Journal of Undergraduate Research at NTU

Stanowska, N. (2018) An investigation into the development of Toyota's e-commerce customer journey. The Journal of Undergraduate Research at NTU. Volume 1, Issue 1, p. 146 -181.

ISSN: 2516-2861

This work is licensed under a Creative Commons Attribution.

Attribution-NonCommercial-ShareAlike 4.0 International.

Copyright for the article content resides with the authors, and copyright for the publication layout resides with Nottingham Trent University. These Copyright holders have agreed that this article should be available on Open Access and licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International.

An investigation into the development of Toyota's e-commerce customer journey

Natalia Stanowska, Nottingham School of Business

Abstract

This article investigates the viability of e-commerce as a source of potential competitive advantage for Toyota (GB) PLC through providing a new sales channel for Toyota vehicles. A literature review provided theoretical understanding of e-commerce, customer journeys, as well as the impact of e-commerce on the automotive industry. Using the theory gained, the writer created a conceptual framework to illustrate how automotive manufacturers can move through digital maturity stages. The author identified three research questions:

- To what extent is a test drive a key determinant of vehicle purchasing?
- What is the impact of e-commerce strategies on dealerships?
- What is the viability of a fully digitalised customer purchase journey?

In order to answer these questions, both primary and secondary research was used. The researcher adopted an interpretivist, inductive approach. The author concludes that there is a market for online automotive retail. Strong evidence suggests that test drives are still a key determinant of a vehicle purchase journey for most. Thus, car dealerships, in particular Toyota Great Britain, should increase their efforts to provide a more customer centric test drive experience. The research lacked conclusive evidence about the impact on dealerships, except that changes will need to be made in order to remain profitable. Research points towards dealerships remaining as an intermediary, but needing to change their service levels or even structure. In summary, there is strong evidence that e-commerce is a viable source of competitive advantage for Toyota Great Britain. Due to increasing demand for an online sales channel and in order to gain market share of online vehicle sales to get ahead of its competitors, it is in the best interest of Toyota Great Britain to incorporate e-commerce into their sales strategy.

Keywords: Automotive industry; Car sales; Car dealerships; E-commerce; Competitive advantage; E-commerce customer journey; Toyota Great Britain

Introduction

At the time of writing, the automotive industry is poised for a paradigm shift in the way it connects economically with its customers. The automotive market is growing in the UK with an estimated 9.93 million vehicles sold in 2015, comprising a mix of new and used cars (Mintel, 2016). However, used cars dominate the market sales with 7.3 million cars sold in 2015, compared to 2.63 million new cars (Mintel, 2016). In 2014, all UK automotive manufacturers contributed £18.9 billion in value to the UK economy, and accounted for 12% of the UK's total goods exported in 2015, making the automotive industry an integral part of the UK economic market, accounting for 4% of total GDP in 2014 (KPMG, 2014; RMI, 2015). However, in 2016, only 4% of vehicles were purchased online; this is insignificant when compared with the clothing and footwear industry where 11.5% of purchases are made online (Google Gearshift, 2016; ONS, 2017).

Existing literature largely points towards a shift towards e-commerce in the automotive industry (Biller et al., 2005; Marques et al., 2014; The Economist, 2015; Bacon, 2016; Lawson et al., 2016). However, the automotive industry is still one of the few remaining industries which is yet to undergo a fundamental shift towards online retailing as there is still a high reliance on brick and mortar in the industry (Burstein, 2016). Thus, the purpose of this research project is to investigate the viability of e-commerce as a source of potential competitive advantage for Toyota (GB) PLC (TGB). Specifically looking at the Business to Consumer (B2C) relationship, from allowing customers to select, specify, configure and purchase their new car¹ entirely online, through an expanded digitalised sales model. The writer will investigate the viability of this as an option for TGB, because an introduction of a new sales channel would have significant implications on the organisational structure, management and resource of the company.

Combining literature with primary research (survey) and secondary research (bench marking automotive e-commerce competitors, document based and secondary survey) will allow conclusions to be drawn on whether TGB should consider expanding into an online sales channel.

Research Gaps

Taking the knowledge gained from reviewing the literature and research on e-commerce, the impact on the automotive industry, as well as how customer journeys have developed, and funnelling it to understand the automotive e-commerce customer journey, the following research gaps arise:

- 1. To what extent is a test drive a key determinant of vehicle purchasing?
- 2. What is the impact of e-commerce strategies on dealerships?
- 3. What is the viability of a fully digitalised customer purchase journey?

The research will answer the above questions using primary and secondary research.

¹ New car is defined as a vehicle brought straight from the production line, made to the customer's exact configurations.

Case study background

Toyota's position in the automotive industry

Based on vehicle sales in 2016, Toyota ranked as the second largest global automotive manufacturer, marginally below the Volkswagen Group and just above General Motors (JATO, 2016; Statistica, 2016).

In 2016, Toyota consolidated vehicle sales totalled over 8,680,000, of which over 844,000 came from Europe (TMC, 2016). TGB contributed 8.8% sales to the Toyota European mix (Auto Retail Network, 2016). With a total of 180 Centres, TGB ranked ninth in the UK in 2015, with 3.8% market share, marginally behind Mercedes-Benz and Peugeot (Mintel, 2016; Toyota Europe, 2016; TGB, 2017).

Using the Herfindahl-Hirschman index² it is possible to assess the automotive market to have a reasonable degree of concentration, which is a proxy for a highly competitive market (Rhoades, 1993). This supports the level of contestability that forges rapid innovation to gain market share, resulting in several automotive manufacturers beginning to retail new cars online (Singh, 2014; Dyer and Gregersen, 2016).

Franchise network

Toyota, like most other automotive manufacturers operate a franchise network to sell their vehicles. A franchise is an exclusive agreement between a dealership and an automotive manufacturer in exchange for a service and provision of a facility to sell new vehicles (Biller et al., 2005). The manufacturer is only concerned with new vehicles sales, used sales are supported but not rewarded. Used car sales are an additional source of income for dealerships (Rhodes and Sear, 2015).

TGB refer to a dealer or dealerships as 'Centres' or 'Centre Network'. Thus, when discussing other automotive manufacturers, the writer will refer to dealers, but if discussing TGB or Toyota in general, the writer will refer to Centres.

Toyota customers

The most accurate data for TGB customers comes from their 'New Car Buyer's Survey' (NCBS). In 2015, this survey gained 1,428 responses and showed the median average age of a TGB customer to be 62 years old and predominantly male with a 58% male and 42% female split (Martucci, 2015). Therefore, despite a small sample size, it is possible to assume the median average Toyota customer is nearing retirement and male. However, it should be noted that this survey is carried out through 'self-selecting' sampling, as the new car buyer can choose to participate in the survey and is not incentivised to do so. Furthermore, the survey is only carried out in paper form; therefore, the data may hold some bias.

² Herfindahl-Hirschman index is a measure of competition in a market (Rhoades, 1993).

Literature review

Rise of e-commerce

In 1996, whilst still a nascent platform, e-commerce was described as consisting solely of "a company web site to share information, maintain relationships as well as carry out transactions using electronic networks" (Zwass, 1996, p.3). A modernised definition has been narrowed down to "a digitally enabled commercial transaction between and among organisations and individuals" (Laudon and Travers, 2006, p.10). Thus, the rise of the Internet, allowed the formation of e-commerce as it provided business with a tool to communicate with a broader consumer base (Ryan, 2017).

E-commerce adoption and associated impacts

With six types of e-commerce (Figure 1), 'Business to Business' (B2B) and 'Business to Consumer' (B2C) are dominant in the e-commerce market, with B2C fundamentally changing businesses by allowing customers to interact and purchase items from a company without having to visit a physical store (Kalakota and Whinston, 1999; Turban et al., 2000).

	BUSINESS	CUSTOMER	ADMINISTRATION
BUSINESS	B2B	B2C	B2A
CUSTOMER	C2B	C2C	C2A

Table 1: The Six Types of E-commerce (Turban et al., 2000)

According to a report by ATKearney, in 2015 global e-commerce sales totalled \$994.5 billion, with an estimation that by 2017 this will have risen to \$1328.0 billion (ATKearney, 2015). Looking specifically at the UK, 14.6% of all B2C retail spending was carried out online in January 2017; this had increased by 1% since January 2016 (Murphy, 2017). The Office of National Statistics reported that in 2016, an average of £1 billion was spent a week on online sales, thus this can be estimated to total £52 billion online sales in the UK alone (Centre for Retail Research, 2014; Moth, 2015; ONS, 2016; Murphy, 2017).

