

To study the comparative analyses of the online portals vs the traditional channels which influence the purchase decision of a buyer in the fenestration industry.

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ABSTRACT

Title: To study the comparative analyses of the online portals vs the traditional channels which influence the purchase decision of a buyer in the fenestration industry.

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This study “Comparative analyses of the online portals vs the traditional channels which influence the purchase decision of a buyer in the fenestration industry” aims to analyse how likely are customers to choose online portals vs the offline portals to purchase fenestration products (doors and windows). The researcher has examined the degree of knowledge the consumers have regarding the fenestration products being sold online. The researcher also explored the application of digital customer experience, online consumer behaviour and the role of social media in the decision making of a consumer. A quantitative approach was used to conduct this research. An online questionnaire was taken from different cities of India and rich data was collected. The data collected suggested that majority of the respondents were unaware of fenestration products being sold online. Moreover, majority of respondents were hesitant on purchasing fenestration products from an online platform.

The findings suggest that respondents were likely to use offline channels to purchase fenestration products as it demands a physical touch and feel. Also, the study suggests that architects are an important influencer in the decision making of a consumer. Based on the findings, it can be concluded that an offline channel with an online presence can be a viable solution for enhancing the market share of a company selling fenestration products.

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1. INTRODUCTION

Online portals (websites that provide users with variety of information, tools, links along with an option for purchasing) are growing at a rapid rate contributing to the overall development of the economy. There has been a significant growth in the consumption of internet and an expansion of websites in the last five years. Kemp (2017) explains in detail the global growth of the internet in the last 5 years. His global digital reports show an incredible growth of 82% or almost 1.7 billion internet users since January 2012.

Staggering growth in online portals have successfully taken over the retail market and helped businesses to reach out to a potentially wider target audience, making the whole process of consumption delightful and easier. Ashton (2015) stresses on reaching a wider target audience with the use of online portals. He explains that a retailer is no longer confined by the limits of the local vicinity. The retailers can reach to any location in the world and take advantage of new opportunities by targeting audience beyond their geographical limits and remaining open all the time.

However, consumption still takes place through traditional channels (brick and mortar stores) as consumers consider these channels to be more secure and comfortable. The majority of consumers still go to stores for a physical look and feel before they make any purchases. With the rise in the digital age, brick and mortar stores are facing a stiff competition from the online portals (E-commerce) websites which are the symptoms of changing consumer demands. An online survey by Skrovan (2017) examines the psyche of the consumer and the evolving role of brick and mortar stores in the shopping journey of consumer. Her analyses show that 62% of the consumers which were aged between 18-24 years and 40% of the consumers which were aged 45-54 years preferred shopping offline so that they can touch, feel and try out products before they make any purchases. The analyses also pointed out that consumers were inclined towards the in-store experience and advantage they hold of buying items and taking them home immediately.

Generally, consumers browsed in store to discover the products they want, whereas now they are shifting to online portals to search and browse. These online portals have

given consumer the freedom to shop as per their convenience and find the best deals resulting in impulsive buying. An impulsive buying would be defined as unplanned decision to buy a product or service. Taylor (2015) explains that online impulsive buying is triggered by a calm, friendly and knowledgeable website with an attractive merchandise. She also lays stress upon websites that offer purchasing of products through one click and the promise of delivery of them the same day also leads to impulsive buying. For example, Amazon prime guarantees delivery of selected products within two hours of purchase.

Karr and Blog (2015) points out the advantage the marketers are taking of granular targeting and reaching the specific target audience. Granular targeting can be understood as pinpointing an audience based on their position ranging from as wide as a city to as granular as an address. Karr and Blog (2015) also highlight that consumers are shifting from traditional to online portals as aggressive competition and exciting offers have lured consumers. Nair and Shrivastava (2014) also believe that the online portals are luring customers to purchase online. They emphasise on online retailers looking to snare more customers are cajoling sellers to offer steep discounts. At the same time, shoppers still love showrooming and getting to touch and feel the products that they're looking to buy.

Businesses have moved forward from hoping consumers will stop for business by just placing an advertisement in the local newspaper. The rise in the digital era has given small and large businesses to run on digital conversions or social media at the fraction of the cost of what they paid for traditional means. The dominant rise of the internet in the modern world has completely transformed the way businesses work. Digital age has gathered momentum making people more tech savvy and hooking them to their gadgets. With the rise in online shopping amongst consumers, it has made mandatory for service providers to deliver a rich digital customer experience. Tamásy (2007) explains that the businesses have transformed to relationship oriented approach from technology oriented approach, which is more inclined towards enhancing customer experience. Technology oriented can be understood as the development of new goods or services established on a company's technical abilities rather than proven demand.

For example, Amazon has shifted to technology oriented strategy in which they focus on innovation and create services which their customers haven't demanded for. They have launched amazon drone delivery, which is an autonomous drone delivering products within few hours of purchase to your doorstep. They are also working on Amazon fresh which will be a retail store but with no checkout counters. People will tap their phone on the entrance and pick up what they like and go and the items will automatically be added to their amazon account.

Consumers are enjoying the boon of the internet. It has brought transparency in the industry as it can be argued that businesses which practised traditionally can be biased and provide customers with misleading or less information. Hamlett (2012) believes that traditional businesses could provide customers with misleading information to maximise sales as consumers had less resources to gain knowledge. He argues that consumers who purchase from brick and mortar stores in the present use the internet services to make sure the product they are purchasing is the right one. For example, before making a smartphone purchase, the modern consumer has the resources to read reviews about the particular smartphone they want to purchase, whereas traditionally consumers believed what the sellers told them and made purchases as per their guidance.

Internet has become a powerful channel for the marketers to effectively target the potential customer. Marketing strategies are being continuously changed and marketers are inventing new ways to target their customers. Klaus (2014) argues that marketers are trying to enhance the digital customer experience which has become a competitive battleground. Klaus (2014) also highlights that practise in digital customer experience is way ahead of academia. He explains that there is limited amount of research carried out in this particular field and the practise by businesses are way ahead. As per Cognizant (2016) research, it concludes that wide-range of businesses still have a long way to go when it comes to getting digital customer experience right.

Consumers have very effectively taken the advantage of online portals for the initial information gathering phase which has become a necessity in the 21st century. As per a study by Stamford (2013) 81% consumers go online to gather information before making

a major purchase. Such information helps customers to carefully consider before making purchases and become more open to make large purchases.

To master the digital customer experience, it is extremely vital for the marketer to understand the basic fundamentals of consumer behaviour. Jacoby, Szybillo and Berning (1976) defines consumer behaviour as the acquisition, consumption and disposition of products, services, time and ideas by decision making units. Consumer behaviour helps identify consumer needs and satisfy them better than the competitors. Brassington and Pettitt (2000) discuss that consumer behaviour of every individual is different and their buying choices are influenced by buying habits and choices are driven by psychological and social drivers that affect the purchase decision. The researcher wants to understand the customer online purchase behaviour so that he can understand the strategies that can be implemented for selling fenestration products online.

The purpose of this research is to study how likely are consumers to purchase fenestration online by understanding consumer behaviour and purchase decision influencers. Fenestration includes doors and windows products which are bought through traditional brick and mortar stores. Purchasing of mobile phone is quite simple as it comes with all the information and an easy return policy. However, purchasing fenestration products will have a stringent return policy as it is made according to the different sizes demanded by the consumer. The researcher wants to understand whether such products which demand a physical touch, feel and specifications can be successfully sold online. The researcher wants to ascertain whether a multi-channel strategy is more viable than just opening an online or an offline store. The researcher wants to gain insights of consumers whether they are aware of any website selling fenestration products and also if they have bought these products online.

The research will help the researcher understand the various strategies that can be implemented to develop a parallel online platform which demands touch and feel.

2. LITERATURE REVIEW

The researcher aims to understand the strategies that are needed to be implemented in online portals vs the offline portals which influence the purchase decision of a buyer in the fenestration industry. The researcher further wants to understand the consumer behaviour when purchasing online and how does digital customer experience play an important role in their buying decision.

