

Dynamic Capabilities and Technology Competence: A Study on Firm Performance in Groom Big Programs

Mohd Guzairy

Fakulti Pengurusan Teknologi dan Teknousahawanan, Universiti Teknikal Malaysia Melaka
75350 Ayer Keroh, Melaka, MALAYSIA
Email: guzairy@utem.edu.my

Norhidayah Mohamad

Fakulti Pengurusan Teknologi dan Teknousahawanan, Universiti Teknikal Malaysia Melaka
75350 Ayer Keroh, Melaka, MALAYSIA
Email: norhidayah@utem.edu.my

Wan Hasrul Nizam Wan Mahmood

Fakulti Teknologi dan Kejuruteraan Industri dan Pembuatan, Universiti Teknikal Malaysia
Melaka 75350 Ayer Keroh, Melaka, MALAYSIA
Email: norhidayah@utem.edu.my

To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v14-i10/23168> DOI:10.6007/IJARBSS/v14-i10/23168

Published Date: 27 October 2024

Abstract

This research thoroughly investigates the connections among dynamic capabilities, technology competence, and company performance, focusing on RISDA's Groom Big initiatives. To stay competitive in the market, a company needs to have dynamic capabilities, characterized as the capacity to integrate, develop, and reconfigure internal and external competencies in response to quickly changing environments. Technology competence is also a critical factor in determining a company's performance. It includes a firm's capacity to recognize and adapt to market trends, customer demands, and competitive dynamics. According to the study, businesses that participate in RISDA's Groom Big programs can considerably improve their performance by a considerable margin by developing dynamic capabilities and improved technology competence. The results highlight the intricate and varied aspects of firm performance, demonstrating the interactive effects and technology competence-mediated relationship between dynamic capabilities and firm performance. The research offers significant perspectives for administrators, policymakers, and institutions like RISDA and Groom Big initiatives. They can assist businesses in adapting to market changes, grabbing hold of new business opportunities, and achieving better performance by cultivating

dynamic capabilities and technology competence. The programs' and entrepreneurs' success may ultimately benefit from this. The research significantly adds to the body of knowledge regarding dynamic capabilities, technology competence, and firm performance. It offers a strong platform to build future investigations into these connections and their consequences for business performance and economic expansion. Moreover, it provides valuable information that can guide the creation of plans, policies, and initiatives to encourage entrepreneurship and economic growth. The results of this study have significant ramifications for strategic management, entrepreneurial theory, and practice.

Keywords: Dynamic Capabilities, Technology Competence, RISDA, Smallholder Entrepreneur, Groom Big.

Introduction

Through the Rubber Industry Smallholders Development Authority (RISDA) fund, 23,522 entrepreneurs have been successfully supported nationwide, contributing up to RM56.3 million to the economy. The Entrepreneur Development Division's goal is to manage and assist small business owners within RISDA, and this accomplishment aligns with that mission. Prices for palm and rubber collapsed due to the planters' meagre income growth despite these efforts. To help the smallholder farming community become less reliant on their crops and to augment their income, RISDA has initiated several entrepreneurship programs. The activities overseen by BPU RISDA are divided into five groups: development products and accreditation; premises, advertising, and marketing; strategic networking; and management financing. The first category is revenue from (*Aktiviti Ekonomi Tambahan*) AET and improvement programs. By the end of 2025, the average monthly income of smallholder farmers in the district should reach RM4,500 per family thanks to the Entrepreneur Development Program, a crucial component of the Model Perancangan Strategik RISDA (MPSR) for 2021–2025. To reach the objectives, several obstacles must be removed. Despite all the programs and initiatives, small farmers and business owners still face some challenges. They have unstable incomes and find it challenging to maintain their businesses due to the fluctuating palm oil and rubber market prices. RISDA offers financial support, but because of its stringent qualifying requirements, many smallholder farmers and entrepreneurs find it difficult to obtain these funds. Additionally, the Groom Big program lacks sufficient funding for business startup and equipment acquisition despite its goal of raising productivity and quality of goods and services. This disparity hampers small business development and growth. This research adds theoretical and practical knowledge for RISDA entrepreneurship in the industry. Three variables are analyzed using theory and research: company, market competitiveness, and dynamic capabilities. The study's objective is to evaluate RISDA's Groom-Big Entrepreneurship program's efficacy as a provider of entrepreneurial programs. The outcomes can be used as a guide by RISDA to make sure business owners can effectively fulfil their goals and objectives and grow their companies. Nonetheless, resolving the noted issues is essential to the program's success and the development of the business owners it assists.