The adoption of new technologies i.e. Internet or e-commerce, can be explained by Rogers (1983) 'diffusion-adoption curve', as seen in Figure 1. The companies or individuals who first embraced e-commerce can be placed in the 'early adopters' stage since they did not invent e-commerce, but have been the first to incorporate it into their selling strategy or have been established due to the technological change (Völlink et al., 2006), i.e. Amazon.



Figure 1: Diffusion-Adoption Curve

However, it is important not to neglect the customers who are not connected to the Internet, and therefore, can be categorised as 'laggards' as they do not have the ability or desire to shop online (Rogers, 1983). In 2016, at least 11% of the population in Great Britain fully relied on brick-and-mortar, which shows that despite many households being connected and online, not everyone requires this capability (Keen et al., 2004; ONS, 2016).

Benefits and drawbacks of e-commerce

As the majority of the population have embraced e-commerce, it has brought many benefits to companies (Rigby, 2011; Consultancy, 2015; Shearman, 2016). As mentioned previously, early adopters of e-commerce can benefit from cost leadership as they utilise innovative technology and build economies of scale (Porter, 1985). One example of this is Amazon who holds 16% of the e-commerce market share in the UK, followed by Tesco with just 9% share (Ecommerce News, 2016). The large product selection online ensures repeat custom and the opportunity to reach wider audiences, not only nationally but also globally, coupled with reduced capital costs as the need for physical stores regresses (Enders and Jelassi, 2000; Deloitte, 2016). Reduced capital costs could also be due to disintermediation as retailing online diminishes the need for a 'middle party' between the producer and customer (Laudon and Traver, 2006; Singh, 2014; Gilliland, 2016). Disintermediation is a topic discussed widely in the literature; defined as "displacement of market middlemen who traditionally are intermediaries between producers and consumers by a new direct relationship between producers and consumers" (Laudon and Traver, 2014, p.30).

For businesses who have entered the e-retailing world, a large challenge comes from foreign competitors who enter the firm's domestic market (Kraemer et al., 2005). Other drawbacks include lack of trust from the consumers causing an unstable customer base and overreliance on external fulfilment houses to fulfil correct orders in a timely manner (Enders and Jelassi, 2000; Grewal et al., 2004). E-commerce can also expose competitive challenges such as easily accessible aggregators, otherwise known as price comparison websites.

Increased price competition can cause a loss of profitability for retailers, as prospective customers search online for cheaper options (Grewal et al., 2004; Chaffey and Ellis-Chadwick, 2016). The Office of National Statistics reported that around 23% of those aged 25 to 55 almost always use comparison websites prior to making a purchase (ONS, 2016). The final drawback, and arguably the main reason

that companies become laggards, is the potential of cannibalisation of other sales channels (Enders and Jelassi, 2000). Shi and Salesky (1994) argued that e-commerce is unlikely to bring additional value to the business, but rather a re-distribution of profitability across current retail channels. This was backed up by Falk et al., (2007) who observed cannibalisation as a core issue of e-commerce. A study in Switzerland in 2015, however, showed no signs of cannibalism, as a significant portion of consumers researched the product online, but still visited the physical store to purchase (Herhausen et al., 2015).

In summary, the literature argues that e-commerce is going to continue sculpting the retailing industry, especially as the young generation grows up (Enders and Jelassi, 2000; Modahl, 2003; Rogers, 2003; Schiffman and Kanuk, 2003; Keen et al., 2004; Bigne et al., 2005). Research by Bigne et al., (2005) showed that young Internet users, who have had a higher level of exposure to technology growing up, are more susceptible to accepting retailing change. As Internet shoppers are more impulsive, convenience seeking and less risk-averse than non-Internet shoppers, it is almost certain that as technology-savvy individuals grow into consumers' e-commerce will be forced to grow with the increased demand (Donthu and Garcia, 1999; Rogers, 2003).

E-commerce impact on the automotive sector

E-commerce has been slow to penetrate the automotive market, but it is forcing it to evolve, changing customer expectations and desires (Biller et al., 2005). The majority of the literature points towards the automotive industry inevitably expanding its sales model to encompass e-commerce, with the digital sales channel working together with dealerships, not as an independent entity (Biller et al., 2005; Marques et al., 2014; EY, 2015; Bacon, 2016; Lawson et al., 2016).

Despite the positive attitude to e-commerce from other industries, online car sales are still a niche market in the automotive industry (Marques et al., 2014). It is possible to hypothesise that the reason why the automotive industry has not grasped e-commerce like other industries is because the demand does not exist yet (The Economist, 1999; Pandya, 2002). However, in the 21st Century, with increasing introduction of new innovative brands, consumers are demanding better quality, in less time, in the exact configuration and finance of their choosing (Lawson et al., 2016). To remain competitive and gain automotive leadership, it is essential that the automotive industry is up-to-date with the latest technology, as well as willing to adapt existing procedures and systems to integrate technology, and therefore e-commerce (McKinsey, 2014; EY, 2015; Lawson et al., 2016).

An increasing number of consumers are purchasing vehicles via independent sales portals, such as Auto Trader, without seeing or test driving the car first (Marques et al., 2014; The Economist, 2015). Granted, the majority of these vehicles are used rather than new, but research by McKinsey & Company (2014) showed that in the US a third of consumers would consider purchasing a car entirely online. A consultancy firm carried out similar research in 2015 in the UK, and found that 20% of consumers would purchase a vehicle online (Capgemini, 2015). Even higher figures come from research by Cars Online which showed that 42% of respondents would buy directly from the manufacturer (Marques et al., 2014).

This raises an interesting question which the research will endeavour to answer: is a test drive still an essential part of a customer purchase journey? Research by McKinsey & Company showed that for most consumers a test drive is a vital part of the decision-making journey, however, the 2013 Retail Innovation Consumer Survey showed that 23% of customers, surveyed in Europe, said that the test drive is not important (Mohr et al., 2014). Furthermore, Hyundai Rockar reported that 47% of customers who brought a vehicle (through Rockar) did not undertake a test drive as part of the purchase journey (Milligan, 2017).

Customer journey

E-commerce customer journey in the automotive market

With quality sales information freely available online, the relationship between consumer and sales person has changed (Foy, 2013; Hirt and Willmott, 2014). This may be due to consumers becoming increasingly trusting in online reviews (Lee et al., 2011). Research by the consultant agency Capgemini (2015) showed that 35% of consumers would be influenced to make a purchase decision by a positive social media comment. Even more striking figures come from PWC (2013) who found that 71% of consumers are more likely to make a purchase if it has been recommended on social media. Furthermore, (Deelarocas (2003), Schindler and Bickart (2005) and Pookulangara and Koesler (2010) argue that social channels are having an increasing impact on customers purchase decisions and brand loyalty. This suggests that the customer experience of an online brand is becoming of integral importance to companies (Edelman and Singer, 2015).

Since customers are utilising the Internet for much of their decision-making process, they enter a dealership knowing exactly what model of vehicle they want and how much they are prepared to pay for it (Conger and Schultze, 1999; Foy, 2013; The Economist, 2015). Especially with the new generation of buyers who are confident online and increasingly shopping for vehicles like they would other products (Foy, 2013; Hirt and Willmott, 2014), it is in the manufacturer's best interest to innovate automotive retail and provide a platform to sell new cars online (Lawson et al., 2016). To gain or even maintain market share, car manufacturers will have to expand their sales channels, as in the UK alone there are three manufacturers already retailing new vehicles online (Milligan, 2017).

This leaves dealerships in a potentially problematic situation. Some argue that manufacturers are too reliant on dealerships to remove them from the customer purchase process entirely, or that online sales are not a threat to physical sales and thus will not negatively impact dealerships (Avery et al., 2012; Foy, 2013; carwow, 2016a; Milligan, 2017). Others argue, that there is a significant chance that if online retailing gains pace, the manufacturer will cut out the middle man to increase their margins (Laudon and Traver, 2014; The Economist, 2015). Especially as consumers used to visit dealerships 3 or 4 times before making a purchase, but nowadays this has dropped to just one visit to test drive and purchase a vehicle (Carwow, 2016b; Milligan, 2017). Singh (2013) argues that the responsibility lies with the dealerships, saying that dealerships need to lead the way on e-commerce to remain an integral part of the consumer purchase journey.

Conceptual framework

Utilising both the 'Digital Marketing Capability Model' (Smart Insights, 2015) as well as the 'Strategic Options for a Company in Relation to the Importance of the Internet as a Channel' model (Chaffey and Ellis-Chadwick, 2016, p. 226) the below visual framework of current understanding about automotive e-commerce was created by the writer (Table 2). The framework is a stage like process, focused on Digital Maturity³ in order to simplify a complex concept. A Centre does not necessarily have to go through each stage, dependent on technology adoption and the other factors showcased in each stage a Centre could skip a stage.

