Gaining competitive advantage through new product development capability in Malaysian Government Linked Companies

Nik Herda Nik Abdullah

Taylor's Business School, Taylor's University, Subang Jaya, Malaysia

nikherda.nabdullah@newinti.edu.my

Article Info	Abstract
Received : 2019-01-01 Accepted : 2019-01-15 Published : 2019-01-28	A new product development capability can be shown through organisational routines that shape the processes of innovation, which are aimed to reconfigure a firm's product portfolio. It is aimed to create a concrete physical asset from an idea and this relates to the innovation that is the mechanism by which firms to produce new products, processes and systems that essential in order to adapt market changes, technologies and types of competition. New product development capability aids corporate managers plan and execute strategies successfully while securing sustainable competitive advantages. This paper aims to explore the extent of top management emphasis on the measures of new product development that are deemed important for business survival and sustainability in the context of Malaysian government-linked companies (GLCs). A questionnaire survey was distributed with a response rate of 47%. Findings revealed that design a high quality of product or service is the most important measures. This revealed that it is a common exercise for Malaysian GLCs to put high emphasis on the importance of the quality of the new products or services.
Key words: Competitive advantages, dynamic capabilities, Government linked companies, new product development capability.	

Introduction

New product development is always related to competitive advantage due to its characteristics such as valuable and difficult to imitate. A new product development capability can be shown through organisational routines that shape the processes of innovation, which are aimed to reconfigure a firm's product portfolio (Danneels, 2008; Lawson & Samson, 2001). In this light, product development is aimed to create a concrete physical asset from an idea and this relates to the innovation that is the mechanism by which firms to produce new products, processes and systems that essential in order to adapt market changes, technologies and types of competition (Davila, 2000; Lawson & Samson, 2001). Thus, generating competitive advantage would attract the interest of stakeholders to invest in an organisation, such as government-linked companies (GLCs).

GLCs contribute extensively towards the development of the country's economic growth by improving the quality of life of Malaysians through programs such as building large-scale infrastructure (Abdullah & Said, 2016) and educational programs, such as the Graduate Trainee Program to train new graduates and the PINTAR Program to improve academic performance from low income families. However, some GLCs have performed poorly as early as in the 1990s (PCG, 2007)(Review 2011 National Audit Report 2011).

Many scholars have reported that one of the factors that led to this issue was relate with competitive advantage (Lau & Tong, 2008; Ting & Lean, 2012; Zin & Sulaiman, 2011). The failure factors such as weak in strategic planning, lack of capabilities, huge gap in talent and execution skills are the issues or greater challenge that faced by GLCs in achieving competitive

advantage (MINDA, 2009). Prior studies have contended on the relationship between new product development with competitive advantages (Lawson & Samson, 2001; Schilke, 2014; Sorensen, 2015; Swink & Song, 2007). Hence, when a firm able to sustain it profits that beyond the average within the similar industry, the firm is said to possess a competitive advantage over its competitors.

Therefore, this study aims to explore the extent to which the top management emphasizes on the new product development capability measurement that is considered essential for business competitive advantage and in the context of GLCs. The research finding contributes to the growing body of literature on new product development capability and GLCs. Hence, this study paves the way towards assessing the success of new product development that promotes industry competitiveness, sustainable competitive advantage and business continuity. The rest of the paper is organized as follows. Next two sections present the literature review and methodology. This is followed by section which discuss the finding and discussion. The last section presents the conclusion and limitation of the study.

Literature Review

Malaysian Government Linked Companies

The GLC is defined as a government-controlled privatized entity and aims to achieve government's commercial goals, such as providing infrastructure and facilities for the public and maximizing the shareholders' wealth. In addition to owning the rights in the GLC, the Malaysian government also has control over the appointment of board members and senior management positions and is involved in key decisions, such as financing and restructuring, mergers and acquisitions, contracting, strategic plans and business disposals (Lau & Tong, 2008). The main objective of the GLC is to enhance financial performance, maximize the shareholders' wealth and achieve better effectiveness and efficiency, and market-oriented culture (Arumugam, Guptan, & Shanmugam, 2011; N. Mokhtar & Sulaiman, 2012).