NCSC (2013) analyses estimates that online sales will be more than double over the next 10 years and pose a substantial threat to the offline stores. The Nordic Council of Shopping Centres (NCSC) claims that the continuous growth in the online portals will cause formidable challenges, drop in sales and low footfalls for the offline brick and mortar stores. They explore the factors such as adoption of multi-channel strategies which include showrooms, own websites and a strong social media presence which can be advantageous for businesses to deal with the changing consumer needs. A study conducted by Cave (2016) also suggests that businesses should adopt multi-channel strategies rather than all or nothing approach. The researcher agrees that businesses should adopt multi-channel strategy as it helps them to communicate an integrated message throughout all their channels. Adopting a multi-channel approach can help businesses to amplify the brand. The researcher feels that adopting a multi-channel approach for fenestration products seems to be the most viable option as online presence can help in reaching a wider target audience, whereas an offline presence can target the customers who demand a physical touch and feel.

An online survey conducted by Farber (2016) explains the change in consumer behaviour by showing year to year growth in the shift to online portals from offline portals. She explains that the consumers shopped traditional products like groceries, smartphones, furniture etc. from brick and mortar stores so that they can see, touch and try out before buying. Another reason which has been highlighted is that consumers want to take the products home immediately and want to enjoy in-store experience. However, the survey indicates a change in consumer behaviour as the polls result shows that 51% of the shoppers in 2016 purchased online compared to 46% and 44% in the year 2015 and 2014 respectively. Thus, the survey indicates that there is a significant

shift to online channels for products which are traditionally bought through other channels.

Stevens (2016) study highlights this change as a wakeup call for retailers and advises them to change their strategy before they are wiped out from the market. Tucillo (1997) argues that online portals pose a direct threat to offline retailers with an increased database and reduced cost. These databases include profiles of digital consumers with their buying habits and needs. Online retailers take advantage of these databases by providing products and services as per the individual needs. Thus, predicting what the consumer wants and offering them better than the offline retailers. The researcher understands the huge benefit the businesses can have when they know exactly what their customer wants. The researcher feel that an online presence can provide a room for innovation as businesses can understand the trends of changing consumer needs and develop products when they want.

Social media marketing can be very beneficial for e-commerce stores to reach and interact with their target audience. With the help of granular targeting, online portals can target the very specific target audience. Alafeef (2014) case study highlights that social media marketing encourages users to spread information/messages to personal contacts which helps the businesses to draw more traffic towards their website. He also adds that a social media presence, helps you stay connected with your customers and build loyalty with continuous interactions.

Gallino and Moreno (2012) emphasise on the increasing shift of retailers from offline to online stores to reduce cost and improve the value propositions they make to their customer.

They argue that traditional brick and mortar (B&M) retailers should not separate the operations of traditional and online channels but integrate both the channels to enrich the customer value proposition. They believe that if a brick and mortar store retailer opens an e-commerce website, they should design their operations in such a way that online website compliments the offline store to maximise customer value. For example, Apple has a retail store and also an e-commerce website. They display products on their website which are available through their B&M store and has no difference in pricing.

This gives the consumer the option to purchase online or offline depending on their convenience. The researcher understands the importance of integrated marketing adoption and believes it should be applied to the fenestration industry to maximise customer value.

Schulte, Rottke and Pitschke (2005) article stresses on the importance of online portals as a research marketing tool. They highlight online portals as the biggest influence in the industry as it brings transparency. Their research also emphasises on reduced costs and major improvements in efficiency and performance. Littlefield, Bao and Cook (2000) article also highlights the effectiveness of online portals in their study as they help with simplified communication, increased information and efficiency.

Online portals offer an in-depth information regarding the product and services at an ease of a click on the go, creating a major obstacle for the traditional methods of marketing (Brooker, 2010). Brooker (2010) article discusses the various digital tools being used to tap a wider target audience and increase brand awareness. James (2017) expresses the importance of digital tools in the 21st century. She explains the complex analytics that the marketers can take advantage off and target a particular customer base. The researcher believes that these tools can help target the specific audience which browse online for fenestration products.

Yu (2011) lays stress on the abundance of information available online and reminds us that “anything can be sold online”. There are so many websites selling all kind of products and the fenestration industry is an upcoming market. With the rise in consumer’s dependency on online portals for all their needs, the fenestration industry can be a niche market to tap into.

Online portals are proving to be an effective marketing tool but it has its own shares of disadvantages. Such disadvantages need to be understood to be used effectively. Using of online portals can lack in adequate technical and financial information thus concerning the credibility and ethical issues. For example, Online security fraud, manhandling during shipping, receiving wrong shipment, data theft, selling counterfeit products etc. Kuriachan (2014) study describes these as common problems the consumer faces while shopping online. He explains these as concerns which the

consumer might feel while shopping online. These include concern of getting damaged product, delay in delivery and not getting the product delivered at all.

Although, internet has brought transparency, Kaul (2014) stresses that numerous fraud websites are spreading misleading information which might force a customer to shell out extra money for a product. Kaul (2014) also points out that a customer may get all the required information but may lack literacy skills to fathom. The researcher feels that lack of literacy skills can be a major issue when purchasing fenestration products online as selecting the product requires a lot of technical knowledge.

In today's digital era, social media sites have become a platform for retailers to engage with their customers and market their product to a wider range of customers. Mangold and Faulds (2009) explains that with the emergence of social media, the tools and approaches for communication have changed drastically. They also emphasise on businesses to learn the use of social media that is consistent with their business plan to gain competitive advantage. The marketer must ensure that the target audience is technology friendly to successfully target them via social media channels. Mady (2011, p195) emphasises the consumer technology readiness. He argues that a retailer must ensure that the target market uses the social media, or is familiar with it or doesn't perceive it negatively for the success of the campaign. Karr (2015) infographic shows that 59% of consumers claimed to use social media platform at least once in a day whereas 46% of the consumers rely on social media when making a purchase.

Traditional methods of marketing have also been successfully used for decades and they continue to do so. The primary focus of marketing used to be to create fascinating campaigns that would catch the consumer's attention and increase awareness. For example, Tyskie a beer company changed the door handles of a bar to handles of a mug with their branding on them. Such clever marketing grabs the attention of the consumer and helps increase awareness. However, Satell (2013) believes that this model is broken and for brands to be successful they need to inspire them to participate rather than focusing just on driving consumers to purchase.

The effectiveness of exhibitions and trade fairs as a marketing tool in the modern digital age has been analysed by Situma (2012). His survey on large scale industries

participating in exhibitions and trade fairs acknowledges that exhibitions involve huge investment but can be effective if carried out smartly bearing in mind the factors such as productive planning, extensive feedback mechanism and relevancy with dynamic competitive market to reach out to a wider range of target audience via a single platform. The researcher agrees as he feels developing a productive marketing plan and forming an extensive feedback mechanism will help the marketers to target the audience better.

Digital Methods of marketing has gained momentum by giving the marketers the power of targeting the very specific audience. With greater number of businesses going digital, delivering digital customer experience has become extremely important leading to a digital battleground. Schmidt-Subramanian and Hogan (2016) analyses the customer experience (CX) and lays stress on the customer experience professionals struggle to level with the growing demand of digital customer experience.

They describe these struggles as - 1) Not owning all relevant metrics – Perception Metrics (Assess how well a company delivers against customers CX quality expectations.), Outcome Metrics (Company's financial success can be tied to CX perception.) and Descriptive Metrics (Contextualize and operationalize perceptions), 2) Failing to identify the main root of customer experience issue and 3) Not taking the required actions for customer experience improvements.

Cognizant (2016) examines the trillion-dollar club which includes companies like Google, Amazon, Netflix, Apple etc. They are called the trillion-dollar club because they have collectively created a trillion-dollar market capital in the last decade. This club has designed an entirely new customer experience by reimagining how they interact with customers by using state of the art technology and business practices. This has inspired various companies to rethink the way they interact with their customers. Their study shows that only 3% of the companies consider themselves doing an excellent job of interacting with their customers. However, the researcher feels that digital customer experience can be improved by implementing strategies by thinking out of the box and taking risks.

Frank, Roehrig and Pring (2014) explains 'Code Halo' as the most important step to understand and deliver a richer digital customer experience. They define the term as the data that accumulates around people, devices and organisation thus creating a virtual picture of a person which helps the marketers to understand and create experience. Code Halo creates data from every transaction, browsing, commenting, sharing and liking. The data created forms a picture of who the person is and what they like and dislike. This data helps the businesses to create products as per the demands of the consumer. Digitization of the customer interface has proven to be life-changing for customers and vendors alike.