Automotive Retail Digital Maturity Framework					
Centre: Supreme	Centre: Checkout	Centre: Pick Up	Centre: Service		
Elementary Grasp of Ecommerce Each stage builds on the previous Multifaceted Grasp of Ecommerce					
All purchases made directly with the Centre, little information available online and Centre is main point of contact	Information is widely available online, thus customer carries out all relevant research online (consulting social media) and only visits the Centre to purchase the vehicle	Full purchase journey is carried out online, and visits the Centre to pick up their newly purchases vehicle. Customer service is outstanding	Either customer picks up their online purchased vehicle at the Centre or it is delivered to their home/work, leaving Centre to mainly carry out service work		
 Basic online presence Treated as display advertising (Laudon and Traver, 2006) Web 1.0 (Robehmed, 2013) 	 Acknowledged as part of customer journey Online lead generation (i.e. brochures, test drives) Mobile optimised (Gill, 2014) Web 2.0 (Barassi and Trere, 2012; Lee et al., 2012) 	 Online retailing Click & Collect Single source of data driving connectivity between all touch points strong CRM system (i.e. HQ, Centre, call centre, service) (Edelman, 2010; Kitewheel, 2016) 	 Telematics (i.e. connected cars) Different ownership model is supported (i.e. rental, car-share) (Orsato and Wells, 2007; Firnkorn and Muller, 2011) 		
Maturity Stage 1	Maturity Stage 2	Maturity Stage 3	Maturity Stage 4		

Table 2: Automotive Retail Digital Maturity Framework

³ Digital maturity can be defined as a continuous and ongoing process of adaptation to a changing digital landscape (Kane et al., 2017).

The author postulates that currently the majority of automotive manufacturers (including TGB) could be placed at 'Maturity Stage 2'. This stage has been visualised below in Figure 2, as the most simplistic current automotive customer purchase journey. The journey begins by researching vehicles; these are then narrowed down by a test drive which consolidates the choice of vehicle. The customer purchases their car, and picks it up once it has arrived. They are then offered After Sales and accessories and return to the dealer to service their vehicle.



Figure 2: Current Customer Journey

Research methodology

For this study, both primary and secondary research methods were used.

Secondary research

Three secondary research techniques were used (Figure 3):



1. Competitor online automotive retailers were benchmarked to gain insight into how other manufacturers have introduced e-commerce into their sales strategy. These competitors were chosen as they were already retailing online.

2. A survey used to gain a preliminary understanding of how the automotive industry feels about automotive e-*commerce*.

3. A document based financial analysis was carried out to understand how a Toyota vehicle is priced and therefore how a vehicle could be priced online. This information is confidential to TGB and official figures and percentages cannot be shared.

Primary research

To gain an understanding of prospective car buyers' current attitudes towards purchasing a vehicle online a survey was carried out. Arguably one appropriate audience for the survey sample would be current Toyota owners. However, as mentioned in the introduction, the average TGB customer is 62 years old, and when looking at the correlation between this age group and e-commerce, it is possible to suggest they are generally less inclined to purchasing a vehicle online (ONS, 2016). The alternative audience could be Toyota conquest customers⁴; however, the information about Toyota prospects⁵ is of low-quality due to an unsophisticated CRM system. Therefore, the focus will be on conquest consumers rather than prospects (Table 3).

Primary Research—Survey Approach			
Interp <mark>retivist Stanc</mark> e	Collecting subjective data		
Inductive Approach	Conclusions will be drawn based upon findings from survey		
Non-Probability Sample	Limited information dictates a non-probability sample		
Purposive Sampling	Enables targeted sampling		
	Both Male and Female		
Audience:	 Living in the OK Aged 18 or over Showing an interest in automotive articles and sites 		
Sample Size:	100		

Table 3: Secondary Research Approach

⁴ Conquest customers: those who have never shown an interest in a Toyota vehicles before.

⁵ Prospects: those who have shown an interest but have not purchased a Toyota vehicle.

Sampling

Adopting an interpretivist stance allowed a richer understanding of how the surveyed audience felt about a digital automotive industry, as the survey collected subjective rather than objective data (Table 3). Conclusions were drawn using an inductive approach as it was based on specific observations rather than existing theory.

The survey was carried out using Google Surveys. This tool was chosen as it allows in depth analysis of the findings and access to a large audience willing to respond to surveys. Aimed at the automotive industry, the survey 'pop uped' on automotive articles after 30 seconds of activity, which the individual can chose to answer or close.

Using Google survey allowed the researcher to set criteria for which individuals should be targeted with the survey i.e. both genders, aged 18 and over, living in the UK and searching for automotive articles. This audience was chosen because the survey aimed to understand the attitudes of prospective car buyers. As targeting was required, the survey used non-probability, purposive sampling (Table 3) (Saunders et al., 2007.) This was the most appropriate survey type as it was not possible to carry out a representative sample, due to the size of the prospective car buyers' population. Not only is the size of the population too large, but directly targeting individuals in this group could present privacy issues due to unsolicited communication. Thus, purposive sampling was the best choice as those individuals looking at automotive pages (thus showing interest in cars) could be targeted (Lenth, 2001). In addition, as the research was investigating the introduction of online retailing, an online survey was a natural was choice for capturing views of online shoppers. A paper form survey may have captured respondents from all ages but it would have been harder to target respondents and more difficult to collect the forms Therefore, an online survey was the preferred and pragmatic option.

100 participants living in the UK responded to the survey on Friday 5th March 2017. 59.1% of the respondents were female and 40.9% were male. The results were analysed and compared with the secondary data.

Methodological choice and time horizons

The research study utilised a mixed method of research, consisting of quantitative and qualitative data. Utilising four different research methods enabled triangulation, helping to balance weaknesses from each research method (Saunders et al., 2007; Gray, 2013).

Due to time constraints, this research was be a cross-sectional study (Saunders et al., 2007). The benefit of this was that the findings from the survey could be compared to the previous years' secondary research to understand if a new trend was appearing.

Practical limitations

There were three main limitations to the research project:

1. The research project was conducted in a short time frame and therefore a large scale survey with hundreds of respondents could not be undertaken.

- Google Surveys is a useful tool as it allows for in-depth analysis and targeted audience selection, however it is a fee based service, with a charge for each response collected. Therefore the survey response limit was set to 100.
- 3. There was a risk of bias from only running the survey online. However, this was justified as the theme of project was purchasing vehicles online, thus an online survey correlated to the theme.

Ethical issues

Chaffey and Ellis-Chadwick (2016) state that unethical actions can damage company reputation, therefore it was imperative that the study adhered to ethical standards. As the online survey collected biographical information (age) from the respondent, permission was sought from the respondents when they completed the survey. Respondents were provided with a clear explanation of why the data was being collected and how it would be used. Assurances were provided regarding responses being anonymised and confidential.

The data from the survey was held in a secure password protected file that was only accessible by the author.

As the research utilises unpublished company information as part of the document based secondary research, permission was sought from the company prior to publication of the research.

Research findings

Benchmarking

Desk research was undertaken to review the digitalised customer journey in the automotive industry in particular for Tesla, Hyundai Rockar and carwow customers (Table 4).

Tesla

Tesla was established in 2003. Selling three models, each comprise a niche all electric engine, along with cutting edge technology and design. Tesla specialises in premium electric vehicles which are predominantly sold online. With just thirteen stores (otherwise known as galleries) in main cities around the UK, and only seven service centres, Tesla is not a mainstream manufacturer. However, with a new affordable product (the model x) coming in 2018, along with three additional stores, Tesla is expanding its reach.

Unsurprisingly, Tesla's website is fully optimised. A prospective customer is able to book a test drive, and purchase a used, showroom or brand new vehicle in the exact configuration of their choosing. A part exchange is also possible, along with flexible finance options. The customer is then able to pay for their vehicle online, and chose either home delivery or pick up from a local store, as well as organise a part exchange pick up.

Tesla's customer purchase journey is seamless and simple. The only negative aspect of the process is the need to request a test drive via a form, which seems like a rudimentary step considering how advanced and sophisticated the rest of the website and purchase journey is.

Hyundai Rockar

Rockar was established in 2012, with the aim of "building a new way to buy cars entirely from a customer's point of view" (Rockar, no date). Removing the salesperson from the customer purchase journey is the key selling point of the company. Instead of salespeople, Rockar employ 'Rockar Angels' who are product experts, on hand to help and advice on any given Hyundai vehicle.

With Hyundai's eleven models, there is a car for every need and lifestyle choice. However, with only two stores (Bluewater shopping centre and Westfield Stratford shopping centre) and one official service centre at Bluewater shopping centre, Rockar's physical presence is small.