GLC represents Malaysia's priority as their presence has a major impact on every aspect of the Malaysian business sector, including transport, energy, telecommunications, construction, oil and gas and finance sectors (Lau & Tong, 2008). The GLC is reported to contribute 54% of the shares in the Kuala Lumpur Composite Index (KLCI) and employ 5% of the national workforce (PCG, 2016). Hence, GLCs are expected to achieve high returns on investments that can benefit the public and the government. Previous studies have shown that GLCs are part of the Malaysian economy and account for almost 49% of Bursa Malaysia's market capitalization in 2009 (Zin & Sulaiman, 2011), which slightly increased from 36% in 2005 (Mokhtar, 2005).

Thus, GLCs clearly play an important role in the growth of the Malaysian economy from which most Malaysians benefit. In 2011, Putrajaya Committee on GLC High Performance (PCG) strongly called for Malaysian GLCs to improve diversity, inclusivity and sustainability practices in their organisations. As stated in PCG (2014), GLCs are expected to gaining its competitive advantage, which is very crucial in ensuring the sustainability, business survival and long-term performance of GLCs. This competitive advantage could be developed by applying dynamic capabilities theory. Ambrosini, Bowman, and Collier (2009) stated the theoretical and practical importance of developing and applying dynamic capabilities in order to achieve the competitive advantages of a firm.

Dynamic Capabilities Theory

Dynamic capabilities are derived from the criticism of the resource-based view (RBV) (Beske, 2012). This new theory started when Teece and Pisano introduced the concept in 1994, but gain remarkable attention from the publication of seminal article by Teece et al. in 1997

where dynamic capabilities view had generated a growing flow of research (Barreto, 2009). They proposed the dynamic capabilities approach as an extension for firm's RBV (Barney, 1991). The RBV intends to explain the conditions under which firm may achieve a sustained competitive advantage based on their bundles of resources and capabilities (Barreto, 2009) which are rare, valuable and difficult to imitate which consequently, help a company to achieve a sustained competitive advantage (Beske, Land, & Seuring, 2014). In addition, dynamic capabilities is defined by Teece, Pisano, and Shuen (1997) as the capacity of a firm to assimilate, develop and rearrange their competencies, both internally and externally so that the progressive changes in the business environments can be consistently adopted.

Teece (2014) described capability as the ability of an organisation to utilize resources to execute an activity or task to align with opposing circumstances. In this light, the framework for dynamic capabilities is an entrepreneurial approach underlining the significance of particularly business processes both within the firm and through connecting with external partners. Furthermore, it acknowledges the significance of good strategies and critical resources (Teece). In this regard, the dynamic capabilities framework is created to understand the foundations of firm-level competitive advantage and organisation value. The theory assumed business environments is strong innovation-driven global competition with strong dynamic capabilities and good strategy anchored by difficult-to-imitate resources are the basis for the sustained competitive advantage displayed by a handful of firms that have endured for decades, even as they may shift the focus of their activities (Teece).

Teece et al., (1997) also emphasised that 'resource-based strategy' itself is insufficient to support the prominent competitive advantages, even its accumulating all the valuable technology assets. This can be supported by its ability which is described in Teece et al. (1997) as the capability to reach new kinds of competitive advantage known as 'dynamic capabilities'. Dynamic capabilities highlighted the two major aspects, namely capacity to renew the organisation's ability to accommodate with the evolving business environment and the major role of strategic management in the adaption, integration, and reconfiguration of internal and external resources, functional competences and organisational skills, to fit the need of an evolving environment. Dynamic capabilities can be an important driver of the industry life cycle by generates consistency in dynamic environments such as the shakeout of firms, and the development of innovation over the industry life cycle (Mitchell & Skrzypacz, 2013).

Inherently, a firm needs to possess static capability to persist in the short run, and nonetheless, dynamic capabilities needed in order to accomplish competitive advantage for the long run. This organisational or static capability refers to the firm's ability to assemble consistently a resource bundle to generate profits. Hence, statistic capability is crucial in maintaining the similar market position with a stable business environment, presuming that a competitive advantage has already been attained (Wilson, 2012).

