



A strategic perspective on the UK automotive industry

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Abstract

UK automotive industry is facing unprecedented challenges as well as attractive opportunities. This report first studies the UK automotive industry from a macro level and then analyzes the five forces of this industry. Finally, the CSR behaviors in this industry are presented. This report presents how to conduct a professional industry analysis.

Keywords: five forces, industry analysis, PESTLE, automotive industry

Introduction

UK automotive industry is facing great transformation towards digitalization and decarbonization. Meanwhile, new entrants, such as electric and driverless carmakers are changing the competition pattern. UK car production decreased to 92158 units in August from 108239 units in July of 2019 (Trading Economics 2019). Despite various political risks and technology shocks, the manufacturing sector has been experiencing steady growth. Having achieved a turnover of £82 billion, the UK automotive manufacturing contributed £18.6 billion to 2018 UK economy and £44.4 billion to 2018 UK exports (SMMT 2019). The EU, USA, China, Japan, and Turkey constitute the largest five oversea customer markets.

For analyzing the UK automotive industry from a top to down approach, the PESTLE analysis framework is helpful for understanding the macro-environment in a higher perspective. UK automotive makers are under an unfriendly environment these years partly because the Brexit has triggered a series of political, economic, and legal impacts on the environment of the UK automotive industry. The uncertainty of the Brexit is decreasing foreign investors' confidences, and if the 'no deal' scenario happens, the UK will face potential high tariffs. The UK economy is suffering from low GDP growth and the depreciation of pounds. More rigorous environmental laws have raised more requirements for UK automotive manufacturers. The attractiveness of the UK automotive manufacturing industry is medium, and the result is concluded by conducting Porter's Five Forces analysis. Although most UK automotive manufacturers have already undertaken significant corporate social responsibilities, they should continue transforming and evolving to deliver a sustainable future.

The strategic analysis is also subject to two main restrictions and constraints. One is the interconnection of the factors when performing PESTLE analysis. Because the six factors are generic and separately described, to interpret the interrelationships or interdependences among variables and to find the critical driver of change only by PESTLE analysis are challenging (Burt 2006) ^[9]. Therefore, scenario analysis is recommended. In Porter's Five Forces analysis, the powers of each 'force' are qualitatively defined as weak, medium, or strong. However, the definition of the extent of weak or strong is subject to subjective judgment. To measure the industry attractiveness more precisely and to make the attractiveness forces of different sectors available for comparison, a more quantitative analysis framework can be created or introduced. For example, build a measurement system that can rationally score each power from 1 to 10.

The Macro-environment Analysis of the UK Automotive Industry

Subject to some restrictions as well as constraints, the PESTLE analysis provides an overview of the six critical factors to influence the macro-environment of the UK automotive industry: political, economic, social, technological, ecological, and legal (Johnson et al. 2018: 68) ^[17].

Political

The UK government's failure to provide Brexit certainty is disappointing Japanese manufacturers who occupy the largest share in UK automotive output (BBC 2019). The political uncertainty brings foreign investors more risks and therefore forces risk-averse Japanese corporations to invest in mature and stable markets in Southeast Asia. If the 'no deal' scenario happens, the UK will face billions of tariffs on vehicles exported to the EU market (SMMT 2019).

In the mid-1980s, the UK attracted Japanese carmakers looking for access to European markets. However, earlier this year, the EU and Japan struck a trade agreement that lowers tariffs on both parties' car exports to zero (BBC 2019). Building automotive plants in the UK is no longer attractive to Japanese producers that can shift to Asia to enjoy cheaper labour and higher efficiency.

Economics

The growth of the UK economy remains sluggish, with a negative GDP growth rate of -0.2% in the second quarter of 2019 and a rising inflation rate of 1.7% in 2019 September (Financial Times 2019). During the recessionary period in an economic cycle, more people delay or curtail spending on cars; the UK carmakers will suffer.

Declining 16.5% against the US dollar after the results of the 2016 Brexit referendum (European Business Magazine 2018), the depreciating pound is in favour of exports for UK manufacturers. However, the benefit is hard to offset the impact of increasing crude oil prices, which prompt a lower car demand and harm the automotive manufacturing industry.

Besides, as the third-largest consumer market (SMMT 2019), China's stagnant economy and emerging local competitors, to some extent, lower the demand for UK high-end brands.

Social

In mid-2018, the UK's population continues to grow at a slow rate of 0.6%, with the population aged grows fastest (Office for National Statistics 2019). The situation indicates a diminishing demand for petrol vehicles but enlarges the market for autonomous (Deloitte 2019) ^[13] or unique designed cars for the aged.

Culturally, the low-carbon lifestyle is becoming popular due to the awareness of global climate change, driving people away from traditional fuel vehicles and increasing needs for electric or new-energy vehicles.

Technological

Depending on the breakthrough innovation on car batteries, the safer and cleaner electric automobiles are reconfiguring the automotive manufacturing industry.

