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The Antecedents for Export Growth and Corporate Sustainability of the Indigenous Malaysian Automotive Companies

Idrakisyah Mohamad

Ph.D. Student, Department of Business and Administration, City University, Malaysia

Abstract:

The indigenous Malaysian automotive companies (Proton and Perodua) are faced with challenges from the liberalization of the Malaysian automotive industries. The saturated domestic market has further reduced its market share as foreign brands were able to penetrate domestic sales through their competitive pricing strategy and superior product quality with the incorporation of advanced modern automotive technology. Malaysian automotive companies needs to reinvent itself by incorporating the antecedents required for export growth and corporate sustainability. The pertinent literatures were studied to gauge the business performance of Proton and Perodua and the challenges it faced in relation to its export growth and corporate sustainability. Content analysis was used to generate research findings and to identify the research issues to guide further research directions.

Both Proton and Perodua has benefitted from foreign collaborations, namely from their partnership with Geely of China and Toyota of Japan but the small and saturated Malaysian market together with its limited export market does not augur well for its long term business sustainability. The business success of both Proton and Perodua would be subject to these companies gradually increasing its domestic market share, sustaining its existing export market in ASEAN and the Middle East and their expansion to new foreign markets in Europe. In order to successfully compete with the established global brands, both Proton and Perodua need to embrace the antecedents for export growth and corporate sustainability, specifically in the areas of green supply chain management, competitive business strategies, marketing and branding, IR 4.0 and export and internationalization strategies.

Keywords: Proton, Perodua, green supply chain management, competitive strategies, marketing and branding, industrial revolution 4.0, export and internationalization

1. Introduction

The automotive industry, one of the world's largest economic sectors by revenue, significantly impacts the global economy in terms of GDP, employment generation, foreign investment flows as well as on technology advancement (Caroline, Tania & Guillermo, 2017). A capital-intensive industry with vertical integration and economies of scale, it is driving technological innovation and actively responds to the forces of globalization, Government regulations, specifically on energy consumption, emissions control and international safety standards (Schulze, MacDuffie & Taube, 2015).

The major trends in the automotive industry include the changing approach towards usership rather than ownership and the impact of global warming counter measures by the international community has given rise to the popularity of battery electric vehicles and autonomous cars (Hopp, et al. 2018). The impacts include the falling need and demand for personal cars, the rise of large fleet services like car subscription or lower maintenance needs that are expected to drastically affect the growth of the domestic automotive companies and increase the competition in the international markets (Antoine, et al. 2018).

The paper explores the paradigm shift occurring within the indigenous Malaysian automotive industry in relation to its domestic and export business performance. Existing studies and literature focus on the specific aspects of this changing trend, which is why this paper concentrates on the holistic changes that include various approaches to the issue of disruptive innovation in automotive industry.

This paper begins with Introduction in Section 1 and in Section 2, Literature Review is made on i) the trends in the Malaysian automotive industry, ii) Malaysian automotive exports, iii) the challenges and emerging opportunities and iv) pertinent theories and prior research. Section 3 draws upon the Research Methodology; Section 4 discussed salient findings and Section 5 draws conclusion and offers recommendations.

2. Literature Review

2.1. Trends in the Malaysian Automotive Industry

The birth of the Malaysian automotive industry begins in 1960s, when the Government decided to boost the industrial sector by not being overly dependent on the agricultural sector (Sultana, 2014). The Malaysian automotive industry began operations in 1967, commencing with the Import Substitution Policies (IS) that launched the local car assembly activities between 1967 and 1982 (Natsuda, et al. 2012). The industry evolved from foreign owned and operated to become Government led, with the establishment of Proton in 1983 (Ridzuan, 2015) and followed by Perodua as its second national car project back in 1993 (Islam, et al. 2016).

The national automotive industry was further enhanced with the establishment of Malaysia Truck and Bus (MTB), a company was established as a joint venture between HICOM and ISUZU in 1994, and began to produce commercial vehicles (CVs) such as trucks and buses in 1997, while INOKOM (Industri Otomotif Komersial, Malaysia) was also established between Hyundai Motors and Malaysian partners, commencing small commercial vehicle production in 1997 (Tham, 2004). As of 2018, the Malaysian automotive industry had 27 manufacturing and assembly plants, 641 parts and component suppliers and 53,011 after sales service centres with a combination of 736,632 workforce (MARii, 2019).