Literature Review and Hypothesis Development

The ideas of dynamic capabilities and technology competency are examined in this literature review, and how they affect organizational performance is examined, focusing on Malaysia's Groom Big programs. Dynamic capabilities pertain to an organization's capacity to adjust to evolving surroundings, whereas technology competence entails comprehending and

addressing the application of technology both in marketing and operation. The review will also examine these programs' contributions to economic growth and entrepreneurship. It will discuss empirical research that has examined the connections between these ideas and highlight the findings and methodologies of those studies. This review aims to create research questions, develop research hypotheses, and pinpoint gaps in current literature.

The Groom Big Program

The Ministry of International Trade and Industry (MITI) in Malaysia launched the Groom Big program in 2006 to strengthen the capabilities of SMEs (small and medium-sized enterprises) and promote the globalization of their goods and services. The program offers modules specifically designed to support medium-sized companies in the food and beverage industry in meeting the challenges of liberalization and globalization. These modules cover various topics, such as packaging design, certification, quality assurance, brand development and optimization of production processes. At the same time, the Mittelstandsbank introduced the Groom Big program, which is intended to support SME entrepreneurs in setting up their own companies. This program complements the work of the Center for Entrepreneur Development and Research Sdn Bhd. (CEDAR), the bank's subsidiary. An initiative that values entrepreneurship. Through partnerships with MITI agencies, SME Bank's Groom Big program provides comprehensive support by focusing on adequate management financing, development skills, marketing strategies and support facilities. So far, over 85 entrepreneurs have benefited from the program. Additionally, companies looking to expand from small to medium or larger SIRIM companies are the focus of the MARA Groom Big Financing Scheme (SPG). The program provides services such as quality assurance, production process optimization, moulded packaging design and brand development to meet the diverse needs of Bumiputera entrepreneurs at different levels. This product development program addresses broader preparation topics such as branding, packaging, labelling and strategy improvement. The ultimate goal of the One District, One Industry (SDSI) program is to increase the legitimacy of manufactured goods in rural areas while increasing product production. The Groom Big program, implemented by several organizations, is critical to promoting entrepreneurship as it provides comprehensive support for various aspects of business development, from marketing and financing to product development and quality improvement. Together, these programs aim to strengthen SME expansion, empower entrepreneurs and strengthen the economy.

Dynamic Capabilities

Entrepreneurs are often criticized for their shortcomings in product packaging and marketing. Dynamic capabilities present a significant challenge to organizations seeking to develop the best available mechanisms and processes to adapt to changing conditions. Nevertheless, the combined mechanism, i.e. H., requires more empirical research as the relationship between dynamic capabilities and performance outcomes remains unclear (Eriksson, 2014). Through the use of integration theory and concept management expertise, the idea of dynamic capabilities has emerged. How companies design the best available mechanism and develop procedures that adapt to changing conditions will significantly impact the dynamics of this approach (Eisenhardt & Martin, 2000). Dynamic capabilities emerge when management skillfully modifies a mix of strategic resources to suit a particular market (Grant, 1996). Similarly, Hitt et al (2001), suggest that strategic leadership is characterized by dynamic capabilities that regularly use effective and dynamic organizational resources to carry out

activities effectively. Young Kang (2016), emphasizes that dynamic capabilities directly impact SME performance through innovation and competency learning. From this context, it is clear that dynamic capabilities support and enhance exploration marketing and exploitation capability technology. This is expected to domino effect on competitive performance in ancillary and market areas. Previous research on marketing competence suggests that companies should adopt a market-oriented approach to improve marketing companies' efficiency and positively impact company performance (Norzalita & Norjaya, 2004). In addition to science, marketing and capability building are crucial but are not enough to establish a favourable waypoint (Mukhtar et al. al. (2020). Companies that show significant momentum dominate both the market and the technology. Achieving this requires less hierarchy and high levels of agility (Teece, 2014). Dynamic capabilities are crucial in determining their performance, innovation and marketing strategies (Eriksson, 2014; Eisenhardt & Martin, 2000; Kang, 2016). According to Eriksson (2014), these competencies enable companies to recognize changes in the market, exploit new opportunities and reorganize their resources to accommodate these changes in today's fast-paced business world. To remain competitive, this adaptability is essential (Pfajfar et al., 2024). Furthermore, dynamic capabilities enable organizations to create, integrate, and reorganize external and internal competencies in response to rapidly changing environments (Eisenhardt and Martin), 2000). Strong dynamic capabilities enable companies to innovate. The hypotheses are as follows:

H1: Dynamic capabilities mediate the influence of technology competencies to enhance firm performance