Rockar's website focuses on selling new cars only, but customers' can trade in their old vehicles with their new purchase. There is also a range of finance options to choose from which are simple to navigate. The prospective customer is also able to test drive on their own terms though Rockar's 'YouDrive', whereby the customer choses from the two available locations, the model they wish to test drive and finally the date and time. Then all the customer needs to do is arrive at the given location, date and time to pick up their test drive vehicle.

The customer is able to pay for their vehicle online, and like Tesla, choose their handover method, either delivery to the customers' home or office or collection from either of the two shopping centres. At the same time as the collection taking place, Rockar are able to take the part-exchange vehicle too.

Hyundai Rockar's customer purchase journey is fairly simple and customer friendly. Potentially the only negative aspect of the process is that it heavily focuses on the price of the vehicle, rather than its features.

carwow

carwow entered the automotive market in 2010 as a car review aggregator, and in 2011 expanded to providing a platform for vehicle sales. However, carwow does not sell cars; it simply finds offers from carwow verified UK dealerships. It is important to differentiate carwow as a service provider rather than a manufacturer providing online sales.

The difference between carwow and manufacturers is that it allows a prospective customer to carry out research about all different brands and models on one website. Once the customer's options have been narrowed, they can express an interest in purchasing a vehicle and then local dealerships get in touch with the customer with offers, rather than the normal journey of customers contacting dealerships.

Therefore, carwow does not provide online sales, but it digitises and modernises the customer purchase journey, taking out the haggling element while reducing customer stress and any time-consuming elements of the vehicle purchase. It brings dealerships to the customer, who then buys the car at the agreed online price at the dealership.

However, a drawback of carwow is that a prospective customer cannot book a test drive through the website; they must show an interest in a vehicle and wait for the dealership to contact them. Also, the

actual collection and part-exchange process is dependent on the local dealership, thus, more often than not the customer will have to pick up their new vehicle from the dealership. This is not as customer friendly as either Tesla or Hyundai Rockar who offer home delivery as an option.

Company	Level of digitalisation
Tesla	 Manufacturer Fully optimised website Online payment facility
Hyundai Rockar	 Manufacturer Partially optimised website Removed need for sales person Online payment facility
carwow	 Service provider not manufacturer Partially optimised website – allowing comparisons to be made between a range of manufacturers

Table 4: Level of digitalisation

Google Gearshift Survey

Google in partnership with Kantar TNS (global marketing research company), annually carry out a national survey called Google Gearshift, to find out the automotive industry trends in the UK. The most recent results were published in 2016 in the 'Drive to Decide' report. The report analysed the responses of 526 UK residents who had purchased a vehicle in the last 12 months. The Report indicates that the automotive customer journey is changing with the growth in digital information influencing how consumers research a vehicle before purchase. The Google Gear Shift report of 2016 highlights that there are three main influencers of online consumer behaviour before an individual buys a vehicle: research; mobile use and online videos.

Google Gearshift (2016) reported that before purchasing a vehicle, a customer can have around 900 digital interactions (Genvelber, 2016). 90% of those surveyed, researched their vehicle purchase online before visiting a dealership. This could be why a new car buyer will on average visit a dealership 2.1 times and only take 1.3 test drives before making a purchase (Google, 2016). This is a new trend in automotive purchase, but it does not infer that the increased availability of information ensures a quick sale as 11% of the 526 customers took more than three months to purchase a vehicle.

Google Gearshift (2016) reported that mobile devices are increasingly a strong medium for research. 65% of the 526 surveyed, said they had used a smartphone to carry out their research. 26% spent more than half their online research time on a mobile device; this has increased 7% since 2015. Furthermore, 10% of new car buyers carried out their entire research phase on a mobile device.

Google Gearshift (2016) discovered that 66% of those surveyed said they watched videos about their vehicle during the research stage; this has increased 9% since 2015. Of those who watched videos prior to a dealership visit, 35% watched vehicle reviews and walk-arounds, 29% watched highlights of vehicle features, and 25% watched test drive videos. This suggests that physical experiences may be

substituted by videos. Furthermore, videos positively changed 62% of the consumers' minds about either the vehicle or manufacturer.

Google are certain that digital is the future for automotive sales, despite 96% of purchases still happening at the dealership, 86% of buyers researched their vehicle online before purchasing at the dealership. In addition, 54% would 'definitely' consider purchasing a vehicle through a fully digital journey (Google Gearshift, 2016).

Social media and peer review in particular is having an increasingly prominent impact on a consumer's automotive choice. 46% of consumers looked for vehicle reviews or ratings prior to visiting a dealership, suggesting that other customers' opinions are influential on a prospective customer.

Google Gearshift (2016) identified a range of influencing factors for customers to purchase vehicles online. 43% of the 306 consumers who would 'definitely' or 'in the future' purchase a vehicle online said that they would buy online if the price was right or there was a promotion. 36% said that convenience is the reason they would purchase a vehicle online. And 35% said that it allows easy price comparison as well at saving time (Google Gearshift, 2016).

Vehicle pricing

The process to price a Toyota vehicle is complicated. It is dictated by a Toyota Motor Europe (TME) competitor basket, but also has to focus on the Centre Network, leaving a very small profit allocation to TGB (Toyota, 2015). It would not be a straightforward task to introduce online retailing due to the issue of pricing. There are four main options, all of which have a host of advantages and disadvantages. These are charted below in Table 5:

	Options for Vehicle Pricing Online					
No.	Options	Advantages	Disadvantages			
1.	Sell vehicles online with the On The Road (OTR) price	 No impact on margins or profit for TGB nor Centre Network 	 Customers are unlikely to accept this price as they know the car can be brought cheaper at the Centre No incentive for Centre Network 			
2.	Use Centre Margin to set online price	 Can offer cheaper price online for customers TGB still fully benefit from online sale 	 Regulations against price fixing Centre Network rebellion due to decreased profit margin Customer may get lower quality of service from Centre Network 			
3.	Use Variable Sales Expense (VSE) to set online price	 Can offer cheaper price online for customers Centre Network fully benefit from online sale 	 Regulations against price fixing TGB lose profit as they must give up a larger portion of VSE 			
4.	Only sell finance offers online	 No impact on margins or profit for TGB nor Centre Network No price fixing issue 	 Does not account for customers who do not wish to purchase on finance (missed opportunity) No incentive for Centre Network 			

Table 5: Options for vehicle pricing online

Survey research findings

As stated early a survey of 100 individuals living in the UK was carried out on Friday 5th March 2017. The sample size was slightly weighted in favour of female respondents, with a 59.1% female and 40.9% male split. The results have been categorised into the following themes: Intention to purchase a vehicle; Importance of a test drive; Information sources that influence purchase; online purchasing behaviour and choice of car brand.

Intention to purchase a vehicle

The majority of those surveyed, a total of 74.7% were not intending to purchase a vehicle in the next 12 months. However, 25.3% were in the market for a vehicle. Of those in the market, 63.95% were male and 36.05% were female. 86.4% were between the age of 18 and 44 (Figure 5), implying that the car market as a whole is younger than TGB's existing customer base (based on NCBS data – showing the average age of a TGB customer to be 62 years old).



Figure 5: Intent to purchase or lease a vehicle in the next 12 months by age category

Importance of a test drive

31.3% of respondents said that a test drive was 'extremely important' when buying a vehicle. 27.7% said it was 'important' and 20.5% who said it is 'not important at all'. Therefore, it could be argued that 49% of the respondents would not purchase a vehicle without having test driven it first (Figure 6).



Figure 6: Importance of a test drive when purchasing a vehicle

When comparing the importance of a test drive with the likelihood of purchasing a vehicle online in the next two years, the results show that a test drive is in fact more important to those who are more likely to purchase online than those who are certain they would not. 72.7% of the respondents who were certain they would purchase online in the next two years stated a test drive was extremely important to their decision-making journey, suggesting that the purchase needs to be informed by the customers own research and experience of a vehicle (Figure 7).



Figure 7: Likelihood of purchasing a vehicle online in the next two years vs. importance of a test drive when buying a vehicle

Information sources that influence vehicle purchase

Sources to inform an automotive purchase decision are fairly evenly balanced. 39% of respondents said they would look to their local dealer's website to gain information to inform their purchase decision.



Figure 8: Sources used to inform automotive purchase decision



Figure 9: Sources used to inform automotive decision split by gender

Stanowska, N. (2018) An investigation into the development of Toyota's e-commerce customer journey. *The Journal of Undergraduate Research at NTU*. Volume 1, Issue 1, p. 146 – 181.