Robust dynamic capabilities assist an organisation to build and renew resource profitably and the assets that are within and beyond the boundaries as well as reconfiguring the organisation to bring and respond to the business environment and general market changes (Teece et al., 1997; Teece, Pisano, & Shuen, 2007). Dynamic capabilities also permit organisation and the top management to estimate consumer preferences evolution, business issues, and technology as well as validating and fine-tuning them and arranging the activities and assets and to allow progressive changes and innovation. The success in building strong dynamic capabilities will allow firms to challenge competitors prioritise efficiency over innovation and fascinated with their resources, which overlook the changing in customer needs, cherish the status quo, and fail to empower entrepreneurs and change agents. One of the capability that can

lead to competitive advantages is new product development capability which in turn, create unique customer value (Oliveira & Roth, 2012). This capability recognised that development of resources and capabilities that would be more difficult to imitate and hence create competitive advantage.

New Product Development Capability

Product development involved process, which is structured around definite phases and each of the phases ended with a decision-making where the management determines on the future of the project. It starts with the planning phase to determine project requirements, whereby the organisation identifies the target market and broad description on characteristics of the product or service. Next phase is to design concept in more detail to determine product specifications and requirements development project. This followed by the development of product design into actual physical products. The final phases involved testing and production launch, which confirms that the product meets its objectives and is ready for release (Davila, 2000; Lawson & Samson, 2001).

New product development is always related to competitive advantage due to its characteristics such as valuable and difficult to imitate. However, if no improvise on established product it will be imitated by other rivals. As claimed by Rungi and Kolk (2012) adaption appears to be a better choice and easier breakthrough. For instance, Google is not the first search engine, Yahoo! and Microsoft dominated the market before it was introduced. However, over the years, Google has emerged as the largest internet search engine, surpassing its predecessors. Another example is Nokia, which was one of the pioneers in the mobile industry, however, in recent years; it has now lost its position to companies like Apple, HTC, LG and Samsung, which entered the market later. In this light, even though Nokia had initialised touchscreens into its phones before other manufacturers and HP have introduced tablet earlier than Apple and Samsung, however these products did not become major breakthrough products (Abdullah, 2017). Therefore, new product development is important for any business so that they compete with market trends and changes which in turn create the competitive advantage to the business.

New Product Development Capability and Competitive Advantage

Prior studies such as Clark and Fujimoto (1990) investigated the relationship between new product developments with integrity, which is one of the sources of competitive advantage. They said integrity starts with product concept that describes the new product from the perspective of potential customers, and products with integrity perform excellently, good value, and meet customer expectations in every way. Taking the example of the Japanese automotive industry, in 1987, Mazda placed introduced a four-wheel steering system in its five-door family hatchback. Meanwhile, Honda introduced the Prelude, a sporty, two-door coupe with a similar system with Mazda. It was reported that customers were more intense on the new technology brought by Honda, while Mazda had sold poorly. The potential customers felt the fit or misfit between the new technology and the car, and they reacted accordingly. The firms that constantly develop products with integrity are coherent, integrated organisation and leading the creation of a strong product in the competitive market (Clark & Fujimoto).

Leonard-Barton (1992) empirical study of 20 case studies of new product and process development projects in 5 US firms, examined the nature of the core capabilities of a firm, focusing on interaction a cluster of technical systems, skills, and managerial systems with new product and process development projects innovation. They stated that the manager projects and new product development process is facing a conflict on how to take advantage of the core capabilities unhindered by their function. Thus, these new product and process development

projects play an important role in the new strategy appears to emphasise the need for change and lead the way.

Griffith and Harvey (2001) conducted a survey on the Association of Development & Product Management (PDMA) best practices for new product development. The survey findings show that the new product development process continues to grow and become more sophisticated. Changes continuously on new product development in various fields, and firms that fail to keep their new product development practices up to date will experience an increasingly significant competitive disadvantage. This study also discovered more than half of the respondents use cross-functional stage-gate process for new product development, while one third of all firms still do not use a formal process to manage new product development.

Helfat and Peteraf (2009) stated that a new product development capability normally involve strong commitment of financial support in order to bear skilled personnel, specialised facilities, and equipment. Helfat and Martin (2015) further contended this, stated firms need to repeatedly deploy new product development capability so that revenues can be generated from new or improved products to offset the expenses. This is due to high costs involved to develop new product development capability. Examples mentioned about the ability are development of Intel's new generation semiconductor chip, chain development of Wal-Mart, Starbucks, Marriott, development of new oil field and gas field.