Technology Competence

For example, in a technology-driven innovation model, scientists are funded for research and development, the technology is developed organically, and their ideas are eventually commercialized for the global market. In a market-driven innovation model, the market is initially determined by knowledgeable entrepreneurs who acquire the best science and technology. This will enable rapid commercialization to meet market needs. Sustainable competitiveness in the rapidly changing global market and foreign investment environment requires the development of a sustainable agricultural sector that focuses on applying technological and scientific knowledge as innovative inputs into agricultural processes and activities that can ultimately increase production productivity and bring added value. To increase its global competitiveness (Young Kang, 2016). Companies achieve a competitive advantage by successfully mobilising their intellectual assets through knowledge, technology, experience and strategic capabilities (Kamukama & Ahiauzu, 2011). Therefore, it is essential to focus on technological and management skills because skills contribute to product development and customer-oriented management (Tuah et al., 2021). In startups, it is not (only) the technological capabilities (dynamics) that determine company growth but rather the ability to learn from customers and create scalable, repeatable and profitable business models (Teixeira et al., 2021). Ahmad et al (2021), suggested that service SMEs may need to focus on innovative service offerings and government facilities to improve international performance, as simply maintaining technological capabilities and relational capital may not lead to optimal outcomes. Technological capability refers to a company's ability to utilize various technologies, including scientific knowledge and technological devices (Gao et al., 2015), in developing and providing products and services (Afuah, 2002). Technological capabilities represent the knowledge and expertise required to develop innovative products

and services according to customers' desires (Chatterjee, 2017). Companies must keep up with technological changes and constantly update their capabilities. In this context, companies can provide training as a standard clause in technology procurement contracts to build skills and capacity to use and manage the acquired technology (Ahmad et al., 2021). Technology competence has been a focal point in recent research, particularly in the context of entrepreneurial performance. Wang, Esperança, Yang, and Zhang (2023), conducted a study on the internal mechanism of university students' recent technology entrepreneurial performance. They found that college students with entrepreneurial family histories rely more on social and industrial networks, whereas those without will seek opportunities from recent technology adoption. Risk preference positively moderates the relationship between entrepreneurial intention and performance. Similarly, a study by Yüceol and Can (2023), examined the relationship between entrepreneurial competencies and firm performance in SMEs. They highlighted the importance of technology competence in enhancing entrepreneurial performance. Technology competence has been a focal point in recent research, particularly in the context of business performance. Ahmed and Hamdan (2023), studied the effectiveness of innovative approaches and digital technology in business training sustainability. They found a positive significant relationship between innovative approaches, digital technology, and employee performance.

Nahidi, Sifat, and Mand (2023), conducted a systematic review examining the intricate relationship between digital transformation and the performance of firms and managers. They identified critical research gaps and recommended investigating the efficacy of digital transformation in small- and medium-sized enterprises, comprehending the role of organizational culture in the success of digital transformation initiatives, and verifying the impact of digital transformation on business resilience.

. The hypotheses are as follows:

H2 - A significant and positive relationship exists between Lecturer Characteristics and Business Plan Simulation Learning Effectiveness.

Firm Performance

Small and Medium Enterprises (SMEs) are pivotal to Malaysia's economic growth, contributing significantly to GDP and employment. The Groom Big Program, initiated by SME Corporation Malaysia, aims to enhance its capabilities through digitalization, financial assistance, and capacity building. Entrepreneurial competencies, such as business planning, managerial expertise, and innovative thinking, are crucial for SME success, significantly impacting business outcomes (Husain et al., 2023). Adopting advanced technologies, including digitalization and automation, is essential for growth and competitiveness but requires significant investments and overcoming challenges like limited technical efficiency (Balasingham, 2016; Andalib & Darun, 2018). Intellectual capital and ICT competencies are vital for enhancing business performance, with studies showing that these investments lead to better technology adoption and innovation (Rahman et al., 2014; Amoako et al., 2022). Dynamic capabilities, such as sensing opportunities, seizing opportunities, and reconfiguring resources, are essential for sustaining competitive advantage and improving company performance (Tatar, 2014). Government support through policies that provide access to financing and encourage technology adoption is crucial for enhancing SME competitiveness (SME Corp., 2023). Empirical evidence suggests that fostering an innovation culture and balancing exploitation and exploration activities significantly enhance SME performance

(MDPI, 2022). Innovation, including product and process innovation, has been shown to positively impact firm performance, with studies indicating that SMEs emphasizing innovation can significantly improve their overall performance (Gill & Hanafi, 2020; Wahab et al., 2020). Furthermore, innovation is a key driver of SME performance, significantly impacting productivity and growth (ResearchGate, 2022). Therefore, the Groom Big Program plays a crucial role in improving firm performance by addressing the unique challenges Malaysian SMEs face in technology adoption and innovation, ultimately enhancing their competitiveness. The proposed hypotheses are as follows:

H_{A3} - Simulation Characteristics and Business Plan Simulation Learning Effectiveness have a significant and positive relationship.