Social media also had an influencing position, with 17% of respondents stating this source would be utilised to inform a vehicle purchase decision (Figure 8). This may be due to the increased use of social media channels by automotive manufactures to advertise and interact with prospective customers. 14% of respondents indicated that they would watch vehicle videos as part of the purchasing journey. More male respondents (71.8%) stated they would watch videos, than females (28.2%). See Figure 9.

When comparing the information sources used to research vehicle purchase to the likelihood of purchasing online in the next two years, those respondents who were more certain that they would purchase online, indicated they would use a greater range of online information sources, especially main dealer websites, search engines, vehicle videos and third party automotive websites (Figure 10). This suggests that in order to purchase a vehicle online a consumer will carry out a much deeper level of research and product analysis online prior to purchase.



Figure 10: Likelihood of vehicle purchase in the next two years vs. sources used to research vehicles

Online spending behaviour

Online spending delivered an unusual result, with 36.9% of respondents having never purchased anything online (Figure 11). However, this means that a large proportion of the respondents were active users of online purchase channels, with 63.1% stating they had purchased online before. 17.5% of those who had purchased online, had spent over £1,000 in one transaction, which could equate to a small vehicle deposit (as part of an online finance agreement).



Figure 11: Highest spending on goods or service online

No conclusions can be drawn from online spending to date in correlation to the likelihood to purchase online in the next two years. Despite no obvious patterns emerging from the survey results, 27.3% of the respondents who have 'never purchased anything online' are also certain they will purchase a vehicle online in the next two years (Figure 12).



Figure 12: Likelihood of purchase in the next two years vs. highest spending on goods or service online

Choice of car brand

When exploring whether the ability to purchase a vehicle online would influence a respondents choice of car brand; 53.5% of respondents indicated they would 'not at all' be influenced by online availability (Figure 13). This may be because these individuals are either loyal to a certain brand, have no interest in purchasing a vehicle online or are not in the market for a vehicle. In addition, only 0.8% of respondents were planning on buying a vehicle in the next 12 months and 84.9% of those who would 'not at all' be influenced by the ability to purchase online were not intending to purchase in the next 12 months.





It could be argued that up to 46.5% of respondents could be influenced to purchase a particular car brand if it was sold online disregarding those who would 'not at all' be influenced). Of the 8.9% who would be significantly influenced by the ability to purchase online, 29.7% were planning on buying in the next 12 months (Figure 14). This suggests that there is demand for online retailing of vehicles.



Figure 14: Choice of car or brand based on ability to purchase online vs. intent to purchase in the next 12 months

Stanowska, N. (2018) An investigation into the development of Toyota's e-commerce customer journey. *The Journal of Undergraduate Research at NTU*. Volume 1, Issue 1, p. 146 – 181.

When comparing those 'purchasing online in the next two years' with 'influence to buy a certain brand if it was available to purchase online', a positive correlation was discovered. 72.7% of respondents who were certain they 'will purchase a vehicle online' being 'significantly' influenced to purchase a particular brand if it was available online (Figure 15). This suggests that retailing online could bring a strong competitive advantage to an automotive manufacturer as those wanting to purchase online could be influenced to purchase a brand they had never interacted with, because they retail their vehicles online, while others do not.



Figure 15: Likelihood of vehicle purchase online vs. choice of car or brand based on ability to purchase online

Purchasing vehicles online

The question 'how likely would you be to purchase a vehicle online in the next two years?' showed that 54% of respondents would 'never purchase a vehicle online' (Figure 16). This may be heavily influenced by those who are not in the market, as 83.9% of those who responded that they would 'never purchase a vehicle online' are not intending to purchase a vehicle in the next 12 months.



Table 16: Likelihood of a vehicle purchase online in the next two years

Stanowska, N. (2018) An investigation into the development of Toyota's e-commerce customer journey. *The Journal of Undergraduate Research at NTU*. Volume 1, Issue 1, p. 146 – 181.

Of those in the market to purchase a vehicle in the next 12 months, 27.7% of respondents were 'certain' they would purchase a vehicle online in the next two years. Taking into account those who are not entirely certain, but definitely have not ruled out an online purchase, 69.9% of those willing to purchase a vehicle online in the next two years were currently in the market to purchase (Figure 17). Again, this is evidence to suggest an automotive manufacturer can gain a significant competitive advantage over competitors if they began retailing online imminently.



Figure 2: Likelihood of vehicle purchase online in the next two years vs. intent to purchase or lease a vehicle in the next 12 months

Discussion

In order to understand whether TGB should expand its sales model to e-commerce. This section will bring together the literature search, benchmarking and survey results (primary research), and will be structured using the following research questions:

- 1. To what extent is a test drive a key determinant of vehicle purchasing?
- 2. What is the impact of e-commerce strategies on dealerships?
- 3. What is the viability of a fully digitalised customer purchase journey?

Importance of a test drive to TGB customers

Mohr et al., (2014) argued that 23% of European respondents did not deem a test drive to be an important aspect of their vehicle purchase journey. Milligan (2017) reported that 47% of Hyundai Rockar customers purchased a vehicle without a test drive suggesting that a test drive is not important to those customers. The decreased reliance on test drives is supported by research from Google Gearshift which showed that a consumer will take 1.3 test drives on average before making a purchase (Google Gearshift, 2016). This is further supported by the project survey results, which found that 20.5% of respondents did not consider a test drive to be an important aspect of their vehicle purchase journey. Thus, it can be argued that to a portion of the population, a test drive is no longer a key determinant of a vehicle purchase.

Instead, it could be argued that the rise of new trends act as a substitute to a test drive. Google Gearshift (2016) found that 25% of new car buyers watched test drive videos before making a purchase. Similar results emerged from the projects survey results, which showed that 14% watched videos to determine their vehicle purchase. This correlates with the documented increased use of digital social channels to inform purchase decisions (Deelarocas, 2003; Schindler and Bickart, 2005; Pookulangara and Koesler, 2010; PWC, 2013; Capgemini, 2015).

However, the project survey found that 31.3% of the respondents still regard test drives as -important to their vehicle purchase decisions. As test drives remain integral to a percentage of potential customers purchase journey TGB may benefit from offering similar test drive services to that of Hyundai Rockar. A process whereby the consumer chooses their location, date and time online, without needing to contact the Centre, and is then able to pick up their chosen vehicle from the Centre and carry out the test drive without a salesperson. This way the prospective customer would avoid pressure from a salesperson, and therefore dissatisfaction with the Centre visit (McKinsey, 2014). To increase customer satisfaction during a Centre Network visit, all efforts should be made by TGB to make the booking process simple and responsive, followed by great customer service during the visit, as well as an option to test drive without the salesperson. However, for those who do not need to test drive to decide on a vehicle, TGB in partnership with its Centre Network should provide high quality resources online, such as videos and reviews. This would show off the features of a vehicle and thus positively influence a consumer to purchase.

Impact of e-commerce on TGB Centre Network

Carwow (2016a) and (McKinsey, 2014) argue that dealerships are aware of the change in customer behaviour. The benchmarking activity supports this by providing examples of new dealership structures, i.e. Tesla provides consumers with 'galleries' in main cities rather than suburbs, Hyundai Rockar have established two stores in London shopping centres and removed the salesperson from the customer journey. Another example comes from carwow (although not an automotive manufacturer but rather an aggregator) who overturned the sales process, making dealerships compete for custom online, instead of a customer approaching their local dealership.

These new and innovative ways to attract customers may have arisen due to the decline in dealership visits (Google Gearshift, 2016). In the past, customers would visit a dealership three or four times prior to making a purchase, whereas nowadays this has dropped to around one visit (carwow, 2016b; Google Gearshift, 2016; Milligan, 2017). There may be a number of causes for this, but arguably the main reason is that consumers are becoming more knowledgeable about products and no longer need to seek 'expertise' from an in-store employee or salesperson (Lee et al., 2011; Hirt and Willmott, 2014; Ryan, 2017). This is also seen from the responses to the Google Gearshift (2016) research, which found that 86% of consumers researched their vehicle of choice prior to visiting a dealership. However, since a vehicle purchase is a high value one, the need for physical product evaluation still remains, even if it occurs after the consumer's decision is almost final (Herhausen et al., 2015).

Even though the literature illustrates that consumers are more informed, 39% of respondents (all ages) to the project survey are still choosing to visit the main dealer website to inform their purchase

decision, compared to 21% who visit the automotive manufacturer website. However, social media and vehicle videos also play a significant part in the decision-making process, especially for those aged 18 to 24, social media being the main source of information, closely followed by vehicle videos. This suggests that TGB as well as the Centre Network may need to consider increasing their social media activity to interact in a modern way with the younger market.