Other studies related to new product development capability include Wu (2010) conducted a single-case-study method to investigate the product development capabilities with the perspective of knowledge management process within the R&D Department of Wistron, a laptop computer ODM. The study reveals that firms with knowledge management processes effectively implemented will enhance product development capabilities significantly. They concluded that the ability of product research and design is exclusive only to R&D in Wistron, which have the highest significant effect on improving product development capabilities, and the most difficult to be imitated by industry competitors and this is the areas of management authority to give the greatest emphasis in terms of sharing, distribution, and utilisations expanded. Therefore, the goal of this study is to explore the level of measurement of new product development capabilities deemed important by top management at GLCs.

Methodology

Research Design

This study has adopted quantitative research using survey instrument. Thus, the survey instrument is the most suitable method in this study in order to answer the research objectives which to explore the extend of new product development capability in GLCs. The used of survey instrument is also the most appropriate method that allows the results to be generalised to the larger population of the study (Creswell, 2003). Therefore, based on the research design that matches the research questions and quantitative objectives, questionnaire instrument is used in this study to collect empirical data. In this light, questionnaire surveys require the respondents to present facts, rather than to express their personal opinions, as in the case of interviews. Moreover, surveys are preferred as they give sufficient time for respondents without the pressure to respond promptly and as anonymity is granted, respondents tend to be more realistic (Gosselin, 1997).

Setting and Participants

Respondents were selected through purposive sampling. The use of purposive sampling is due to the characteristics of respondents involved in this study chosen based on the position they hold. The respondents include chief financial officer (CFO) or financial controller (Cadez & Guilding,

2008; Cinquini & Tenucci, 2010). The characteristics of the respondents are those who usually monitor the organization's finances, and their decisions have a direct impact on all senior managers involved with performance (Ge, Matsumoto, & Zhang, 2011; Maelah & Ibrahim, 2007).

Data Collection Method and Analysis

The data were collected using a questionnaire survey distributed by post to 455 GLCs at states and federal levels in Malaysia. In 2015, there are 462 GLCs including federal-owned states and GLCs in Malaysia (Arumugam et al., 2011; Kadir, Abidin, Ramli, & Surbaini, 2014; Said & Jaafar, 2014). Due to mergers and acquisitions, only 455 GLCs were considered residents for this study. In addition, unit analysis is an organization. The response rate for the study was 47% represented by 215 valid and complete questionnaires were received from GLCs (see Table 1). Rates for feedback are within the range of recent mail surveys in academic research (Amir, Ahmad, & Mohamed, 2010; Chenhall, Hall, & Smith, 2010). The outcome was analysed using the SPSS statistics package.

Table 1: Industry classification of the responses

Industry	Frequency	Percentage (%)
Agriculture	18	8.3
Banking and Investment	28	13
Construction	35	16.2
Healthcare	29	13.4
Manufacturing	38	17.6
Service	47	21.8
Oil and Gas	7	3.2
Others	14	6.5
Total	215	100

Variable of Measurement

A new product development capability is reflected in organisational routines that structure innovation processes aimed at reconfiguring the firm's product portfolio (Danneels, 2008; Lawson & Samson, 2001). To describe the firm's new product development capability, this study will adopt the measurement introduced by Davila, 2000 which recently was used by Schilke (2014). Using the Likert scale ranging from "1" (never), to "10" (very often), the respondent were asked to rate the frequency of product or service innovation in their organisation (Appendix 1). The Table 2 indicates the measurements apply in this variable.

Table 2: Measurements for new product development capability

Item Code	Item Description
D01	Introduce new generation of products/services
D02	Extend product/service range
D03	Open up new markets
D04	Enter new technology field
D05	Design a low cost product/service
D06	Meet unit cost objectives
D07	Target customers value price
D08	Reduce time to market
D09	Meet timing goals
D10	Target customers value time

Item Code	Item Description
D11	Design a customer friendly product/service
D12	Fulfill customer needs
D13	Target customers focus on ease of use
D14	Design a high quality of product/service

Findings and Discussion

Validity and Reliability

The validity and reliability of the measurement are based on a report on the exploration factor analysis (EFA) which uses the output of the SPSS statistics package. The factor loadings, eigenvalues and percentages (%) variance are presented in the Table 3. Additionally, the EFA using the principal component extraction method with Varimax (variation maximisation) rotations was performed on the 14 items to measure new product development capability.