A study by Deloitte (2015) revolves around the user demands evolving. Their study gives insights to the maturing landscapes of digital services and how it has widened the doors to a new world of customer experience circumstances that are innovative and understandable.

To enhance the customer experience, it is important for a marketer to understand consumer behaviour. Putman (2016) explain the importance of consumer behaviour to cater a rich customer experience. She argues that understanding the way a consumer anticipates allows the marketer to market their product from grass-root level, providing the consumer with a rich customer experience.

Peter and Olson (2010) define consumer behaviour as the phenomenon of interactions between an individual's emotions, moods and feelings related to a purchase decision. A consumer goes through many steps while buying a product. Tyagi and Kumar (2004) lay stress on the importance of understanding the consumer behaviour as it gives marketers the valuable insights on to know the what, when, where, how and why of the consumption of product consumption. Such insights help marketers to know the reason behind a purchase and how it satisfies their customers. Solomon (2009) believes that a marketer should understand and examine the way in which the consumers behave so that they can position their products to a specific targeted people so as to satisfy their needs and wants.

Howard and Sheth (1969) suggests that to understand the consumer behaviour, it is essential to understand the buying decision process of a consumer.

Consumer buying decision process consists of – 1) Need Recognition: This is the first stage of the buying decision process where an individual establishes a specific need and wants. Hawkins and Coney (1998) believes that these needs and wants are influenced by external stimuli (Society, peers, other customers) and internal stimuli (individuals own emotions and knowledge). 2) Information Search: In the next stage, the individual gains the relative information and knowledge required to satisfy the need and want. Hawkins and Coney (1998) highlights that consumers often gather information regarding the product/ service that will fulfil their need from various personal/public/online sources. 3) Alternative Evaluation: Once the individual gains enough information regarding the product/service, the individual then analyses different alternatives of the product that might suit their preference. Kotler (2004) argues that an individual is most likely to make a decision based on the analyses of his/her physical and emotional satisfaction derived from the product purchase. 4) Purchase Decision: Post the evaluation done by the individual, he/she is ready to make a purchase decision towards the preferred product/service. Kotler (2004) believes that purchase decision of an individual is usually influenced by the attitude of other individuals and the unexpected situational factors that might arise. 5) Post Purchase Behaviour: This is the most important stage of the buying process behaviour. Post purchase stage gives rise to two possibilities which is either Satisfaction or Dissatisfaction. Gilly and Gelb (1982) explain that if the delivery of value derived from a product or service meets or exceeds the customers expectation, then the customer is satisfied whereas if the value derived from the product or service is lower than the customers expectation, then the customer is dissatisfied.

Emotions or attitude play a vital role during a purchase decision of a consumer. Olson and Zanna (1993) lay stress upon different aspects or situation to understand attitudes or emotions as these variables depend person to person and becomes difficult to understand and evaluate. As per Fishbein and Aizen (1975), their theory of reasoned action emphasises intention as the actual predictor of a person's behaviour. Yen-Tsang, Csillag and Siegler (2012) add individual beliefs on people's views and expectancy as a predictor for person's behaviour. Steluta Ută and Popescu (2013) argue that intention

should be considered essential to decide an individual's behaviour. The researcher feels that the individual's attitude comprises of facts, intentions and beliefs.

Although, online portals have been successful for businesses to tap a wider target audience and to provide information in the initial phase, there is still demand for traditional brick and mortar stores. Soergel (2016) article states that although online sales are booming there are a significant number of people who still shop from brick and mortar stores. His survey shows that footfall in offline store increases during the end of the year specifically around the holiday season. A lot of consumers still feel the need of touch and feel before making a purchasing decision. The researcher intends to explore the effectiveness of the marketing tool in relation to buying decision of a consumer. Digital Customer Experience is considered as the next competitive battleground. A need for innovation has been raised and businesses are catering their services as per the needs of the consumers. Implementation of Code Halo strategy can prove to be beneficial for businesses to deliver a rich digital customer experience. Moreover, the firms can gather data and discover what the customer need and wants. These needs and wants can be understood by studying the consumer behaviour. Perloff (2003) links attitude as a learned outcome of behaviour. It is argued that attitude once formed can be difficult to change. Consumer behaviour theories are of most important to understand as it helps the marketers to create products and services to cater consumer's needs and wants. Understanding the consumer behaviour helps the marketer to analyse the different factors that has influence over the buying decision of the consumer.

Ian Schafer quotes "Innovation needs to be part of our culture. Consumers are transforming faster than we are, and if we don't catch up, we're in trouble."

The researcher aims to compare strategies implemented in online vs offline portals while understanding the application of digital customer experience and how consumer behavior can be beneficial in formulation of strategies.

3. RESEARCH QUESTIONS

To study the comparative analyses of the online portals vs the traditional channels which influence the purchase decision of a buyer in the fenestration industry.

1. How likely are consumers to purchase products and services online in comparison to traditional channels?
 - Understanding the consumer behaviour and their concerns when purchasing online?
 - How often are products/services bought online?
2. What is the role of digital customer experience in their buying decision?
 - What is the role of social media in the decision-making process of a consumer?
 - Is there significant interaction between the consumers and their favourite brand's social media handles?
3. How important are series of characteristics of retail websites?
4. The researcher wants to examine the degree of knowledge the consumers have regarding fenestration products (door and window) being sold online?
 - Whether they have purchased fenestration products online?
5. The researcher wants to ascertain which group of members can be a viable target market on understanding the degree of influence they have on decision making.

3.1 VARIABLES

1. Age (years)
2. Gender
3. Type of influencer – Builder/contractor, Home Owner, Architect.
4. (Dependent variable) - how likely are consumers to choose online vs offline
5. Attitude
6. Demographic
7. Consumer buying behaviour
8. Digital customer experience

4. RESEARCH METHODOLOGY

4.1 RESEARCH DESIGN

Research design is a planned sequence of the entire process involved in the conducting of a research study (Miller and Salkind, 2002). Kothari (1990) highlights that a preparation of design facilitates the research to be as efficient as possible yielding maximum information. Kothari (2004), sums it up that the function of research design is to provide for the collection of relevant evidence with minimal expenditure of effort, time and money.

Toledo-Pereyra (2012) suggests that an effective research design allows more accurate data enhancing and fulfilling objectives of the study. To study the comparative analyses of the online portals vs the traditional channels which influence the purchase decision of a buyer in the fenestration industry, quantitative research design was used. The main purpose of this study was to understand the online purchase behaviour of consumers. The researcher wants to understand whether there is a market for selling fenestration products online which generally demands a physical touch and feel. The researcher believes that quantitative research design is more reliable and objective as the data collected is in numeric form and statistical tests can be used to generalise a statement. Statistical analyses will allow the researcher to derive important facts from the research data. Quantitative research design also looks at the relationship between the variables which can be clearly specified in highly controlled circumstances.

The researcher believes that selecting survey as a method to collect data can help the researcher perform statistical tests on the data to derive results. Online surveys are inexpensive and have the capability to target hard-to-reach respondents. The survey provides anonymity to the respondents which helps them to provide more honest and unambiguous responses.

The researcher has selected quantitative research design so that relevant data can be collected with minimal investment on effort, time and money.

4.2 RESEARCH PHILOSOPHY

Saunders, Lewis and Thornhill (2012) define research philosophy as the 'system and beliefs about the development of knowledge'.

For the current study, the researcher has applied the objective philosophy. Objective philosophy supports reality which is independent of any social influences. Objectivity means the state of being true of subject's imaginations, feelings, prejudice and interpretations. Deductive approach has been applied by the researcher for the study. Saunders et al. (2009) explain deductive approach as evolving of theory followed by a factual verification. A hypothesis is formed through a process of thought flowing from generalised views to specific outcome.