References

- Buil, I., Catalán, S., & Martínez, E. (2018). Exploring students' flow experiences in business simulation games. *Journal of Computer Assisted Learning, 34*(2), 183–192. <https://doi.org/10.1111/jcal.12237>
- Cui, J., Sun, J., & Bell, R. (2021). The impact of entrepreneurship education on the entrepreneurial mindset of college students in China: The mediating role of inspiration and the role of educational attributes. *International Journal of Management Education, 19*(1), 100296. <https://doi.org/10.1016/j.ijme.2019.04.001>
- Han, S., Cai, J., Liu, X., & Wang, Q. (2011). What can students learn by playing business simulation game: An empirical study in China. *2011 International Conference on E-Business and E-Government (ICEE)*, 1–4. <https://doi.org/10.1109/ICEBEG.2011.5882277>
- Ibrahim, A., Shatar, S., Tajuddin, O., Yaziz, A., Rahmat, W., & Faudziah, M. D. (2013). *Modul Teras Keusahawanan*. Majlis Kokurikulum Universiti-Universiti Malaysia (UniCC), Jabatan Pengajian Tinggi, Malaysia.
- Idrus, S. Al, Ahmar, A. S., & Idrus, S. Al. (2018). The effect of organizational learning on market orientation moderated by job satisfaction. *Cogent Business & Management, 5*(1), 1–12. <https://doi.org/10.1080/23311975.2018.1475048>
- Jos, A. (2017). Simulation and Learning Dynamics In Business Games. *Mackenzie Management Review, 18*(2), 49–79. <https://doi.org/http://dx.doi.org/10.1590/1678-69712016/administracao.v18n2p49-79>
- Kikot, T., Costa, G., Magalhães, R., & Fernandes, S. (2013). Simulation Games as Tools for Integrative Dynamic Learning: The Case of the Management Course at the University of Algarve. *Procedia Technology, 9*, 11–21. <https://doi.org/http://dx.doi.org/10.1016/j.protcy.2013.12.002>
- Kuratko, D. F., & Morris, M. H. (2018). Corporate Entrepreneurship : A Critical Challenge for Educators and Researchers. *Entrepreneurship Education and Pedagogy, 1*, 42–60. <https://doi.org/10.1177/2515127417737291>
- Loukis, E., Trivedi, R., & Ranchhod, A. (2014). *Evaluating the educational effectiveness of simulation games: A value generation model.* 264, 75–90. <https://doi.org/10.1016/j.ins.2013.09.008>
- Maria, J., Maria, C., & Lazaro, R. (2016). Clearing the hurdles in the entrepreneurial race: the role of resilience in entrepreneurship education. *Academy of Management Learning & Education.*

- Palmunen, L.-M., Pelto, E., Paalumäki, a., & Lainema, T. (2013). Formation of Novice Business Students' Mental Models Through Simulation Gaming. *Simulation & Gaming*, 44(6), 846–868. <https://doi.org/10.1177/1046878113513532>
- Ramayah, T., Yeap, J. A. L., Ahmad, N. H., Halim, H. A., & Rahman, S. A. (2017). Testing a Confirmatory model of Facebook Usage in SmartPLS using Consistent PLS. *International Journal of Business and Innovation*, 3(2), 1–14.
- Ruszkowska, A., & Marcin, W. (2016). Process - Oriented Research Method for Teamwork Effectiveness Assessment in Business Simulation Games. *Developments in Business Simulation and Experiential Learning*, 43, 233–239.
- Sekaran, U., & Bougie, R. (2016). *Research Methods for Business* (Seventh Ed). Wiley.
- Sorensen, M. (2011). *Learning with Simulation Games - Evaluating Hotel Simulation Games' Effectiveness on Higher Academic Performance within Service and Hospitality*. Copenhagen Business School.
- Streukens, S., & Leroi-werelds, S. (2016). Bootstrapping and PLS-SEM : A step-by-step guide to get more out of your bootstrap results. *European Management Journal*. <https://doi.org/10.1016/j.emj.2016.06.003>
- Tao, Y. H., Cheng, C. J., & Sun, S. Y. (2009). What influences college students to continue using business simulation games? The Taiwan experience. *Computers and Education*, 53(3), 929–939. <https://doi.org/10.1016/j.compedu.2009.05.009>
- Tiwari, S. R., Nafees, L., & Krishnan, O. (2014). Simulation as a pedagogical tool: Measurement of impact on perceived effective learning. *International Journal of Management Education*, 12(3), 260–270. <https://doi.org/10.1016/j.ijme.2014.06.006>
- Wawer, M., Miloz, M., Muryjas, P., & Rzemieniak, M. (2010). Business Simulation Games in Forming of Students' Entrepreneurship. *International Journal of Economics and Management Sciences (IJEMS)*, Vol 3(1), Pages 49-71.
- Wellington, W. J., Hutchinson, D. B., & Faria, A. J. (2016). Measuring the Impact of a Marketing Simulation Game : Experience on Perceived Indecisiveness. *Simulation & Gaming*, 48(1), 56–80. <https://doi.org/10.1177/1046878116675103>