There are two contrasting viewpoints about the true impact on dealerships. One is arguably a pessimistic opinion, whereby automotive manufacturers will cut out the intermediary from the sales process, or e-commerce will naturally cannibalise dealerships (Shi and Salesky, 1994; Enders and Jelassi, 2000; Laudon and Traver, 2006; Falk et al., 2007; Singh, 2014; Economist, 2015; Gilliland, 2016). The other, a far more optimistic, but equally as feasible view, is that e-commerce will not cannibalise the dealership structure because it's a different channel which won't be accepted by all consumers instantly (Avery et al., 2012; Foy, 2013; Herhausen et al., 2015; carwow, 2016a; Milligan, 2017). Thus, the impact on TGB Centre Network remains largely unknown, but Centres could take comfort in the fact that at the current moment in time all their competitors still have physical stores too (Marques et al., 2014).

Viability of digitalised customer purchase journey for TGB

There are several factors which must be considered before any decisions can be made on whether a digitalised customer journey is viable for TGB, this includes demand and pricing.

In 2016, The Office of National Statistics reported that 77% of Internet users are buying goods or services online, meaning that only 23% of the internet population do not (ONS, 2016). This is similar to the results of the project findings, 36.9% of respondents had 'never brought anything online', and thus 63.1% either actively purchase or have in the past purchased online. Of this, 17.5% had spent over £1,000 online in one single transaction, suggesting that a portion of the population is willing to spend a large sum of money online. Of those respondents who had never purchased online before, 27.7% stated they were certain they will purchase a vehicle online in the next two years. This seems peculiar, since literature such as Rogers (2003), Bigne et al., (2005) and Foy (2013) suggest that individuals in tune with the Internet and e-commerce are likely to purchase vehicles online, not those who have no experience in the online market.

McKinsey (2014), Capgemini (2015) and Marques et al. (2014) highlight that between 20% and 40% of consumers would purchase a vehicle online. In addition, Google Gearshift (2016) argues that 54% of the UK automotive market would consider purchasing a vehicle online. In addition, 46% to the project survey stated they would not completely rule out purchasing a car online in the next two years, with 7% certain that they will purchase online. Furthermore, 46.5% of those surveyed would be influenced to some degree to purchase a certain brand if it was available online, of whom 8.9% would be significantly influenced. Therefore, there is evidence to suggest that there is a growing demand for automotive e-commerce, meaning TGB should exploit the potential to gain competitive advantage by differentiating their sales model and offering vehicle purchase online.



Figure 21: New TGB Digital Customer Journey

The new online sales channel, should work alongside the existing customer journey, as detailed in Figure 21. Whereby all steps are fully digitalised, but the purchase of the vehicle can be carried out at the Centre or online, therefore moving TGB from 'Maturity Stage 2' to 'Stage 3' of the conceptual framework. Improving all digital touchpoints would provide all customers (whether they purchase online or instore) with a better and smoother experience from test drive to servicing, ultimately improving customer satisfaction. For example, improving test drives and servicing by allowing a customer to book the date, time and location online rather than needing to contact a salesperson to book.

Before a digital customer journey can be achieved, the barrier of online pricing needs to be overcome. It is vital for TGB to remain profitable while satisficing the Centre Network as they rely on their service as the only sales channel. As discussed earlier vehicle pricing, including online pricing is problematic, due to price regulations and profitability. Setting online prices at the 'On the Road' price would be the ideal solution because these prices are currently advertised on the website, however, it is also common knowledge in the automotive market that a customer can get a cheaper price at the dealership (Milligan, 2017); therefore, this may not be an effective solution. An alternative solution would be to utilise either some of the Centre Network or TGB profit margin to set a cheaper price online, however, this can run the risk of anti-competitiveness as TGB could be undercutting its competitors by promoting a lower price online.

In order to realise this new online sales channel, McKinsey's 7-S framework (Figure 22) should be discussed by TGB management (McKinsey, 2008). For example, a new set of skills will be required for both Centre Network and head office staff. Systems will need to be updated i.e. new customer relationship management system and website capability. Structure of both TGB and departments within TGB, will need to change as a new manager would be required to project manage a new digital customer journey. TGB and Centre Network staff may need to help to embrace the change. Finally, a new strategy will need to be developed. The only two factors which will remain the same for this new customer journey is style and shared values, as TGB has a sound culture and leadership style, and the shared values would be communicated and incentivised with the Centre Network. As many of these changes would require significant alterations in the company, management must consider the implications and weigh up the risks ahead of implementing the new sales channel.

Conclusion

It can be concluded that there is a market for automotive e-commerce. Evidence points towards an emerging market and clear demand for online automotive retailing (Foy, 2013; Lawson et al., 2016; Google Gearshift, 2016). There is a growing acceptance and demand for an online automotive customer journey, as triangulation of the literature, benchmarking and primary research has shown.



The future of dealerships is uncertain, however, in the short to medium term changes will need to be made in TGB, as well as the Centre Network, to continue being profitable. In the long term, it is unlikely that manufacturers will no longer require any intermediary in the sales process, because there will still be a need for a 'hand over location' or at least an officially licensed service centre. Thus, cannibalisation of dealerships from automotive e-commerce is unlikely; however, it will force the structure or service requirements to change. It can be assumed that the TGB online purchase journey may remain the same as current, except that the payment exchange will occur online and the cycle will become more customer centric. Therefore, moving from 'Maturity Stage 2' to 'Maturity Stage 3' of the conceptual framework.

The project survey indicated that for the majority of customers test drives are still an imperative part of the decision-making process. This is also evident in both the benchmarking activity and literature (Mohr et al., 2014; Milligan, 2017). Therefore, it is important that test drives are incorporated into the digital sales journey, in a seamless and customer friendly way. As mentioned previously, inspiration could be taken from automotive manufacturers such as Hyundai Rockar. For those who do not require a test drive, TGB should provide quality resources online to help validate a consumer's purchase decision.

As discussed previously, pricing online is an issue Consumers have indicated that the main reason they would consider buying a vehicle online would be if the price was lower that a Centre. However, this would mean that TGB might be undercutting their competitor, which encompasses large consequences. It is therefore in the interest of TGB to focus on the second reason customers may consider purchasing a vehicle online: convenience. Thus, TGB should price their vehicles online at the 'On the Road' price, as that overcomes any legal issues, and provide a quality online service channel for those who wish to purchase online due to convenience.

The only question which remains unanswered from the study is the 'impact of e-commerce strategies on dealerships'. Although the impact on the Centre Network has not been characterised, it is certain that they will be impacted, and will need to adapt to the new sales channel (Singh, 2013; Bacon, 2016; Milligan, 2017).

The impact of the new digitalised purchase journey on the customer will be positive as it will increase the customer's choice of sales channel. As the Centre Network could be incentivised on customer satisfaction, there is no perceived risk of a decline in customer service for an online customer versus an offline customer.

With the inevitable rise of e-commerce in the automotive industry, TGB must ensure it gets ahead of its competitors or at least maintain its market share by introducing a new digital sales channel into the customer purchase journey. Since the demand exists and technology permits the development, the opportunity to introduce a digital customer purchase journey into TGB's sales channel should be exploited as soon as possible in order to gain competitive advantage over other automotive manufacturers.

Limitations of study and further research

Upon reflection, the primary research sample size may have been too small to be representative of the automotive industry customers, however, based on time and financial constraints a more representative sample was not possible. Therefore, although the findings correlated to those from the literature, it is essential to understand that the sample size is not representative of the automotive market.

Secondly, in conjunction with literature, the survey findings did not capture the opinions of TGB customers, despite this being deliberate, as the research intended to understand the opinions of prospective customers. It would be of benefit to TGB to carry out further research with Toyota owners as this would enable an accurate analysis of the online market and loyal customers' willingness to purchase online.

Lastly, the final limitation is the lack of first hand opinion from the TGB Centre Network about the move to a digital customer journey. This was not part of the study. Again it would be beneficial for TGB carry out further research to understand the Networks standpoint on incorporating a digital sales channel into the existing strategy. This would allow the creation of a strategic plan to implement the new sales channel, in union with the Centre Network.

References

ATKearney, 2015. Global retail e-commerce keeps on clicking the 2015 global retail e-commerce Index[™] global retail e-commerce keeps on clicking [online]. ATKearney. Available at: <u>https://www.atkearney.com/documents/10192/5691153/Global+Retail+E-</u> <u>Commerce+Keeps+On+Clicking.pdf/abe38776-2669-47ba-9387-5d1653e40409</u> [Accessed: 27 January 2017].

Auto Retail Network, 2016. Who's where in auto retail 2016. Oakham: Automotive Retail.

Avery, J., Steenburgh, T.J., Deighton, J., and Caravella, M., 2012. Adding bricks to clicks: Predicting the patterns of cross-channel elasticities over time. *Journal of Marketing*, 76 (5), pp. 96–111.