Table 3: KMO and Bartlett's test for new product development capability

Kaiser–Meyer–Olkin Measure of Sampling Adequacy.		.905
Bartlett's Test of Sphericity	Approx. Chi-Square	1371.267
	df	91
	Sig.	.000

The results in Table 3 indicate that Bartlett's test of sphericity is significant (p -value <0.05). Furthermore, the measure of sampling adequacy by Kaiser–Meyer–Olkin (KMO) is excellent because it exceeds the required value of 0.6 (Awang, 2014). These two results (Bartlett's test is significant and $KMO>0.6$) indicate that the data are adequate to proceed further with the data reduction procedure (Awang, 2014; Gani, Awang, & Mohamad, 2015).

Table 4: Factor loadings for items and Cronbach Alpha

Item	Description	Factor loadings	Cronbach's Alpha
D01	Introduce new generation of products/services	.838	9.33
D02	Extend product/service range	.818	
D03	Open up new markets	.836	
D04	Enter new technology field	.807	
D05	Design a low cost product/service	.843	
D06	Meet unit cost objectives	.816	
D07	Target customers value price	.823	
D08	Reduce time to market	.855	
D09	Meet timing goals	.820	
D10	Target customers value time	.822	
D11	Design a customer friendly product/service	.794	
D12	Fulfill customer needs	.914	
D13	Target customers focus on ease of use	.926	
D14	Design a high quality of product/service	.913	

Table 4 exhibits that the factor loading from EFA procedure for every item ranged from 0.794 to 0.926, which are greater than 0.6. Thus, all items are useful to measure the variable and no item should be deleted since they achieved the minimum requirement for factor loading of 0.6

(Awang, 2014). Meanwhile, the Cronbach's alpha value is greater than 0.7 given that the items achieved internal reliability. Hence, these items considered as appropriate for exploring new product development capability in this research.

Discussion

The results in Table 5 show the descriptive statistics for every item that measure the construct on new product development capability. As can be seen, the mean score for every item ranges from 7.00 to 7.85, whilst the standard deviation of the score ranges from 1.093 to 1.432.

Table 5: Descriptive Statistics: New Product Development Capability

Item	Statement	N	Mean	Std. Dev.
D01	Introduce new generation of products/services	215	7.38	1.272
D02	Extend product/service range	215	7.34	1.312
D03	Open up new markets	215	7.35	1.327
D04	Enter new technology field	215	7.41	1.141
D05	Design a low cost product/service	215	7.00	1.432
D06	Meet unit cost objectives	215	7.47	1.285
D07	Target customers value price	215	7.59	1.144
D08	Reduce time to market	215	7.28	1.314
D09	Meet timing goals	215	7.34	1.280
D10	Target customers value time	215	7.39	1.202
D11	Design a customer friendly product/service	215	7.53	1.222
D12	Fulfill customer needs	215	7.73	1.093
D13	Target customers focus on ease of use	215	7.63	1.161
D14	Design a high quality of product/service	215	7.85	1.176

The mean score for every item ranged between 7.00 and 7.85 while the standard deviation of the score ranged between 1.093 and 1.432. The item 'Design a high quality of product or service' exhibited as the highest score compared with among all 14 items with mean score of 7.85 (std. dev. = 1.176). This revealed that it is a common exercise for Malaysian GLCs to put high emphasis on the importance of the quality of the new products or services. Meanwhile, item 'Design a low cost product/service' recorded the lowest mean among the items under new product development capability with the means score of 7.00 (std. dev. = 1.432). The low mean score for this item implies that some GLCs less emphasises on designing a low cost product or service for their consumers.

There is little discussion on the descriptive result in the past studies. Similar study by Davila (2000) found that item of introduce new product or service has important roles in new product development in medical device companies and this finding is inconsistent with the descriptive result in this study which might due to different sector or industry. However, it is found that there is consistency on item of design a low cost product or service which has less important in new product development. This could be due to designing a low cost product or service will not create unique customer value which in turn lead to competitive advantages (Oliveira & Roth, 2012).