To study the comparative analyses of the online portals vs the traditional channels which influence the purchase decision of a buyer in the fenestration industry, the researcher chose quantitative research design as it is considered as a reliable method and the statistical tests can be performed on the data in order to derive results from the data collected. Frankfort-Nachmias and Nachmias (1992) explain quantitative research as being deductive and particularistic which allows in formulation of research hypothesis and proving them experimentally on a specific set of data. Mills, van de Bunt and de Bruijn (2006) explain the goal of comparative analysis as to the search of similarity and variance. They believe that the search for similarity often applied to a more general theory (regression equation) and search for universals or underlying general processes cross different contexts. Mills et al. (2006) argue that comparison not only uncover differences between social entities but also reveal unique aspects of particular entity that would be virtually impossible to detect otherwise.

4.3 TYPES OF DATA

4.3.1 PRIMARY DATA

Primary data are data that are collected for the specific research problem at hand, using procedures that fit the research problem best (Hox and Boeije, 2005). The primary data which gets collected is added to the existing literature and thus becomes the secondary data. The research was carried out using primary data. The researcher will identify the problem to be researched and intends to collect primary data by planning an effective research design. The researcher collected primary data for this paper by effectively designing the questionnaire and making the questions straightforward, making it easier for respondents to interpret. Collection of primary data is essential to make this paper detailed, reliable and realistic as the research was conducted with limited researches. The researcher intends to collect primary data as there were very few secondary data relating to the current study. Secondary data is useful as it is quick and easy to process. However, the researcher believes that secondary data is not specific to researcher's need and doesn't have control over the quality of data, whereas collection of primary data will be specifically related to the researchers need and the quality of the research can be controlled. Although, secondary data is easily accessible, they are not pure as they have undergone through various statistical treatments (Surbhi, 2016). The researcher understands the limitations of collecting primary data such as time consuming and high cost, but in order to fulfil the objectives of this paper, first hand data is essential.

4.4 QUALITATIVE VS QUANTITATIVE

Quantitative research is based on the measurement of quantity or amount whereas qualitative research is concerned with the phenomena relating to or involving quality or kind (Kothari, 2004). Wahyuni (2012) highlights that qualitative data approach can provide rich and descriptive data which allows a researcher to gain a deeper understanding of the research study. Lincoln and Guba (2000) claims that qualitative

research involves an interpretive and naturalistic approach which allows the researcher to study things in its natural way, attempting to make sense of, or to interpret, phenomena in terms of meanings people bring to them.

Quantitative research is based on objective philosophy and deductive approach which uses a systematically structured framework whereas Qualitative research is based on subjective philosophy and an inductive approach using exploratory tools such as interviews, focus groups etc.

4.5 SAMPLING TECHNIQUE

Sampling is the process of selecting units from a population of interest so that by studying the sample we may fairly generalize our results back to the population from which they were chosen (Trochim, 2006). Selection of sampling can be of two types – probability and non-probability.

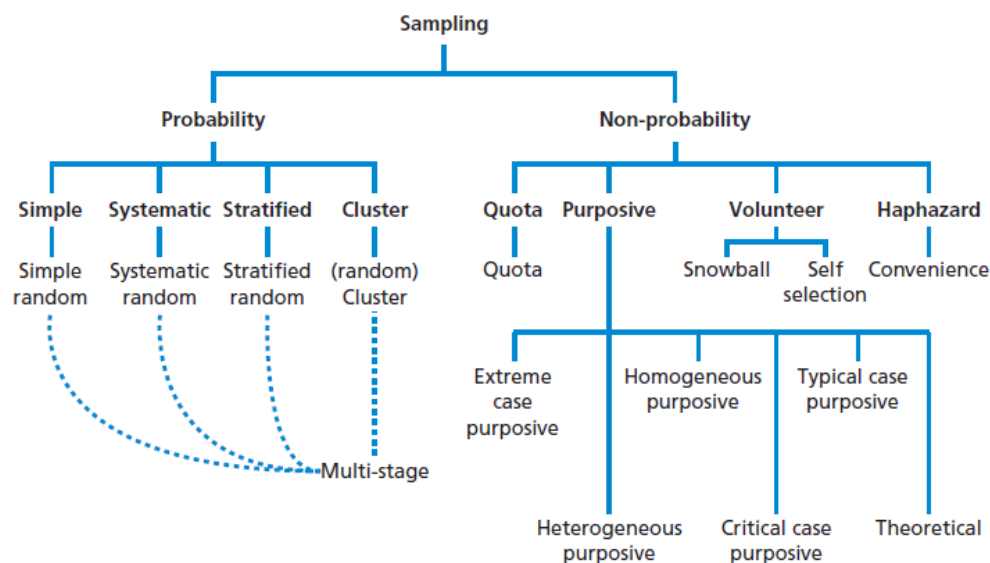


Figure: 1

4.5.1 PROBABILITY SAMPLING

Trochim (2006) explains probability sampling as a method of sampling that utilizes some form of random selection associated with statistically judging the trait of sample to the

whole population. Random selection is utilized to assure different respondents in the sample population have an equal probability of getting selected. The researcher did not choose this method of sampling as it is fit when creating larger samples.

4.5.2 NON-PROBABILITY SAMPLING

Non-probability sampling does not involve randomized selection process. It is more of a rationale way of selection where selection is based on referral or volunteering or convenience. The sample selected are representative of a specific group of similar category. The researcher has selected non-probability convenience sampling and has selected a fairly large representative sample size of 111 participants in a short span of time. The researcher has selected convenience sampling method as it involves selection of those participants to whom the researcher has easy access. The selected sample is a representative of people who shop online for various products. Malhotra and Dash (2007) discusses the effectiveness of convenience sampling by stating that it saves money and time of the researcher through easy approachability and participation of the sampling unit. The researcher had time and money constraints which makes this method more convenient. The researcher selected convenience sampling as it is easy to carry out in comparison to probability sampling and helps the researcher to achieve the sample size relatively faster. Saunders *et al.* (2012) lay stress on selecting convenience sampling method as the preferred sampling method when using online questionnaires to collect data. They emphasise on sending the questionnaire links to an individual's contact list or via the connected social media networks as an easy and the most convenient way to select the respondents for the research.

4.6 DATA COLLECTION METHOD

Nalzar (2012) explains data collection as the process by which the researcher collects the information needed to answer the research problem. Data can be collected through various methods such as Questionnaire, Interview, Survey approach, Observation, Experimental approach and Record. However, for the purpose of this research, the

researcher used online Questionnaire to collect data. Questionnaire provides anonymity to the respondents which helps them to provide more honest and unambiguous responses.

4.7 QUESTIONNAIRE

Mondal (2010) defines questionnaire as a research instrument consisting of series of questions and other prompts for the purpose of gathering information from respondents. A mix of close ended and open-ended questionnaire was used in the collection of data to yield maximum results. Oppenheim (1992) suggests that close ended questions are easier to analyse and process. However, Foddy (1993) argues that close ended questions limit the respondent to the set of alternatives being offered while open ended questions allow the respondent to express an opinion without being influenced by the researcher. An online questionnaire allowed the researcher to reach a generous audience and collect primary data to comparatively analyse the role of online portals vs the traditional channels. The questionnaire was a practical way to gather data as the researcher chose to put open-ended and close-ended questions which helped to gather vast amounts of data. The questions were designed precisely and correctly to achieve short and simple answers covering all the aspects of the study. A total of 140 participants were contacted out of which 111 responded making the response rate 79.28%.

Betts and Hartley (2012) lay stress on the adoption of various scales in questions which were particularly very useful in understanding and gathering a wider opinion on the questions asked. Likert (1932) developed the Likert scaling technique which enables the customers to answer questions from 5 alternatives. This method was extremely useful for measuring opinions of the participants and the data analysis. The participants were asked to answer from strongly agree to strongly disagree and from very important to unimportant which were useful in the measurement of factors involving online behaviour of the respondents. This helped the respondents to respond the questions easily and helped the researcher to quantify the results more systematically.

Google forms, an online survey software was used by the researcher to effectively design a questionnaire and the links were sent through e-mail. The results gathered from the questionnaire were computed and stored electronically through this software. The researcher provided assistance to those respondents who were unable to submit the questionnaire. The researcher feels that using an online survey portal helped him save money and time. Also, the researcher easily administered and monitored the data in real time. The biggest advantage the researcher enjoyed was that the online survey made it convenient for the respondents to fill the questionnaire as per to their time and schedule. The researcher simplified gathering of data by using Google forms for the research.