Bacon, B., 2016. *Ecommerce, autonomous vehicles and their effect on the automotive supply chain* [online]. Automotive Logistics. Available at: <u>http://automotivelogistics.media/opinion/e-commerce-autonomous-vehicles-and-their-effect-on-the-automotive-supply-chain</u> [Accessed: 27 January 2017].

Bigne, E., Ruiz, C., and Sanz, S., 2005. The impact of internet user shopping patterns and demographics on consumer mobile buying behaviour. *Journal of Electronic Commerce Research*, 6 (3), pp. 193–209.

Biller, S., Chan, L.M.A., Simchi-Levi, D., and Swann, J., 2005. Dynamic pricing and the direct-tocustomer model in the automotive industry. *Electronic Commerce Research*, 5 (2), pp. 309–334.

Burstein, D., 2016. *Ecommerce research chart: Industry benchmark conversion rates for 25 retail categories* [online]. Marketing Sherpa. Available at:

https://www.marketingsherpa.com/article/chart/conversion-rates-retail-categories [Accessed: 2 March 2017].

Capgemini, 2015. *Card Online: The Selfie experience* [online]. Capgemini. Available at: https://www.capgemini.com/resource-file-access/resource/pdf/cars_online_2015_0.pdf [Accessed: 7 February 2017].

carwow, 2016a. How will dealerships change in the next 10 years? Accelerate, (2), pp. 28-29.

carwow, 2016b. The new car buying journey. Accelerate, (2), pp. 22-23.

Centre for Retail Research, 2014. *Online Retailing: Britain, Europe, US and Canada 2016* [online]. Retail Research. Available at: <u>http://www.retailresearch.org/onlineretailing.php</u> [Accessed: 2 March 2017].

Chaffey, D., and Ellis-Chadwick, F., 2016. Digital Marketing. 6th ed. Harlow: Pearson.

Conger, S., and Schultze, U., 1999. Understanding e-commerce through genre theory: The case of the car-buying process. *New Information Technologies in Organizational Processes*. 20 (2), pp. 219–239.

Consultancy, 2015. *British businesses embracing e-commerce and mobile* [online].Consultancy UK. Available at: <u>http://www.consultancy.uk/news/2982/british-businesses-embracing-ecommerce-and-mobile</u> [Accessed: 28 February 2017].

Deloitte, 2016. *Going digital, going direct* [online]. Deloitte. Available at: https://www2.deloitte.com/ca/en/pages/consumer-business/articles/going-digital-going-direct.html [Accesses: 8 October 2016].

Donthu, N., and Garcia, A., 1999. The Internet shoppers. *Journal of Advertising Research.* 39(3), pp. 52-58.

Dyer, J., and Gregersen, H., 2016. *Tesla's innovations are transforming the auto industry* [online]. Forbes. Available at: <u>https://www.forbes.com/sites/innovatorsdna/2016/08/24/teslas-innovations-are-transforming-the-auto-industry/#6928025019f7</u> [Accessed: 8 January 2017].

Ecommerce News, 2016. *Ecommerce in the United Kingdom* [online]. Ecommerce News. Available at: https://ecommercenews.eu/ecommerce-per-country/ecommerce-the-united-kingdom/ [Accessed: 6 January 2017].

Edelman, D., and Singer, M., 2015. *Competing on customer journeys* [online]. Harvard Business Review. Available at: https://hbr.org/2015/11/competing-on-customer-journeys [Accessed: 30 January 2017].

Enders, A., and Jelassi, T., 2000. The converging business models of Internet and bricks-and-mortar retailers. *European Management Journal*, 18 (5), pp. 542–550.

EY, 2015. *Future of automotive retail* [online]. Ernst & Young. Available at: <u>http://www.ey.com/Publication/vwLUAssets/EY-future-of-automotive-retail/\$FILE/EY-future-of-automotive-retail.pdf</u> [Accessed: 8 October 2016].

Falk, T., Schepers, J., Hammerschmidt, M., and Bauer, H.H., 2007. Identifying cross-channel Dissynergies for multichannel service providers. *Journal of Service Research*, 10 (2), pp. 143–160.

Foy, H., 2013. *Online showrooms and digital dealerships revolutionise car buying* [online]. Financial Times. Available at: https://www.ft.com/content/d13c6b1e-6e51-11e3-ac2a-00144feabdc0 [Accessed: 7 February 2017].

Genvelber, L., 2016. *The car-buying process: One consumer's 900+ digital interactions* [online]. Google. Available at: https://www.thinkwithgoogle.com/articles/consumer-car-buying-process-reveals-auto-marketing-opportunities.html [Accessed: 14 February 2017].

Gill, M., 2014. Manage the Cross-Touchpoint customer journey. Cambridge: Forrester Research.

Gilliland, N., 2016. *How automotive brands are blurring the lines between digital and reality* [online]. Marketing Week. Available at: https://www.marketingweek.com/2016/06/08/how-automotive-brands-are-blurring-the-lines-between-digital-reality/ [Accessed: 7 November 2016].

Google Gearshift, 2016. *The Drive to Decide* [PowerPoint]. Presentation at Toyota (GB) Head Office. 16 October 2016.

Gray, D.E., 2013. Doing research in the real world. 3rd. London: SAGE Publications.

Grewal, D., Iyer, G.R., and Levy, M., 2004. Internet retailing: Enablers, limiters and market consequences. *Journal of Business Research*, 57 (7), pp. 703–713.

Herhausen, D., Binder, J., Schoegel, M., and Herrmann, A., 2015. Integrating bricks with clicks: Retailer-level and channel-level outcomes of Online–Offline channel integration. *Journal of Retailing*, 91 (2), pp. 309–325.

Hirt, M., and Willmott, P., 2014. *Strategic principles for competing in the digital age* [online]. McKinsey & Company. Available at: <u>http://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/strategic-principles-for-competing-in-the-digital-age</u> [Accessed: 5 January 2017].

JATO, 2016. *Global car market new-car sales 2016-Q1* [online]. JATO Dynamic Limited. Available at: http://www.jato.com/wp-content/uploads/2016/06/JATO-Global-Car-Sales-2016-Q1.pdf [Accessed: 22 February 2017].

Kalakota, R. and Whinston, A., 1999. *Electronic commerce: A manager's guide*. 1st ed. Reading: Addison-Wesley.

Kane, G., Palmer, D., Phillips, A., Kiron, D., and Buckley, N., 2017. *Achieving Digital Maturity: Adapting your company to a changing world* [online]. Massachusetts Institute of Technology Sloan Management Review. Available at: https://sloanreview.mit.edu/projects/achieving-digital-maturity/ [Accessed: 03 January 2018].

Keen, C., Wetzels, M., de Ruyter, K., and Feinberg, R., 2004. E-retailers versus retailers. *Journal of Business Research*, 57 (7), pp. 685-695.

Kitewheel, 2016. *The state of the customer journey 2016 report* [online]. Kitewheel. Available at: https://kitewheel.com/state-customer-journey-2016/ [Accessed: 31 January 2017].

KPMG, 2014. *The UK automotive industry and the EU* [online. SMMT. Available at: http://www.smmt.co.uk/wp-content/uploads/sites/2/SMMT-KPMG-EU-Report.pdf [Accessed: 2 November 2016].

Kraemer, K., Gibbs, J., and Dedrick, J., 2005. Impact of globalization on e-commerce use and firm performance: a cross-country investigation. *The Information Society*, 21 (5), pp. 323-340.

Laudon, K.C., and Traver, C.G., 2006. *E-commerce: Business, technology, society*. 3rd ed. Harlow, United Kingdom: Pearson.

Laudon, K.C., and Traver, C.G., 2014. *E-commerce: business, technology, society*. 10th ed. New Jersey: Pearson.

Lawson, G., Salanitri, D., and Waterfield, B., 2016. Future directions for the development of virtual reality within an automotive manufacturer. *Applied Ergonomics*, (53), pp. 323-330.

Lee, M.K.O., Shi, N., Cheung, C.M.K., Lim, K.H., and Sia, C.L., 2011. Consumer's decision to shop online: The moderating role of positive informational social influence. *Information & Management*, 48 (6), pp. 185–191.

Lenth, R., 2001. Some Practical Guidelines for Effective Sample Size Determination. *The American Statistician*, 55 (3), pp.187-193.

Life Engineering, 2010. *How great leaders inspire action – the golden circle.* Life Engineering. Available at: <u>http://life.engineering/how-great-leaders-inspire-action-the-golden-circle/</u> [Accessed: 20 January 2017].