The finding consistent with past studies stated that the primary dynamic capabilities comprise of systems, processes, and routines in the development of firm-level competencies that would generate competitive advantages and create sustainability. The sustainable competitive advantage can be achieved through organisational strategic capabilities such as new product development capability which is in line with dynamic capabilities theory that suggests strategic capabilities as the highest level of firm's capability to create value through shaping,

transforming, and combining organisation resources that drive strategic success. Hence, the distinctive and difficult-to-replicate advantages can be built, maintained, and enhanced where is linked it to sustainable competitive advantages (Parnell, 2011; D. J. Teece et al., 1997).

Conclusions

This study aims to explore the extent of top management emphasis on the measures of new product development capability, which are considered important for business sustainability in the context of Malaysian GLCs. This objective is in line with the government emphasis on achieving competitive advantages amongst GLCs. On the basis of the findings, we can conclude that all the measurements are needed in assessing new product development capability in GLCs.

We also discovered that the top three financial measures that are highly emphasised in GLCs are design a high quality of product or service, fulfill customer needs and target customers focus on ease of use. These measurements are important in the product or service aspects of new product development capability, such as to expanding shareholder's capital, create greater avenues for profit generation and business sustainability and secure the long-term performance of the organisations. These measures can reflect the drivers of the financial measures by expanding business opportunities and improving brand reputation, which will flow through to improve the financial measures, such as increase in sales growth, return on investment and market value.

This paper contributes to the corpus of existing knowledge. First, the paper demonstrates the importance of new product development capability to GLCs, which can be created and assessed by improving Introduce new generation of products/services, extend product or service range, open up new markets, enter new technology field, design a low cost product or service, meet unit cost objectives, target customers value price, reduce time to market, meet timing goals, target customers value time, design a customer friendly product or service, fulfill customer needs, target customers focus on ease of use and design a high quality of product or service.

Thus, the implication arising from this research affects both practitioners and researchers concerning the importance of assessing new product development capability in the organisation. The research indicates that the GLC's top management have a similarity on emphasis the measurements that assessing this capability. These measurements highlight the importance of creating awareness amongst GLCs on the importance of measuring new product development capability in their organisations and its benefit to the decision-making process.

Therefore, knowing about the importance of new product development capability and understanding how to measure this element would help corporate managers and stakeholders in planning and executing the plan successfully to create a competitive advantage that will affect financial, social and environmental sustainability and the survival of the business and secure sustainable competitive advantages.

The limitations of this paper need to be addressed. This research was specifically conducted on Malaysian GLCs according to the issue discussed earlier. Although the findings contribute to the existing knowledge, the limitation is subject to generalisability. Comparative studies amongst multiple types of organisations are necessary to determine whether the other studies hold the same pattern of findings with this current research. In summary, this research provides insights into the most emphasised measurements in measuring new product development capability in GLCs. Therefore, we hope that the findings of this research would add to the corpus of literature on new product development capability pertaining to GLCs and serve as references for future research.

References

- Abdullah, N. H. N. (2017). The influence of dynamic capabilities on strategic management accounting practices and its effect on value creation in Government Linked Companies. Universiti Teknologi MARA.
- Abdullah, N. H. N., & Said, J. (2016). Value Creation and Government Linked Companies : Towards High Level of Accountability. Information.
- Ambrosini, V., Bowman, C., & Collier, N. (2009). Dynamic capabilities: An exploration of how firms renew their resource base. *British Journal of Management*, 20(S1), 9–24. <https://doi.org/10.1017/CBO9781107415324.004>
- Amir, A. M., Ahmad, N. N. N., & Mohamed, M. H. S. (2010). An Investigation on PMS Attributes in Service Organizations in Malaysia. *International Journal of Production and Performance Management*, 59(8), 734–756.
- Arumugam, G. S., Guptan, V., & Shanmugam, B. (2011). Market orientation in a GLC: Evidence from Malaysia. *Problems and Perspectives in Management*, 9(2), 51–62.
- Awang, Z. (2014). A handbook on SEM for academicians and practitioners: the step by step practical guides for the beginners. MPWS Rich Resources. Bandar Baru Bangi.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Barreto, I. (2009). Dynamic Capabilities: A Review of Past Research and an Agenda for the Future. *Journal of Management*, 36(1), 256–280. <https://doi.org/10.1177/0149206309350776>
- Beske, P. (2012). Dynamic capabilities and sustainable supply chain management. *International Journal of Physical Distribution & Logistics Management*, 42(4), 372–387. <https://doi.org/10.1108/09600031211231344>
- Beske, P., Land, A., & Seuring, S. (2014). Sustainable supply chain management practices and dynamic capabilities in the food industry: A critical analysis of the literature. *International Journal of Production Economics*, 152, 131–143. <https://doi.org/10.1016/j.ijpe.2013.12.026>
- Cadez, S., & Guilding, C. (2008). Strategy and Strategic Management Accounting: an Investigation of Organizational Configurations. Manchester Business School Research Seminar.
- Chenhall, R. H., Hall, M., & Smith, D. (2010). Social capital and management control systems: A study of a non-government organization. *Accounting, Organizations and Society*, 35(8), 737–756. <https://doi.org/10.1016/j.aos.2010.09.006>
- Cinquini, L., & Tenucci, A. (2010). Strategic management accounting and business strategy: a loose coupling. *Journal of Accounting & Organizational Change*, 6(2), 228–259. <https://doi.org/10.1108/18325911011048772>
- Clark, K. B., & Fujimoto, T. (1990). The power of product integrity. *Harvard Business Review*, 68(6), 107–118.
- Creswell, J. W. (2003). *Research Design: Qualitative and Quantitative Approaches*. SAGE Publications. London. <https://doi.org/3109300305073>
- Danneels, E. (2008). Organizational antecedents of second order competences. *Strategic Management Journal*, 29(5), 153–164.