The automotive policies of the Malaysian Government have not contributed to the technological upgrading of the industry as it continues to depend on the technology embodied within imports. The policies to protect the domestic producers from international competition and to favour Bumiputra firms seem to have adverse impacts on productivity (Kozo and Kaoru, 2015). In this context, studies find that due to the lack of external competition, Malaysia's industrial policy in the automotive and parts industry has not been effective (Rasiah 2009). There is a significant performance difference between local and foreign vendors in the production of Proton vehicles and local vendors lack the capabilities to compete with foreign vendors (Rosli and Kari 2008).

As the results of the strong industrial nationalism from various direct and indirect state interventions, the Malaysian national automotive industry has been facing serious challenges in response to liberalization pressures from the World Trade Organization (WTO) and ASEAN Free Trade Area (AFTA) (Natsuda and Thoburn 2014). These state interventions contributed to the negative labour productivity in the Malaysian manufacturing sectors of electronics, textile and automotive industries 2000, added by Malaysia's inability to develop human capital or meet the intensity of research & development (R&D) investment (Rasiah, 2011).

The trends in the global automotive industry has evolved significantly over the past decade and the emerging trends in energy efficient vehicles, fuel standards, disruptive technologies and e-hailing services play a crucial role in this evolution (Syakir, et al. 2018). OEMs and other key industry players in Malaysia are taking note of this evolution and investing heavily in these areas for continued business sustainability of their automobile industries, failing which it would affect Malaysia's competitiveness in the global automotive market (Asrulnizam, et al. 2015)

In compliance to global green environmental regulations, of which Malaysia is a signatory, car manufacturers are compelled to decrease the production of internal combustion engines (ICE) and to create innovative solutions by minimizing the usage of petroleum to reduce carbon emission (Shukor et al., 2017). Malaysia was declared as having one of the highest carbon emissions per capita in the world at 12.3 tons per capita compared to world average of 7.9 tons per capita in 2011 (Malaysia Energy Commission, 2015). Malaysia aims to continuously develop local automotive industry in EEV technology, to enhance the production of lower fuel consumption and lower carbon emission vehicles (Syakir, et al. 2018).

In one of its measures to reduce carbon emission, the Malaysian Government introduced National Biodiesel Policy (NBP) in 2006 as a platform to promote biodiesel industry as an alternative to petroleum diesel (IEA, 2015; September 29). This policy has increased the use of biodiesel has reduced the consumption of petroleum diesel by 965, 982 tonnes over a 5-year period from 2011-2015 (GTMP, 2017). The Government too has planned to replace the Euro2M RON 95 to Euro4M RON95 by 2018 but has now differed it to January 2020. The Euro 5 diesel and Euro 5 petrol would also be introduced in 2020 and 2025 respectively. (Fuel and Lubes Asia, 2018 October 15). Despite the contraction in Malaysia's economic growth and weak consumer spending power, the planned introduction is expected to go down well with vehicle owners as on the average, the price of fuel in Malaysia is the lowest compared the price consumers pay in Singapore, Thailand and Indonesia (Gavin, 2018).

The launch of the New 3rd National Car Project (NNCP), which is projected in 2021, would incorporate disruptive technologies contents as Malaysia is one of the top nine high-tech manufacturing exporters in the world in terms of capacity and capability and has companies that can contribute technology and components of the car (Alita, 2018). According to the Networked Readiness Index by the World Economic Forum, Malaysia ranked 31st out of 139 countries in exploiting the opportunities offered by ICT in 2016, an improvement from its 32nd placing in 2015 (World Economic Forum Report, 2016). The Automated, Autonomous and Connected Vehicles (AACV) which is part of the Next Generation Vehicle (NxGV), has become one of the elements that is expected to drive the growth of Automotive Industry in Malaysia (Marii, 2019 June 28).