4.8 VALIDITY AND RELIABILITY

Heale and Twycross (2005) define validity as the extent to which a concept is accurately measured in quantitative study. They further relate reliability to the consistency of measure. Punch (1998) highlights validity to the degree to which a research accurately represents the purpose it intends to research. The researcher aims to ensure the data gathered is reliable and validated to help the thesis solve its problem by formulating questionnaires in a simple, consistent, dependable and accurate form. Questionnaire was selected as method of data collection after a thorough research and analyses. The researcher will assess the validity by applying the content validity application. Content validity refers to the appropriateness of the content of the instrument (questionnaire) (Biddix, 2014). This involves the study of the data collected and accurately assessing whether it answers all the questions the researcher wants to research. Reliability is directly related to the validity of the measure (Biddix, 2014). Reliability can be achieved when a respondent completing an instrument have an approximately same response each time the test is completed (Heale and Twycross, 2015). However, for the current study it isn't possible to provide with an exact calculation of reliability.

The researcher is confident that questionnaire is an appropriate tool to collect accurate data. The researcher aims to maintain validity and reliability to ensure its accountability, helping in adding a sizeable value to the existing literature in comparative analyses of

the online portals vs the traditional channels which influence the purchase decision of a buyer in the fenestration industry.

4.9 LIMITATIONS

As per Saunders et al. (2009), research methodology serves as a backbone of a research study. By measuring the views and responses of a sample population, quantitative research allows the researcher to generalise results. Simon (2011) argues that every methodology consists of two phases – planning and execution and it is evident that there are limitations which are beyond our control. Quantitative research usually requires a large sample size, but due to budget and time constraints, the researcher chose a fairly decent sample size to take online questionnaire which could lead to an ineffective finding as a result of participant bias. Quantitative research method includes structured questionnaire which can lead to limited outcomes, affecting the representation of the actual occurring in a generalised form. Also, the results gathered from data analyses cannot be generalised due to the selection of non-probability convenience sampling. Quantitative study also demands extensive statistical analyses which can be difficult to perform as the researcher is from a non-statistical background.

4.10 ETHICAL CONSIDERATIONS

As per Kovacs (1985), ethics is a branch of philosophy that deals with the conduct of people and guides the norms of behaviour of people and the relationship with each other. Saunders *et al.* (2009) lay stress on the researcher's responsibility to protect the rights of all individuals who are a part of their research. The author acknowledges that ethical considerations apply to this research.

The researcher has thoroughly considered and followed all the ethical guidelines stated by National College of Ireland. The research involves quantitative data collection in the form of an online questionnaire, where the names of the respondents weren't collected for the purpose of data safety. The participants participation was voluntary and they had the right to withdraw from the research at any given time. It was made clear to participants that the study is anonymous and their consent to participate in the survey was taken. The results from the online questionnaire were only accessible to researcher.

5. RESEARCH ANALYSES

5.1 INTRODUCTION

The study aims to compare how likely are customers to choose an online portal vs the traditional brick and mortar store during the purchase of fenestration products.

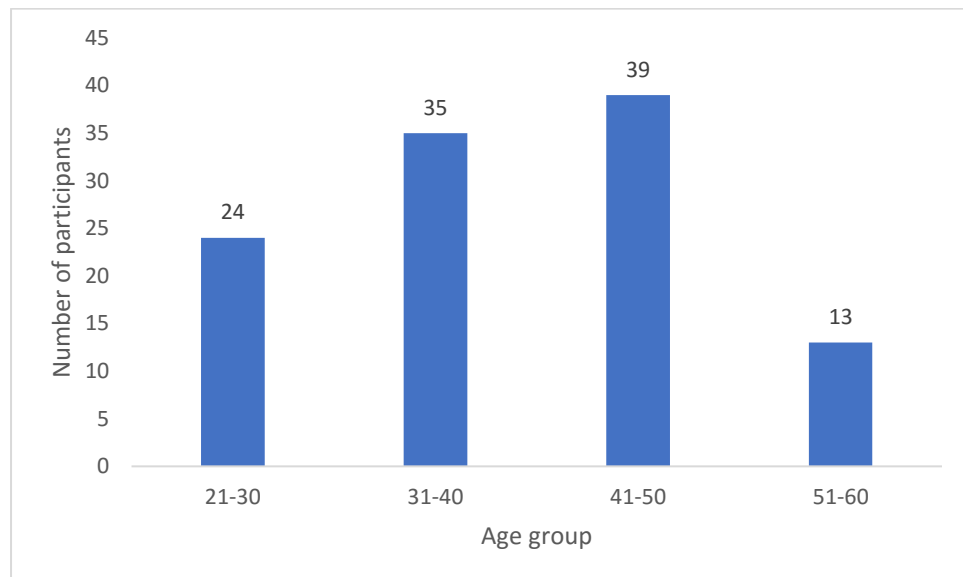
The researcher wants to examine the role of digital customer experience and how it plays a pivotal role in decision making. Also, what role does consumer behaviour play when consumers purchase products online. This chapter would be summarised in the discussion chapter with significance purpose of the study. Analyses of the data would involve linking the interpreted data with the researchable questions. The researcher will also critically analyse the findings from the data collected.

The researcher will also critically analyse the findings from the data collected using the correlation technique. The researcher will investigate the degree of relationship between pairs of the participant's responses to the various variables under consideration. Specifically, the researcher investigates if significant relationship exists among the participant's degrees of belief on various advantages of online shopping over the offline channels. Such advantages include: more time-saving, more money-saving, more efficiency and more convenient than the offline channels. The five-point Likert scale used here include: Strongly Disagree (SD), Disagree (D), Neutral (N), Strongly Agree (SA), and Agree (A). Then the researcher investigates if significant relationship exists among the participant's responses on importance of each of the given series of characteristics of retail websites. Such characteristics include, easy access, user-friendliness, design, reputation, security, and interactive elements. The five-point Likert scale used here include: Very unimportant (VUI), Unimportant (UI), Neutral (N), Important (I), Very Important (VI). In each case, Pearson product moment correlation coefficient technique was used with the aid of the MINTAB version 17 software to obtain the degree of relationship between the participant's responses for each of the possible pairs of these characteristics. The resulting correlation coefficients (output) are given in form of correlation matrix in each case.

5.2 DEMOGRAPHIC DATA

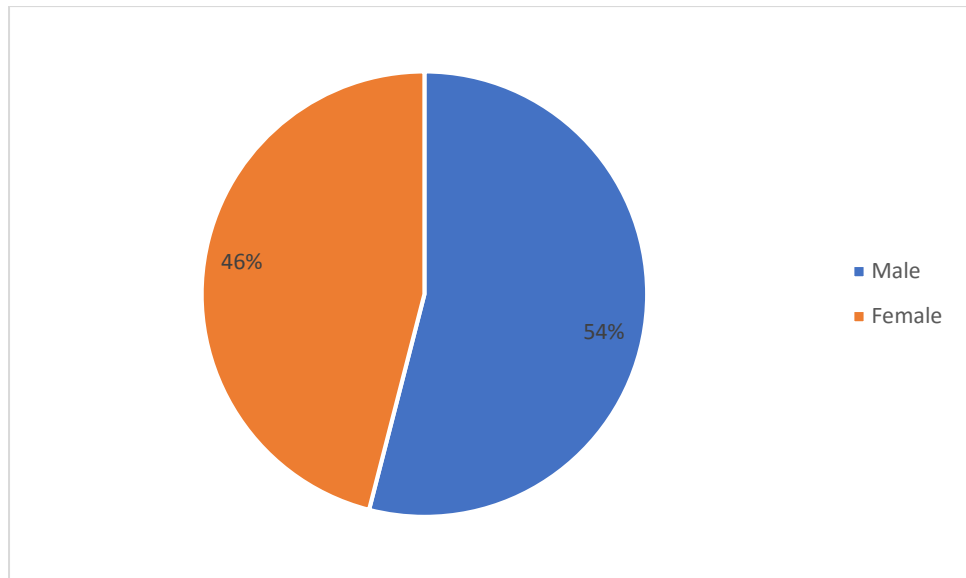
This section of the study discusses the demographic characteristics of the respondents such as age group, gender and location. To understand the profile of the respondents, the researcher has neatly presented and discussed the following bar graphs and pie charts.

FIGURE 2: Bar chart showing the distribution of participants by age group.