Conventional car manufacturers are facing unprecedented challenges not only from electric unicorns, such as TESLA, but also from internet giants, including Google and Apple, who have invested billions in technology research and development (R&D) of autonomous and new-energy vehicles. Between 2009 and 2015, Google spent over \$1.1 billion on developing its self-driving vehicles (Business Insider 2017). Owning thousands of patents and developing several prototypes, the Googles have begun smart cars' road-tests.

Ecological

The pressure to minimize the direct pollution of exhaust prompts manufacturers to develop more 'green' automotive technologies.

However, environmental protection also means carmakers are responsible for dealing with the seemingly indirect pollutions, for example, the industry wastes produced during manufacturing, assembling, and painting processes. These pollutions can be easily overlooked.

Over the past five years, the number of vehicles abandoned in England and Wales has increased by 228% (Auto Express 2019). So, manufacturers should consider how to recycle and safely dispose of the abandoned vehicles, especially the electric parts and poisonous materials that are environmentally harmful.

Legal

Introduced across Europe in 2015, the new emission-rules raise new requirements for automotive producers to develop cleaner diesel technologies fitted to Euro 6-compliant models (Auto Express 2019).

Furthermore, because the EU is the largest export destination for UK cars (SMMT 2019), the more rigorous rules will create remarkable compliance costs, which can lead to a drop in demand by consumers and a squeeze on the UK manufacturers' profits.

Overall, the UK automotive industry is facing a challenging macro-environment. All six factors are presented as discrete areas with defined focuses, while, in practice, they overlap and interact in ways that cannot be detailed. For example, the Brexit, a political factor, also has an impact on economic components, such as tariff and exchange rate. For a better understanding of the interconnections of those factors, scenario analysis can be conducted (Burt 2006) ^[9].

Industry and Sector Analysis of UK Automotive Manufacturing

Porter's five forces framework offers a comprehensive way to identify the attractiveness of the UK automotive industry according to five competitive forces. The stronger forces mean that the industry is less attractive to enter because the industry's costs are higher (Johnson et al. 2017: 64, Magretta 2012) ^[18, 19].

Competitive rivalry: Strong

The high investment in R&D, manufacturing lines, and marketing forces carmakers to cut unit prices as a way to improve their sales and to amortize the substantial fixed cost. Cutting price is always followed by more competitors and finally leads to price wars and more intense competitions (Johnson et al. 2018: 111) ^[18]. As a result of the enormous initial investment, exiting is difficult for manufacturers, which, otherwise, will bear devastating losses, thereby increasing the level of rivalry.

Since 2010, more players have come into the car manufacturing industry, and the annual number of enterprises' death is smaller than those birth (Statista 2019) ^[33], intensifying the competition. However, with a growth rate of

4.56% in 2018 and 2.2% expected in 5 years (Statista 2019, SMMT 2019) ^[33], UK carmakers can capture new growth opportunities and still make profits.

The threat of entry: Weak

The threat from entrants is subject to several limitations. In 2013, Rolls-Royce spent S\$ 75 million only to launch a manufacturing laboratory (Asian Scientist 2013). The considerable investment in plants, equipment, and daily operations are high barriers for new brands. New entrants are impossible to achieve the economic scale that needs decades of accumulation. Likewise, they are difficult to access supply or distribution channels, with the tendency to be charged more. The unpopular brand image and lack of reputation also challenge new entrants. Moreover, increasingly harsh laws create another barrier to entry. Consequently, new players cannot challenge the advantages of incumbents who have developed over the past decades.

The threat of substitutes: medium

Although there are several substitutes for transportation, such as buses and trains, the advantage of automobiles cannot be fully hedged. Owning a car can allow people to travel 'from point to point', offer more flexible time, and, to some extent, represent one's prestige.

However, commuters in big cities tend to choose public transportations because they are cheaper and more convenient, and high-speed trains are safer for long journeys. Furthermore, new energy and electric brands, such as TESLA, are challenging the traditional automotive manufacturers (Deloitte 2019) ^[13].

The power of suppliers: weak

Automotive suppliers' bargain power is low. There are plenty of vendors such as GKN for components and BP for lubricant oil. Many international competitors, including Bosch and Continental (Spotlightmetal 2019), produce similar products without significant differentiation. Leading UK manufacturers, such as Bentley, Rolls-Royce, and Land Rover, can switch from one supplier to another at low costs, because raw materials, auto parts, and labours are always available.

So, suppliers must play according to carmakers, who have real clout to build the market rules. Although few vendors control the core high-tech components or rare materials, such as Hyperbat expert in battery systems (Automotive Logistics 2018), they are often small in size. Thus, the threat caused by most suppliers doing forward integration can usually be ignored.

The power of buyers: strong

Influential buyers include the vast individual buyers that buy single vehicles and the governments as well as large corporations, such as Uber, Gett, and Wincanton, who purchase fleets of automobiles. Both of them are price-sensitive and can turn to a new brand without high switching costs (Pratap 2019). Thus, the buyers always try to bargain for a lower price, compressing the profit space of carmakers.