-
- Davila, T. (2000). An empirical study on the drivers of management control systems' design in new product development. *Accounting, Organizations and Society*, 25(4–5), 383–409. [https://doi.org/10.1016/S0361-3682\(99\)00034-3](https://doi.org/10.1016/S0361-3682(99)00034-3)
- Gani, A. A., Awang, K. W., & Mohamad, A. (2015). SOCIAL SCIENCES & HUMANITIES Attributes of Successful Public Participation in Planning for Sustainable Tourism in Protected Areas : A Modified Delphi Study, 23, 49–64.
- Ge, W., Matsumoto, D., & Zhang, J. L. (2011). Do CFOs Have Style? An Empirical Investigation of the Effect of Individual CFOs on Accounting Practices. *Contemporary Accounting Research*, 28(4), 1141–1179. <https://doi.org/10.1111/j.1911-3846.2011.01097.x>
- Gosselin, M. (1997). The effect of strategy and organizational structure on the adoption and implementation of activity-based costing. *Accounting, Organizations and Society*, 22(2), 105–122.
- Griffith, D. a., & Harvey, M. G. (2001). A Resource Perspective of Global Dynamic Capabilities. *Journal of International Business Studies*, 32(3), 597–606. <https://doi.org/10.1057/palgrave.jibs.8490987>
- Helfat, C. E., & Martin, J. a. (2015). Dynamic Managerial Capabilities: Review and Assessment of Managerial Impact on Strategic Change. *Journal of Management*, 41(5), 1281–1312. <https://doi.org/10.1177/0149206314561301>
- Helfat, C. E., & Peteraf, M. A. (2009). Understanding dynamic capabilities: progress along a developmental path. *Strategic Organization*, 7(1), 91–102. <https://doi.org/10.1177/1476127008100133>
- Kadir, M. R. A., Abidin, Z. Z., Ramli, A. R., & Surbaini, K. N. (2014). Factors Influencing A Business Towards Zakat Payment In Malaysia. *International Journal of Science Commerce and Humanities*, 2(3), 147–156.
- Lau, Y. W., & Tong, C. Q. (2008). Are Malaysian Government-Linked Companies (GLCs) Creating Value? *International Applied Economics and Management Letters*, 1(1), 9–12.
- Lawson, B., & Samson, D. (2001). Developing Innovation Capability in Organisations: a Dynamic Capabilities Approach. *International Journal of Innovation Management*, 05(03), 377–400. <https://doi.org/10.1142/S1363919601000427>
- Leonard-Barton, D. (1992). Core Capabilities and Core Rigidities : a Paradox in Managing New Product Development. *Strategic Management Journal*, 13(Special), 111–125.
- Malah, R., & Ibrahim, D. N. (2007). *Factors Influencing Activity Based Costing (Abc)*, 4(2), 113–124.
- MINDA (Malaysian Directors Academy). (2009). Mid-Term Progress Review: GLCs are Much More Resilient and Focused on Catalysing Growth and Realising the Programme's 2015 Aspirations, July(2).
- Mitchell, M., & Skrzypacz, A. (2013). *We analyze a model of industry evolution where the number of*, 1–35.
- Mokhtar, A. (2005). *The Malay Way of Business Change*. *Economist*, 376(8440), 50.