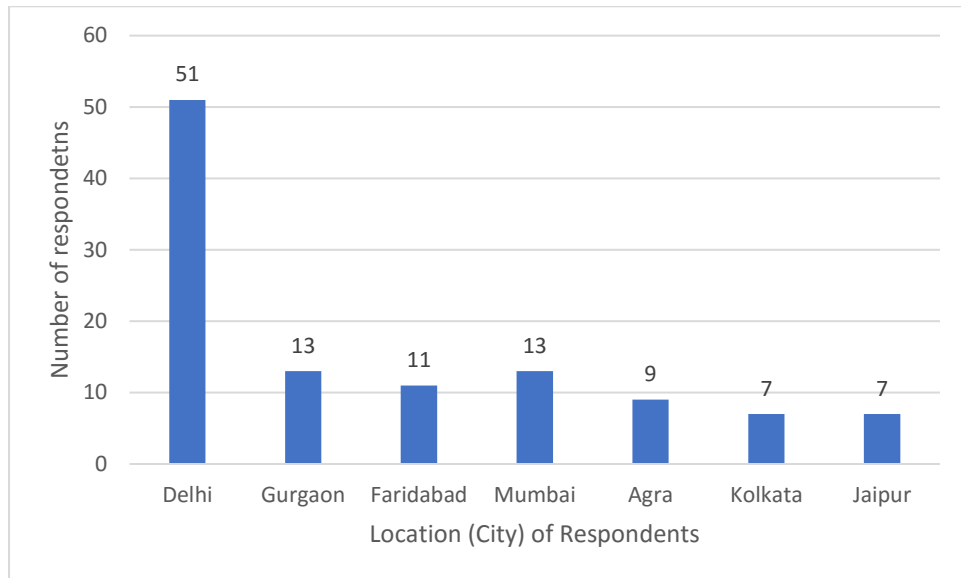
We first investigate the age distribution of the participants and this is given by the bar chart in **Figure 2**. From this chart, we observed that the maximum number of participants fall under 41-50 years age group (c.35.1%). This information is beneficial as the analyses shows that this age group participates in renovation and building of new houses, where there is a need of fenestration products. The second highest participation is from the age group of 31-40 years (c.31.5%) followed by 21-30 years (c.21.6%) and 51-60 years (c.11.7%) of age.

FIGURE 3: Pie Chart showing the distribution of participants by gender.



Then we consider the sex distribution of the participants and this is given by the pie chart in **Figure 3**. From this Figure, it was observed that approximately 54% males and 46% females participated. The chart shows a moderately equal participation from both the genders, which was found to be beneficial for the researcher. This indicates a large representation from female respondents as understanding their online behaviour gave deep insights to the researcher in formation of strategies.

FIGURE 4: Bar chart showing the distribution of the respondents by location (City).



Then we looked at the distribution of the participants according to location (city). With this information, the researcher gained insights on the consumer behaviour and the degree of knowledge of fenestration products from people located in different cities. This is given by the bar chart in **Figure 4**. From this chart, it can be observed that largest percentage of the respondents reside in Delhi as this constitutes approximately 46% of the total respondents sampled. This is followed by Gurgaon and Mumbai, each constitutes about 11.7% of the total number of respondents sampled. There is a big difference of about 38 respondents between each of the residents of these cities and that of Delhi. Apart from these, a combined share of approximately 30.6% respondents were from Faridabad, Agra, Kolkata and Jaipur. This can help in understanding the target market for fenestration products.

5.3 ONLINE BEHAVIOUR AND DIGITAL CUSTOMER EXPERIENCE DATA

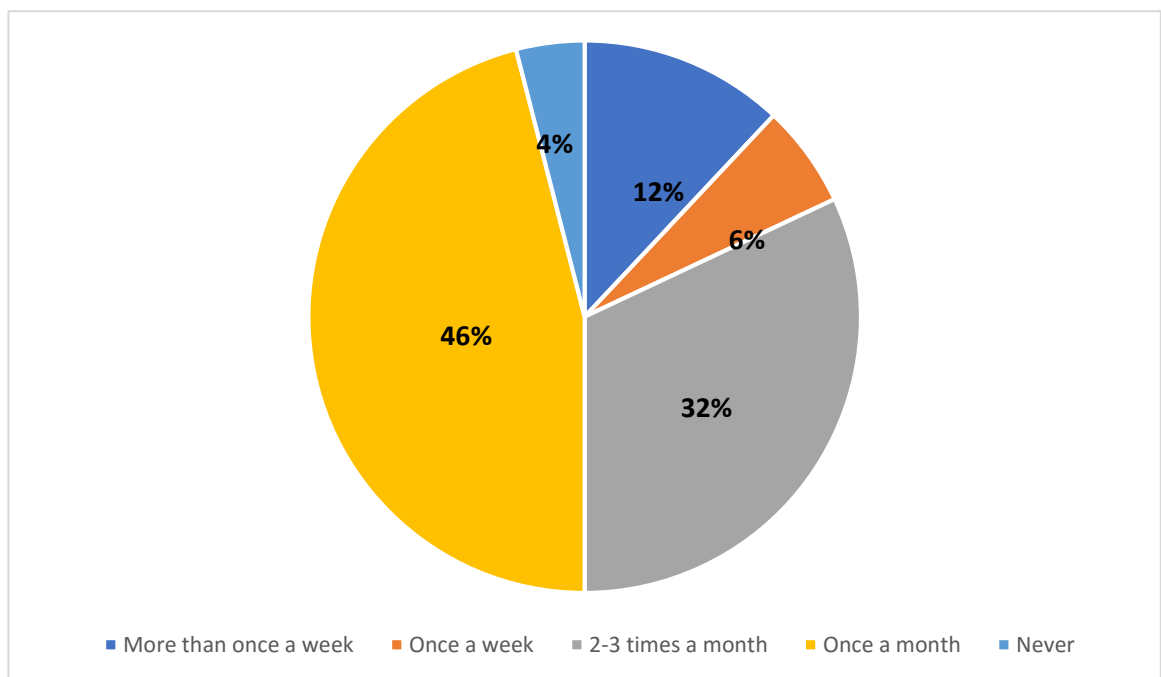
Research Question 1

How likely are consumers to purchase products online? Specifically,

- What are the consumer behaviour and their concerns when purchasing online?
- What products and how often do they purchase online?

To understand the consumer behaviour and their digital customer experience, the researcher has neatly presented and discussed the following bar graphs and pie charts.

FIGURE 5: Pie chart showing the frequency distribution (in percentages) of online shopping by respondents.



The Pie chart in **Figure 5** illustrates how often the respondents shop online. We can observe from this figure that majority of the respondents fall under the category of those who shop online once in every month. This was followed by those who shop online 2-3 times in a month, which constitute 32% of the total respondents sampled and then those who shop online more than once in a week. This category constitutes 12% of the

total respondents sampled, while 6% of the respondents constitute those who shop online once in a week. However, only 4% of the respondents sampled fall in the category of those who don't shop online at all. Thus, from these results it was observed that most consumers prefer shopping online for their various products of interest as 96% of them indicated their preference for online shopping leaving only 4% who do not. Understanding this analysis prove that majority of consumers make use of online retail websites to purchase products.

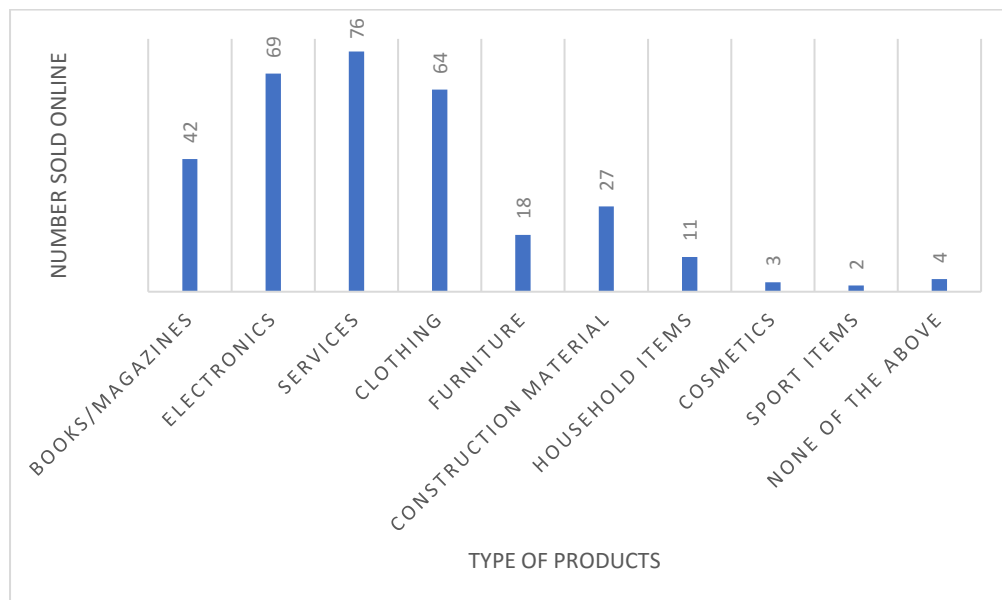
Figure 6: Bar chart showing frequency distribution of various concerns of an online shopper while shopping.