Marques, J., Zhang, W., Hanrion, X., Winkler, M., Kumar, V., Belan, I., Erander, H., Gill, N., and Martinez, M., 2014. *Generation connected the way we see it automotive* [online]. Capgemini. Available at: <u>https://www.capgemini.com/sites/default/files/annual-</u>report/768636/img/Cars Online 2014 Final Web Group.pdf [Accessed: 29 January 2017].

Martucci, A., 2015. Toyota NCBS Information Paper 2015 FY. Epsom: Toyota (GB) PLC.

McKinsey, 2008. *Enduring Ideas: The 7-S Framework* [online]. McKinsey & Company. Available at: http://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/enduring-ideas-the-7-s-framework [Accessed 14 Mar. 2017].

McKinsey, 2014. Innovating automotive retail. McKinsey & Company. Available at: <u>http://www.mckinsey.com/industries/automotive-and-assembly/our-insights/innovating-automotive-retail</u> [Accessed: 30 January 2017].

Milligan, B., 2017. *Online car sales to accelerate, as salesmen take a back seat* [online]. BBC. Available at: http://www.bbc.co.uk/news/business-38769896 [Accessed: 30 January 2017].

Mintel, 2016. *The car purchasing process - UK - April 2016: Consumer market research report*. Mintel. Available at: <u>http://store.mintel.com/the-car-purchasing-process-uk-april-2016?cookie_test=true</u> [Accessed: 15 October 2016].

Modahl, M., 2003. Now or never. New York: Harper Collins.

Mohr, D., Kaas, H., Gao, P., Camplone, G., Hohmann, M., Kostring, J., and Mathis, R., 2014. Innovating automotive retail journey towards a customer-centric, multiformat sales and service network advanced industries. McKinsey & Company. Available at: https://www.mckinsey.de/files/brochure_innovating_automotive_retail.pdf [Accessed: 29 January 2017].

Moth, D., 2015. *UK online retail sales to reach £52.25bn in 2015*. Econsultancy. Available at: https://econsultancy.com/blog/66007-uk-online-retail-sales-to-reach-52-25bn-in-2015-report/ [Accessed: 2 March 2017].

Murphy, R., 2017. *Retail sales in Great Britain: Jan 2017*. The Office of National Statistics. Available at: https://www.ons.gov.uk/businessindustryandtrade/retailindustry/bulletins/retailsales/jan2017 [Accessed: 2 March 2017].

ONS, 2016. *Internet access – households and individuals: 2016* [online]. The Office of National Statistics. Available at:

https://www.ons.gov.uk/peoplepopulationandcommunity/householdcharacteristics/homeinternetandso cialmediausage/bulletins/internetaccesshouseholdsandindividuals/2016 [Accessed: 22 January 2017].

ONS, 2017. *Retail sales* [online]. The Office for National Statistics Available at: https://www.ons.gov.uk/businessindustryandtrade/retailindustry/bulletins/retailsales/march2016 [Accessed 9 Mar. 2017].

Pandya, N., 2002. *Frustrating problem? That'll be the Daewoo* [online]. The Guardian. Available at: https://www.theguardian.com/technology/2002/dec/14/motoring1 [Accessed: 7 February 2017].

Pookulangara, S., and Koesler, K., 2010. Cultural influence on consumers' usage of social networks and its' impact on online purchase intentions. *Journal of Retailing and Consumer Services*, 18(4), pp.348-354.

Porter, M., 1985. Competitive Advantage. New York: The Free Press.

PWC, 2013. Social Media and the Car Buying Experience [online]. PricewaterhouseCooper. Available at: http://www.pwc.com/gx/en/automotive/autofacts/analyst-notes/pdf/pwc-autofacts-analyst-august-2013.pdf [Accessed: 27 January 2017].

Rhoades, S. A., 1993. <u>The Herfindahl-Hirschman index</u>. *Federal Reserve Bulletin*, 79 (3), pp. 188-189.

Rhodes, C., and Sear, D., 2015. *Motor industry: Statistics and policy - commons library briefing - UK parliament* [online]. House of Commons. Available at:

http://researchbriefings.parliament.uk/ResearchBriefing/Summary/SN00611 [Accessed: 27 January 2017].

Rigby, D., 2011. The Future of shopping. Harvard Business Review, 89 (12), pp. 65-76.

RMI, 2015. *Manifesto 2015 - Accelerating for growth* [online]. RMIF. Available at: http://www.rmif.co.uk/_assets/1187%20Manifesto%20Low%20Res%20Proof%20V6_1.pdf [Accessed: 2 November 2016].

Rockar, no date. *Rockar angels - who we are*. Rockar. Available at: https://www.rockar.com/about-rockar [Accessed: 20 February 2017].

Rogers, E., 1983. *Diffusion of Innovations*. 3rd ed. New York: The Free Press.

Rogers, E., 2003. Diffusion of Innovation. 5th ed. New York: The Free Press.

Ryan, D., 2017. Understanding digital marketing. 4th ed. London: Kogan Page.

Saunders, M., Lewis, P., and Thornhill, A., 2007. *Research Methods for Business Students*. 4th ed. Essex: Pearson Education Limited.

Schiffman, L., and Kanuk, L., 2003. Consumer Behaviour. 8th ed. New Jersey: Prentice Hall.

Schindler, R.M., and Bickart, B., 2005. Published "word of mouth": Referable, consumer-generated information on the Internet. In Haugtvedt, C.P., Machleit, K.A., and Yalch, R.F.. Online consumer

psychology: Understanding and influencing behavior in the virtual world (*pp.* 35–61). *Mahwah*, *NJ: Lawrence Erlbaum Associates.*

Shearman, S., 2016. Back to bricks and mortar: how e-commerce has embraced the real world [online]. The Guardian. Available at: https://www.theguardian.com/media-network/2016/jul/07/bricks-and-mortar-ecommerce-retail-digital [Accessed: 28th Feb 2017].

Shi, C.S., and Salesky, A.M., 1994. Building a strategy for electronic home shopping. *The McKinsey Quarterly*, (4), p. 77.

Singh, S., 2013. *Future of retailing in the car industry* [online]. Frost and Sulivan. Available at: http://www.frost.com/sublib/display-market-insight.do?id=271824870 [Accessed: 7 February 2017].

Singh, S., 2014. The future of car retailing [online]. Forbes. Available at: http://www.forbes.com/sites/sarwantsingh/2014/02/05/the-future-of-car-retailing/#318f76e42d51 [Accessed: 7 November 2016].

Smart Insights, 2015. Introducing RACE: A practical framework to improve your digital marketing. In: Chaffey, D., and Ellis-Chadwick, F. *Digital Marketing*. 6th ed. Harlow: Pearson. 2016, p. 190.

Statistica, 2016. *Car manufacturers: Largest car companies by sales 2016* [online]. Statistica. Available at: https://www.statista.com/statistics/275520/ranking-of-car-manufacturers-based-on-global-sales/ [Accessed: 22 February 2017].

TGB, 2017. *History by model Toyota passenger car sales 1965-2017* [online]. Toyota Media. Available at: http://media.toyota.co.uk/wp-

content/files_mf/1486659898ToyotaUKbymodelToyota6517.pdf [Accessed: 22 February 2017].

The Economist, 1999. *The death of Daewoo* [online]. The Economist. Available at: http://www.economist.com/node/233562 [Accessed: 7 February 2017].

The Economist, 2015. *Death of a car salesman.* The Economist. Available at: http://www.economist.com/news/business/21661656-no-one-much-likes-car-dealers-changingsystem-will-be-hard-death-car-salesman [Accessed: 7 February 2017].

TMC, 2016. *TMC Announces Financial Results for Fiscal Year Ended March 31, 2016*. Toyota Global. Available at: http://www.toyota-

global.com/pages/contents/investors/financial_result/2016/pdf/q4/overview.pdf [Accessed: 22 February 2017].

Toyota Europe, 2016. *Toyota Motor Europe Factsheet* [online]. Toyota Newsroom. Available at: http://newsroom.toyota.eu/corporate-news [Accessed: 22 February 2017].

Toyota, 2015. *2016 Vehicle margins, fleet and retail operating standards* [unpublished internal document]. Epsom: Toyota (GB) PLC.

Turban, E., Lee, J., King, D., and Chung. H., 2000. *Electronic commerce: A managerial perspective*. Uppser Saddle River: Prentice Hall.

Völlink, T., Meertens, R.M., Midden, C.J.H., 2006. *Diffusion of technological innovations*. In: Verbeek, P.P., Slob, A. User Behavior and Technology Development. Dordrecht: Springer.

Zwass, V., 1996. Electronic commerce: structures and issues. *International Journal of Electronic Commerce*, 1 (1), pp. 3 – 23.