card that is customized to the Organisation. Moreover, it will also give the organisation the ability to measure its overall performance and how does it contributes to Digital Economy in Malaysia.

1.8 Definition of the term

Definition of the term use in this research is important since it will determine the direction of this paper. Therefore, the definition must be made as accurate as possible by taking into consideration of its conceptual definition.

1.8.1 Balanced Score Card (BSC)

Summary of definition of terms as explained in table below:

Authors	Definition
Kaplan, Robert S; Norton, 1992	Tool to measure organisational performance based on four identified perspectives: financial, customer, internal business and innovation and learning perspective (later renamed as “learning and growth”). The BSC is used to measure and provide not only financial but also nonfinancial feedback to

	<p>the organisations, and has developed into a strategic management system. approach enhancing the provision of information to management to aid policy formulation and promoting the overall organizational performance</p>
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Table 1.1: Definition of Term for BSC

1.8.2 Digital Economy Framework

Authors	Definition
<p>Economist Intelligence Unit, (2010)</p>	<p>Digital Economy Framework consisted of following perspectives:</p> <ul style="list-style-type: none"> i) Connectivity and Technology Infrastructure; ii) Social and Cultural Environment; iii) Business Environment; iv) Government Policy and Vision; v) Legal Environment; and vi) Consumer and Business Adoption

Table 1.2: Definition of Term for Digital Economy Model

REFERENCES

1. Abidin, N. Z., Adros, N. A., & Hassan, H. (2014). Competitive strategy and performance of quantity surveying firms in Malaysia. *Journal of Construction in Developing Countries*, 19(2), 15–32.
2. Alani, F. S., Khan, M. F. R., & Manuel, D. F. (2018). University performance evaluation and strategic mapping using balanced scorecard (BSC): Case study – Sohar University, Oman. *International Journal of Educational Management*, 32(4), 689–700. <https://doi.org/10.1108/IJEM-05-2017-0107>
3. Ali, M. A., Hoque, M. R., & Alam, K. (2018). An empirical investigation of the relationship between e-government development and the digital economy: the case of Asian countries. *Journal of Knowledge Management*, 22(5), 1176–1200. <https://doi.org/10.1108/JKM-10-2017-0477>
4. Bhatia, M. (2018). *Your Guide to Qualitative and Quantitative Data Analysis Methods*. Your Guide to Qualitative and Quantitative Data Analysis Methods.
5. Blackstone, A. (2012). Principles of Sociological Inquiry – Qualitative and Quantitative Methods. *The Saylor Foundation*.
6. Chopra, M., & Gupta, V. (2019). Linking knowledge management practices to organizational performance using the balanced scorecard approach. *Kybernetes*, 49(1), 88–115. <https://doi.org/10.1108/K-04-2019-0295>
7. Dimitropoulos, P., Kosmas, I., & Douvis, I. (2017). Implementing the balanced scorecard in a local government sport organization: Evidence from Greece. *International Journal of Productivity and Performance Management*, 66(3), 362–379. <https://doi.org/10.1108/IJPPM-11-2015-0167>
8. Ducharme, L. M., Arslanalp, S., Goksu, B., Kostroch, D., Carlos Moreno-Ramirez, J., Martins, M., Matei, S., Cas, S. M., Van Oudheusden, P., Piché, R., Razin, T.,