We then investigate the various concerns that an online shopper may have while shopping for different products in an online store. The responses that have been recorded have helped the researcher understand the issues faced by the online shoppers and their concerns about them. Such insights can help in developing a more robust retail website. The respondents were asked to choose as many options as they felt were a concern for them online. The results are represented by the bar chart in **Figure 6**. It was observed that approximately 28% of the responses feel the products/services they are purchasing won't match up to their standards of quality, whereas 14% of the responses are sceptical on how the product will be delivered.

Approximately 11% responses were concerned with digital payment failure, whereas approximately 12% responses were concerned about additional charges that might be applied. 20% of the responses were doubtful about the unclear return and guarantee policy. While 5% were concerned about non-availability of the product/size, 12% of the responses were scared of lack of security concerns. However, approximately 1.5% responses had no concerns about shopping online. This information can be understood and applied during the formation of strategies to serve the consumer better.

Figure 7: Bar chart showing the frequency distribution of various products being sold online by their type.

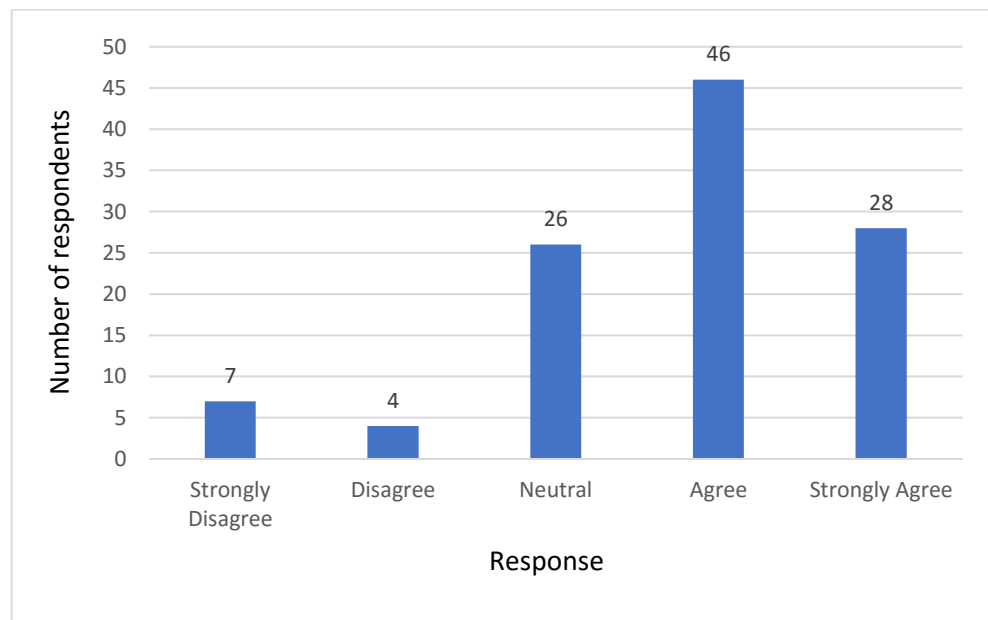


Next, we investigate the categories of products that are sold online. That is, the number of various products which the respondents buy online, as given by the bar charts in **Figure 7**. From this figure, we observed that about 24% of the respondents are in the category of those purchasing services online which included travel and movie tickets, about 22% of the respondents purchased electronics online while about 20% are in the category of those purchasing clothes. This is followed by the category of those purchasing books and/or magazines, which constitute about 13% of the respondents. The beneficial part of the analyses here was to see that approximately 9% and 6%

responses were of people purchasing construction material and furniture respectively. Generally, these items demand a physical look and feel but a handful of people are purchasing these items online which ascertains that such items do have a capacity to be sold online.

The followings investigate the respondent's degree of agreement on various advantages of online activities compared to offline activities.

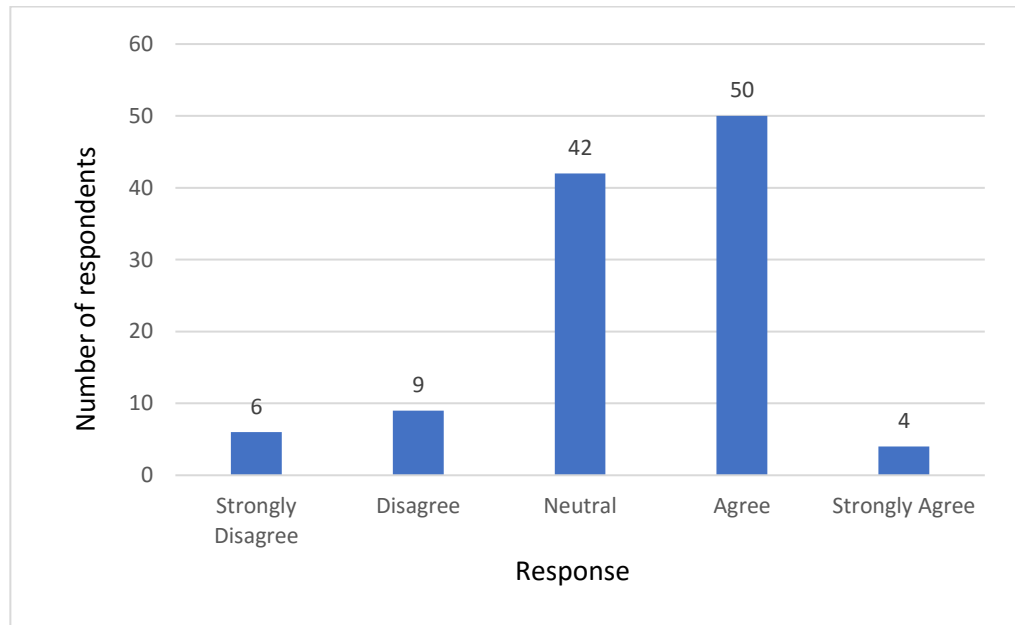
Figure 8: Bar chart showing the respondent's level of believe on online shopping being more time-saving than offline channels.



We first investigate the respondent's level of belief on online shopping being more time-saving than offline channels. Such comparison projects the respondent's choice of channel when making a purchase. The results of this investigation are given by the bar-chart in **Figure 8**. The researcher used the Likert scale measurement approach to get a clear understanding of the responses. Approximately 67% of the respondents agree that online shopping is time saving, whereas approximately 10% disagree on the same. 23% of the respondents were neutral about the statement. This gives a clear picture to the