The e-hailing services have revolutionized the personal transportation industry in Malaysia, which started with started with Uber in late 2013 and followed by Grab in 2014 (Santos and Xavier, 2015). Both companies started with much hiccups and resistance from the conventional taxi drivers, however, the Malaysian government has given full support for the ride sharing system although most of the taxi drivers have aggressively protested against it. Uber exited the Malaysian market in March 2018 and today; six other new ridesharing players have emerged to fill the market (Boon, et al. 2018). The hike in car interest rates and tightening and capping of car loans to only 68% by Bank Negara Malaysia (BNM), has affected the sales of new passenger cars in Malaysia. (The Star, 2019 May 8). The depreciation of Malaysian currency has

increased car prices, making car ownership beyond the reach of many potential buyers (Boon, et al. 2018). As the result, the cheaper transportation rates offered by e-hailing providers, it has become more popular and an efficient mode of transportation, especially among the urban dwellers in Malaysia (Gavin, 2018)

2.2. Malaysian Automotive Exports

Though Malaysia's automotive exports has steadily increased from RM 6.10 billion in 2013 to RM 7.46 billion in 2017, it continues to be net importer of automotive components and parts (MIDA, 2018). Despite the increase in automotive exports, Malaysia remains a net importer as its import of CBU's increased drastically from 34,832 units in 2016 to 76,996 units in 2017(AAF, 2018). The increase in imports can be traced to increased competition in the global market making it tough for new entrants, stringent new vehicle standards in the international automotive market and the improved Malaysian economy resulting in consumers desire to buy foreign manufactured cars (Holland, 2001).

The emergence of Geely as a foreign strategic partner in 2017 was a milestone for Proton and will help fast-track the company's presence abroad with plans in the pipeline to renew its export to the United Kingdom, South Africa, Australia, Singapore, Brunei, Indonesia, Nepal, Sri Lanka, Bangladesh, Taiwan, Cyprus, Mauritius and the Middle East. (The Star Biz, 2019, January 16). Proton Holdings Bhd has exported some 1,635 vehicles worth RM55.1 million between June 2018 to August 2019 and its main export destinations included Brunei, Mauritius, Jordan, Pakistan, Iraq, Zimbabwe and Egypt (The Edge Markets, 2017 November 6)

Exports of Perodua vehicles are up from 923 units in first half of 2018 to 1601 units in first half of 2019. Perodua Malaysia revealed that the company is projecting a 50% growth in exports, aiming to reach 3,270 units in 2019 after recording only 2,184 units in total in 2018. (The Edge Markets, 2018, January 25). Perodua currently exports to seven markets – Brunei, Fiji, Mauritius, Singapore, Sri Lanka, Seychelles and Indonesia. Perodua's biggest foreign market is Indonesia, with 1,030 units sold in the first half of 2019. (The Star Biz, 2019, July 18)

2.3. The Challenges and Emerging Opportunities

Malaysia categorized at the level of Industry Revolution 2.0 and Industry Revolution 3.0 in terms of manufacturing technology and hovering at planning stage of Industrial Revolution 4.0 (EITN Malaysia, 2018 September 6). Malaysia's IR 4.0 readiness is necessary as it facilitates the Malaysian automotive industry in mass customization, increase of productivity, flexibility and speed of production and improvement on product quality, all which are prerequisites for the Malaysian automotive export market (Mohd Aiman, et al. 2016).

Both the national firms, Proton and Perodua which dominated the market in 1990s, had to contend with the increased competition generated by 9 assemblers of foreign models, which are Toyota, Kia, Mercedes, Honda, Peugeot, Mazda, Mitsubishi, Cherry, and Great Wall with a combined annual capacity amounting to approximately 963,300 units. The increased competition resulted in Proton losing its market share to the new entrants which benefit from superior technology capabilities (MIDA, 2014).

The Malaysian brands are facing severe challenges, particularly with differentiation issues and a good strategy would be to provide with a view of building a positive brand image (Hanaysha, 2016). Further, brand loyalty of Malaysia consumers in local automobile brand industry are affected by brand personality and brand satisfaction (Ahmad Mabkhot, Md. Salleh & Shaari, 2016). In this aspect, the brand attribute and brand image are two crucial factors that influences the brand experience of national car owners (Wan Nadiah, et al. 2016).

The sustainable and competitive business environment for the future survival of the Malaysian automotive industry can be attained by the adoption of the green business model (Abu Bakar & Amat Senin, 2016). The remanufacturing exercise remains an appropriate sustainability measures that gives the automotive industry an edge over the competition (Govindan et al., 2016). The application of green supply chain management (GSCM) also as part of the strategies to overcome ASEAN Free Trade Area challenges (Khairani, et al. 2017).