Large corporation customers also cause a threat of backward integration. For example, multinational logistics groups and car-rental companies tend to merge manufacturers to get rid of the procurement limitation and realize economic scales. A travel agency or a hotel group can buy a car brand to broaden its services for ultimate customers. In all, the UK automotive industry shows medium attractiveness, accompanied by strong buyers' power and intense rivalry.

Corporate Social Responsibilities (CSR) of the UK automotive industry

The World Bank Group defines CSR as 'the commitment of business to contribute to sustainable economic development, working employees, their families, the local community and society at large to improve quality of life, in ways that are both good for business and good for development' (World Bank 2003). Although the formalization, main actors, and specific aims of CSR vary among different firms, the core idea of CSR is doing some 'good' things (Kotler 2005) beyond the basic economic and legal requirements and out of ethic or philanthropy. CSR is not a new concept. Since the Industrial Revolution, UK carmakers have tried a lot to ensure labour working conditions, provide accommodation or healthcare, and donate to charities. In the 1960s, corporations began to pay more attention to environmental problems. At the same time, a series of apocalyptic ecological literature were published, such as Silent Spring (Carson 1962). However, contemporary CSR requires corporations to address their roles in society more coherently, comprehensively, philanthropically, and professionally (Crane, Matten and J. Spence 2014: 3). Figure 1, below, compares the up-to-date CSR with the traditional CSR (Crane, Matten and J. Spence 2014: 66).

	Traditional CSR	Contemporary CSR
Focus	Risk	Reward
Drivers	Image, Brand, Public Acceptance	Performance, Markets, Products
Actors	Corporation, unilateral philanthropy	Corporation + Multi-stakeholder networks, collaborative value creation
Relation to the bottom-line	No direct contribution: CSR is value distribution	Integral goal: CSR is value creation
Orientation	Reactive	Proactive
Motto	'CSR is bolt-on'	'CSR is built-in'

Fig 1: The evolution of CSR (Crane 2014: 66)

CSR is helpful for increasing sales and market share. Over the last two decades, the UK automotive manufacturers have undergone tremendous growth and transformation, while they have successfully balanced the economic growth with social responsibilities and environmental requirements. Such agile responsiveness has helped the industry to thrive through the economic recessions many times, with vehicles becoming the UK's most exported product, occupying nearly 10% of total UK exports (SMMT-Trade 2019).

UK automotive industry constantly focuses on environmental protection and resource efficiency, having saved 8.9 million tonnes of CO₂, 7 million MWh of energy, 53.6 million M³ water usage, and over half million tons of waste from landfill (SMMT-Sustainability 2019) since 1999. Less energy and resource use means lower costs and more profits for manufacturers.

Being responsible and 'green' can link a brand with moral spirits, enhance the corporation's positive public image, strengthen the brand reputation as well as market position, and attract more investments in sustainable development. The UK automotive sector has been long dedicated to deliver energy efficiency and decarbonisation; for example, BENTLEY has achieved generating all electricity needed by solar power or other green energies (SMMT-Sustainability 2019).

Employees are the most critical stakeholders, and more care on employees can bring corporations more loyalties, more working enthusiasm, and higher retention rate. During the last 20 years, UK automotive manufacturing has greatly improved employees' satisfaction. More job opportunities were created, the industry's average wage increased by 85% against the whole UK economy by 61%, and the number of incidents per employee dramatically decreased. Meanwhile, to adapt to digitalization, the number of formal training days per employee has increased by 61% (SMMT-Sustainability 2019).

Many stakeholders expect more than minimum. UK government shows great ambition in its 'Road to Zero' strategy, which targets that by 2040, all new cars will achieve absolutely zero-emission (SMMT-Sustainability 2019). Even though the gender pay gap in UK automotive manufacturing is close to that in manufacturing overall, the automotive council launched a program last year to pursue more inclusivity and diversity (SMMT-Sustainability 2019).

In conclusion, CSR is not just a matter of senior policymakers. However, the staffs' ethical behaviours and the managers' focuses on employees' safety, well-being, and gender diversity are driving ASTON MARTIN to deliver a sustainable future by constant innovation (ASTON MARTIN 2019).

Conclusion

UK automotive industry is under an adverse macro-environment, but the corporations can still make profits, aligned with the weak entrants' threat, the weak suppliers' power, and the medium substitutes' threat. Along with the popularity of driverless technology, more cross-industry players will crowd into the industry and create more substitutes, consequently intensifying the rivalry; but the powers from customers and suppliers will not be substantially changed.

To prepare better for the industry digitalization transformation, UK carmakers should build strategic alliances (Johnson, Whittington and Scholes 2012: 218) with players from other industries, such as Google from AI or Inter from the chip industry. Manufacturers are also responsible for developing more energy-efficient technologies to reduce water use, recycle wastes, and extend vehicles' lifespans.

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