- Mokhtar, N., & Sulaiman, M. (2012). Environmental reporting practices of Malaysian government linked companies (GLCs). *International Journal of Economics and Management*.
- Oliveira, P., & Roth, A. V. (2012). The influence of service orientation on B2B e-service capabilities: An empirical investigation. *Production and Operations Management*, 21(3), 423–443. <https://doi.org/10.1111/j.1937-5956.2011.01256.x>
- Parnell, J. A. (2011). Strategic Capabilities, Competitive Strategy and Performance among Retailers in Argentina, Peru and the United States. *Management Decision*, 49(1), 130–155.
- Rungi, M. (2014). The impact of capabilities on performance. *Industrial Management & Data Systems*, 114(2), 241–257. <https://doi.org/10.1108/IMDS-04-2013-0202>
- Rungi, M., & Kolk, A. (2012). Capability development - No path, response to competition: The cross-case of Google, Ericsson, Microsoft and Nokia. *IEEE International Conference on Industrial Engineering and Engineering Management*, 689–693. <https://doi.org/10.1109/IEEM.2012.6837827>
- Said, J., & Jaafar, N. H. B. (2014). Accountability in Government Linked Companies: An Empirical Finding. *Procedia - Social and Behavioral Sciences*, 145, 294–299. <https://doi.org/10.1016/j.sbspro.2014.06.037>
- Schilke, O. (2014). On the contingent value of dynamic capabilities for competitive advantage: The nonlinear moderating effect for environmental dynamism. *Strategic Management Journal*, 35, 179–203.
- Sorensen, A. (2015). Social Media for Social Good : Value Creation in Social Media Based Cause Brand Communities, (December).
- Swink, M., & Song, M. (2007). Effects of marketing-manufacturing integration on new product development time and competitive advantage. *Journal of Operations Management*, 25(1), 203–217. <https://doi.org/10.1016/j.jom.2006.03.001>
- Teece, D. J. (2014). A dynamic capabilities-based entrepreneurial theory of the multinational enterprise. *Journal of International Business Studies*, 45(1), 8–37. <https://doi.org/10.1057/jibs.2013.54>
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic Capabilities and Strategic Management.
- Teece, D. J., Pisano, G., & Shuen, A. (2007). *MANAGEMENT*, 18(7), 509–533.
- The Putrajaya Committee GLC High Performance (PCG). (2007). News. Retrieved from <http://www.pcg.gov.my/news.asp>
- The Putrajaya Committee GLC High Performance (PCG). (2014). GLCs delivering high performance and catalysing inclusive growth.
- The Putrajaya Committee GLC High Performance (PCG). (2016). Overview.
- Ting, I. W. K., & Lean, H. H. (2012). Capital structure of government-linked companies in Malaysia. *Asian Academy of Management Journal of Accounting and Finance*, 7(2), 137–156. <https://doi.org/10.1166/asl.2015.5944>
- Wilson, C. (2012). The Integrated Propulsion Strategy Theory: A Resources, Capability and Industrial Organization. *Journal of Management Policy and Practice*, 13(5), 159–171. Retrieved from

http://search.proquest.com/docview/1315304099/D6CA32EDCE1A4F54PQ/19?accountid=15035%5Cnhttp://media.proquest.com/media/pq/classic/doc/2911687051/fmt/pi/rep/NONE?hl=dynamic,capabil_____,dynamic,capabil_____,structure+conduct+performance&cit:auth=

Wu, L. Y. (2010). Applicability of the resource-based and dynamic-capability views under environmental volatility. *Journal of Business Research*, 63(1), 27–31.
<https://doi.org/10.1016/j.jbusres.2009.01.007>

Zin, N. M., & Sulaiman, S. (2011). Government-linked Companies Blue Book (GLCs Blue Book) as a complement to Balanced Scorecard (BSC) in the Government-Linked Companies transformation program. *International Conference on Business and Economics Research* 2010, 1, 294–297.