- Reinsdorf, M., Sánchez-Muñoz, C., Tumbarello, P., Venter, L., Ylä, M., & Jamasali, J. K. (2018). MEASURING THE DIGITAL ECONOMY Approved By. *Measuring the Digital Economy International Monetary Fund*, 3(February).
9. Dudovskiy, J. (2018). An Ultimate Guide to Writing A Dissertation in Business Studies A Step-by-Step Assistance. *Research Methodology*.
 10. Gabriel, D. (2013). Inductive and deductive approaches to research. *Www.Deborahgabriel.Com*.
 11. Gomes, R. C., & Liddle, J. (2009). The balanced scorecard as a performance management tool for third sector organizations: The case of the Arthur Bernardes Foundation, Brazil. *BAR - Brazilian Administration Review*, 6(4), 354–366. <https://doi.org/10.1590/S1807-76922009000400006>
 12. ITU. (2019). *The economic contribution of broadband, digitization and ICT regulation: Econometric modeling for the Americas*.
 13. Kaplan, Robert S; Norton, D. P. (1992). The Balanced Scorecard - Measures That Drive Performance / Robert S. Kaplan, David P. Norton. *Harvard Business Review*, 70(1), 71. <https://umei007-fall10.wikispaces.com/file/view/Kaplan%26Nortonbalanced+scorecard.pdf>
 14. Khazaei Pool, J., Khodadadi, M., & Amirbakzadeh Kalati, E. (2017). Linking internal marketing orientation to balanced scorecard outcomes in small businesses: the case of travel agencies. *International Journal of Culture, Tourism, and Hospitality Research*, 11(3), 297–308. <https://doi.org/10.1108/IJCTHR-03-2016-0024>
 15. Kim, K., Watkins, K. E., & Lu, Z. (Laura). (2017). The impact of a learning organization on performance: Focusing on knowledge performance and financial performance. *European Journal of Training and Development*, 41(2), 177–193. <https://doi.org/10.1108/EJTD-01-2016-0003>

16. McAdam, R., Hazlett, S. A., & Casey, C. (2005). Performance management in the UK public sector: Addressing multiple stakeholder complexity. *International Journal of Public Sector Management*, 18(3), 256–273.
<https://doi.org/10.1108/09513550510591542>
17. Mohammed, I. (2015). Investigating the use of the four perspectives of balanced score card (BSC) as technique for assessing performance by Nigerian banks. *Journal of Accounting and Taxation*, 7(4), 62–70. <https://doi.org/10.5897/jat2014.0148>
18. Osunsanwo, H. F., & Dada, J. O. (2019). Evaluating quantity surveying firms' performance: An application of balanced scorecard technique. *International Journal of Productivity and Performance Management*, 69(1), 134–152.
<https://doi.org/10.1108/IJPPM-06-2018-0209>
19. Paul, M., Upadhyay, P., & Dwivedi, Y. K. (2020). Roadmap to digitalisation of an emerging economy: a viewpoint. *Transforming Government: People, Process and Policy*, 14(3), 401–415. <https://doi.org/10.1108/TG-03-2020-0054>
20. Putu Dian Sawitri, N. L. (2019). Choose a Corner Strategy and 21st Century Skills in Argumentative Writing. *KnE Social Sciences*, 3(10), 102.
<https://doi.org/10.18502/kss.v3i10.3892>
21. Raitanen, M. (1997). Book Review: The Balanced Scorecard: Translating Strategy into Action. *IEEE Transactions on Engineering Management*, 44(3), 330–331.
<http://doi.wiley.com/10.1002/ajpa.20120%5Cnhttp://doi.wiley.com/10.1002/ajpa.10433>
22. Sekaran, U. and Bougie, R. (2013). Research methods for business: A skill-building approach, Sixth edition. John Wiley and Sons, New York. *Journal of MultiDisciplinary Evaluation*.
23. Tripp, D. (2005). Action research: a methodological introduction. *Educ. Pesqui.*,

- 31(3), 443–466. <https://doi.org/dx.doi.org/10.1590/S1517-97022005000300009>
24. Trochim, M. K., & Donnelly, J. (2006). *The Research Methods Knowledge Base*, 2nd Edition. *Atomic Dog Publishing, Cincinnati, OH*.
<https://doi.org/10.2471/BLT.05.029181>
25. United Nations Conference On Trade And Development. (2019). *Digital Economy Report 2019 : value creation and capture - implications for developing countries*.
26. Zekos, G. I. (2003). Multinational enterprises , globalisation and digital economy : legal and economic aspects. *Managerial Law*, 45(1/2), 1–296.
27. Zhao, F., Wallis, J., & Singh, M. (2015). E-government development and the digital economy: a reciprocal relationship. *Internet Research*, 25(5), 734–766.
<https://doi.org/10.1108/IntR-02-2014-0055>