Proton and Perodua are facing difficulties in their attempt to export vehicles overseas without foreign partners to help them with establishing retail outlets and marketing activities. As the local industry is suffering from excess capacity, vehicle export would resolve this issue and provide economies of scale to the industry (Abe, 2009). The production of both Proton and Perodua has failed to reach the minimum order quantity required per model required for a positive return on investment. The industry standard for economic quantity requires an output volume of at least 250,000 units per model per year with a preferred volume of 400,000 (Maxton and Wormald, 2004).

Proton's acquisitions of strategic brands such as Lotus of UK and Suzuki of Japan facilitates its expansion abroad in emerging markets. Proton could work on producing high end premium models targeting the higher market segment. It has the needed resources to become the EEV hub for ASEAN region in view of the increasing demand for hybrid electrical vehicles. Proton with its recent joint venture with Geely of China has introduced premium models and increased its export initiatives, seen as a positive move to revitalize the Proton business.

Perodua would benefit from its exports to India, which are favourable for smaller cars as the Malaysian market is getting saturated. The volatile fuel prices will drive people to prefer smaller cars, thus Perodua will benefit from the change. With many of the developing economies are trying to improve infrastructure through better roads this will also see an increase in the demand for bigger cars like sedans, giving Perodua an opportunity to start producing bigger cars of premium models. The growing number of dual income households and more women drivers on the road is a potential market for buyers looking for a smaller car as a second family vehicle.

2.4. Pertinent Prior Research

The indigenous Malaysian automotive industries need to develop a holistic business strategy for continuous business growth and profitability in a rapidly competitive business environment. (Worthington & Britton, 2003). In relation to this, the pertinent research relating to Green Supply Chain Management, Competitive Strategies, Marketing and Branding, Industrial Revolution 4.0 and Export and Internationalization were reviewed as discussed below.

The study on the application of Conceptual GSCM practices in the Malaysian automotive companies covered the areas of green purchasing, green manufacturing, materials management, green distribution/marketing and reverse logistics. The researchers found that only few of these automotive companies have the knowledge and the capability to actually put the elements of Conceptual GSCM into practice (Argustina, et al., 2018).

Studies were carried out on the successful globalization of Swedish firms in the competitive international markets, using AB Volvo and IKEA as case studies. In addition to organizational ambidexterity, both firms applied Dynamic Capabilities Framework in their business expansion initiatives, managed to build strong advantages and learned to overcome barriers constituted by cultural, institutional and geographic distance. The research concludes that being proactive in exploration and improving on the effectiveness in exploitation, may lead to successful globalization performance (Jan-Erik, et al., 2016)

Research was made on the relationship between service quality and brand equity and the research findings indicated that service quality has a significant positive effect on all dimensions of brand equity: brand awareness, brand loyalty, brand image and brand leadership brand equity. The finding would prove useful to automotive industries in identifying the possible problems that could relate to service quality and other issues in order to help the management to further improve the products or services according to market needs as desired by their customers (Jalal 2016).

Researchers examined the upgrading of the Chinese automobile industry value chain using Porter's Value Chain Model as the research framework. Compared with international brands, China's auto industry always has the problem of low added value and hence this research was undertaken to explore the current situation and barriers that hinder the development of the Chinese automobile industry and to figure out the solutions to improve the automotive industry. The research finds that improvements to the value chain in the areas of automotive design and production, increase in research and development investments, increase in the quality of vehicle parts and components and the implementation of proactive industry policy by the Chinese Government, are all positively correlated and adds value to the value chain of the Chinese automotive industry (Jun, 2015).

Uppsala University in Sweden examined the network knowledge and business relationship value in the foreign market. The research focused on the early expansion to foreign market networks based on the key assumptions that firms are opportunity seeking and that gain critical knowledge operating in a network of relationships. By applying the Network Model of Internationalization, the research finds that experience and experiential learning are central to successful internationalization of industries. The analysis of the research demonstrated the importance of customer knowledge increased the importance of competitor knowledge. The study concludes that, knowledge about network actors and relationships are important for understanding network development and imply that long term relationship development as a pre requisite for a dynamic approach to network development (Hohenthal, et al., 2014).

3. Research Methodology

The study of literature review focused on pertinent issues in relation to the barriers and opportunities the indigenous Malaysian automotive companies was facing in both its local and export markets. The mix sources of the literature reviews were derived from journal papers, industry reports, academic textbooks, conference papers and online business news portals. In addition, information was also gathered from prior research on the Malaysian automotive industry, specifically in the areas relating to strategies on Green Supply Chain Management, Competitive Strategies, Marketing and Branding, Industrial Revolution 4.0 and Export and Internationalization and the corresponding theories. The Coding and Content analysis method was then used generate the findings, as it permits the analysis of large amounts of textual information to systematically identify properties which include words, concepts, characters, themes or sentences (Myers, 2013). This approach was considered appropriate to meet the purposes of this paper.

4. Themes and Findings

In the Malaysian context, the parts and component suppliers of both Proton and Perodua as a local and national SCM cluster could replicate the same concept and move into regional markets Southeast Asia countries like Thailand and Indonesia and later to China, US and Europe as part of their internationalization strategies (OICA, 2018).

Strategic implementation is a process by which competitive strategies are put into action through the development of programs, budget and procedures which involves the change within the overall culture, structure and management system within the organization, carried out by the middle and lower managers and reviewed by the top management (Thomas, et al. 2018). These are the changes that both Proton and Perodua need to undertake in its quest to increase export sales as a prerequisite for its corporate sustainability.

Proton and Perodua are two national automotive brands in Malaysia vying for market dominance with other globally successful brands such as Toyota, Nissan and Honda and these domestic automotive brands are dropping in sales and are gradually losing their market share to both the Japanese and European brands (Hadadi and Almsafir, 2014).

The digitization technology adds value to the manufacturing sector, making it possible to manufacture low volume, high mixed production in a cost-efficient way (William, 2014). Both Proton and Perodua need to embrace IR 4.0 in their manufacturing process that would give them the edge to compete in the global market in line with its export and corporate sustainability strategies.

Proton and Perodua needs to embark on export and internationalization strategies to address issues of excess production capacity entry of foreign competition into the domestic market as a result from Malaysia's trade liberalization policy. These issues need to be resolved urgently to arrest the further erosion of its domestic market, hamper its export initiatives that could render both Proton and Perodua as failed entities of the Malaysian automotive industry.

With the liberalization of the Malaysian automotive market, Proton faces intense competition from foreign manufacturers originating from Japan, South Korea and Europe, offering products at competitive pricing, advanced technology and energy efficient vehicles. With Proton's partnership with Geely in 2017, Proton's sales have surged to a total of 70,330 units in both domestic and export market for the nine-month period of 2019 from its totals sales of 64,744 units in 2018. Proton is on track to achieve its best sales number since 2015, and the model Proton Saga has reached the number one spot in the A-segment sedan market. (The Star Biz, 2019 October 3).

Perodua has primarily been focusing on Malaysia and other parts of Southeast Asia and should look beyond these regions to increase its export volume. Perodua is also excessively dependent on Toyota for upgrades. The company looks up to Toyota thus for many manufacturing related support activities which in turn affects its independence drastically. Perodua should look at newer markets like India, which are favourable for smaller cars as the Malaysian market is getting saturated. The volatile fuel prices will drive people to prefer smaller cars, thus Perodua will benefit from the change. Further, the growing number of dual income households and more women drivers on the road is a potential market for buyers looking for a smaller car such as Perodua, as a second family vehicle.

5. Conclusion and Recommendations

The paper explored related literature in regards to export and corporate sustainability requisites for the indigenous Malaysian automotive companies. The emerging trends in the global automotive industry posed a direct impact on the Malaysian indigenous automotive industry with regards to the changes that is taking prominence in the areas of green supply chain management, government policies and its implication on competitive strategies, marketing and branding strategies, IR4.0 and export and internationalization strategies of emerging markets.

Previous studies find that the weaknesses of Proton could be attributed to its limited product lines and limited exports markets, coupled with internal and external competition from domestic and international brands, resulting from market liberalization. On the other hand, Perodua has poor global reach, faced with product quality issues and its over dependence on Toyota for technology transfers. With the further saturation of Malaysian market and the intense competition from Proton, Honda and Nissan, a reduction in Perodua's market share is likely in the coming years.

The indigenous Malaysian automotive companies have to earnestly work with foreign partners for an increased share in the domestic market and to gain access to the international markets. These requires Proton and Perodua to implement competitive strategies based the Dynamic Capabilities Framework, focusing on the implementation of R 4.0 initiatives, GSCM practices and enhancing on its marketing and branding strategies.

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