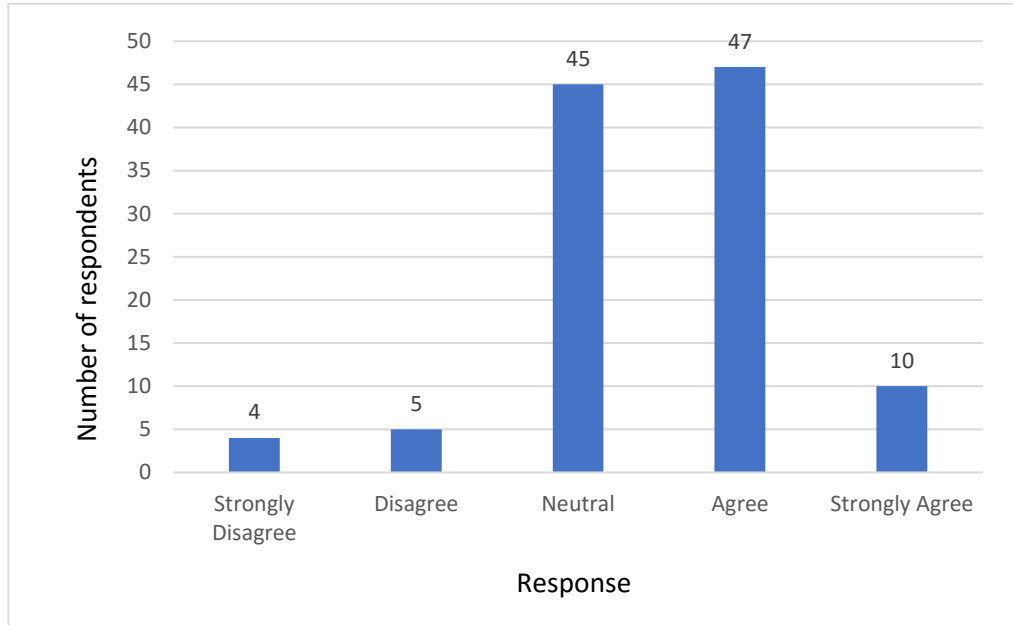
researcher that the responses suggest that majority of participants believe that online shopping is more time saving than offline channels (brick and mortar stores).

Figure 9: Bar chart showing the respondent's level of belief on online shopping being more money-saving than offline channels.



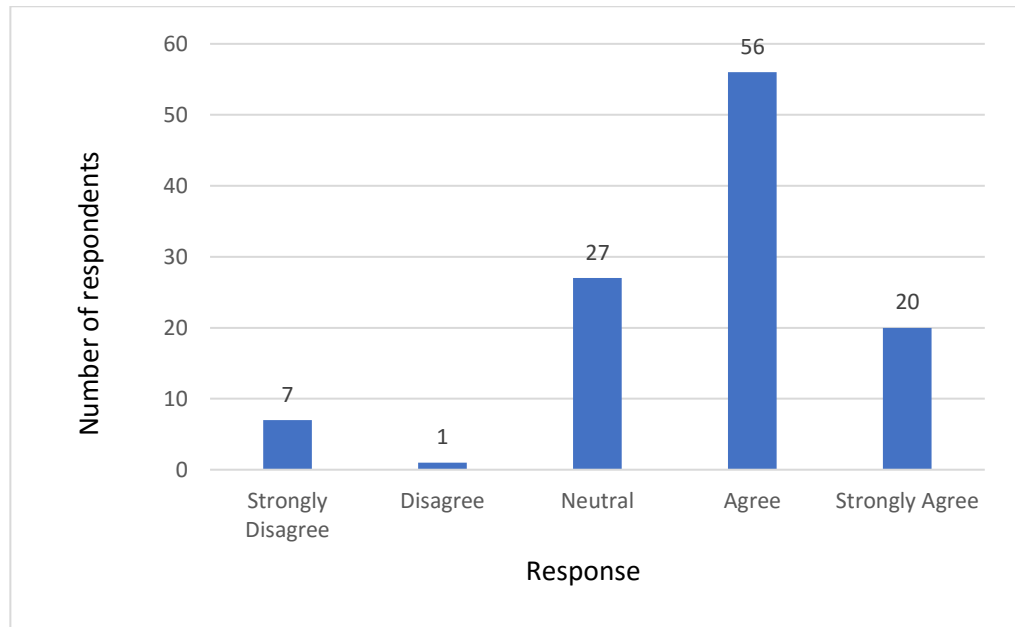
We then investigate the respondent's level of belief on online shopping being more money-saving than offline channels. **Figure 9** illustrates the degree of agreement by the respondents that online shopping is more money-saving than offline channels. The researcher used the Likert scale measurement approach to get a clear understanding of the responses. Approximately 49% of the respondents agree that online shopping helps one save more money as compared to offline shopping. Approximately 39% of the people remained neutral on the same, and 12% disagreed that online shopping saves them money. This turned out to be an interesting response, where majority of the respondents believe that online shopping helps one save money. The researcher gauges that the respondents might find online shopping cheaper since more money-saving deals are available or maybe that getting items delivered at their doorstep with no extra cost or effort is more economical.

Figure 10: Bar chart showing the respondent's level of belief on online shopping being more efficient than offline channels.



Next, we investigate the respondent's degree of agreement that online shopping is more efficient than offline channels. The researcher used the Likert scale measurement approach to get a clear understanding of the responses. This result is given by the bar chart in **Figure 10**. It was observed from this chart that approximately 51% of the respondents agree that online shopping is more efficient than offline channels, while approximately 41% of the respondents were neutral. Only 8% of the respondents think that offline channels are more efficient. This indicates that majority of the respondents agree with online shopping being more efficient. The researcher believes that online shopping is becoming more efficient as the policies and transparency has made the consumer more trustworthy of online portals. With fast delivery and easy return policy, the consumers are now choosing online portals as their one stop shop for all their needs rather than the offline ones.

Figure 11: Bar chart showing the respondent's level of believe on online shopping being more convenient than offline channels.



Next, we looked at the respondent's degree of agreement on online shopping being more convenient than offline shopping. The results obtained are represented by the bar chart in **Figure 11**. The researcher used the Likert scale measurement approach to get a clear understanding of the responses. It was observed that approximately 69% of the respondents agree to online shopping being more convenient as compared to offline shopping, with only 7% feeling the other way around. Approximately 24% of the respondents remained neutral about the statement. The researcher understands and believes that the consumers consider online shopping to be more convenient as it can be done at any given point of time and from anywhere. The hassle of running to a store in time gets negligible with online shopping giving the consumer choice and convenience. This in turn gives an advantage to online retailers to get business anytime of the day and to shoppers to browse items as per their convenience.

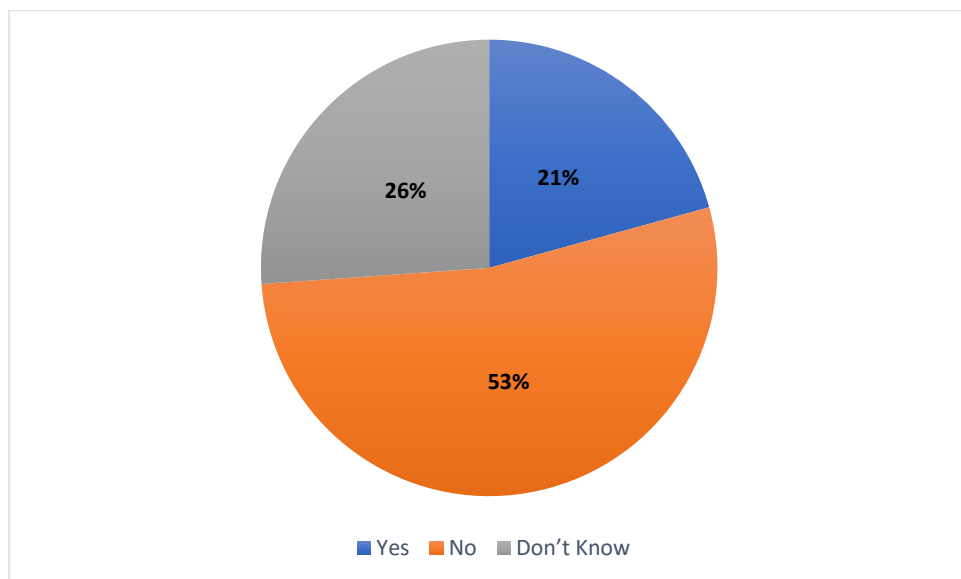
5.4 DEGREE OF AWARENESS REGARDING THE FENESTRATION PRODUCTS

Research Question 2

This section of the analyses covers the research question regarding the degree of awareness the respondents have regarding fenestration products being sold online?

The section also covers the respondents having knowledge of buying or know someone who has purchased fenestration online. It covers whether the respondents are willing to choose online channels instead of offline channels to make purchases. Some questions were asked regarding the knowledge the respondents have regarding the fenestration industry. The researcher has neatly presented the data collected with the help of pie charts and bar graphs.

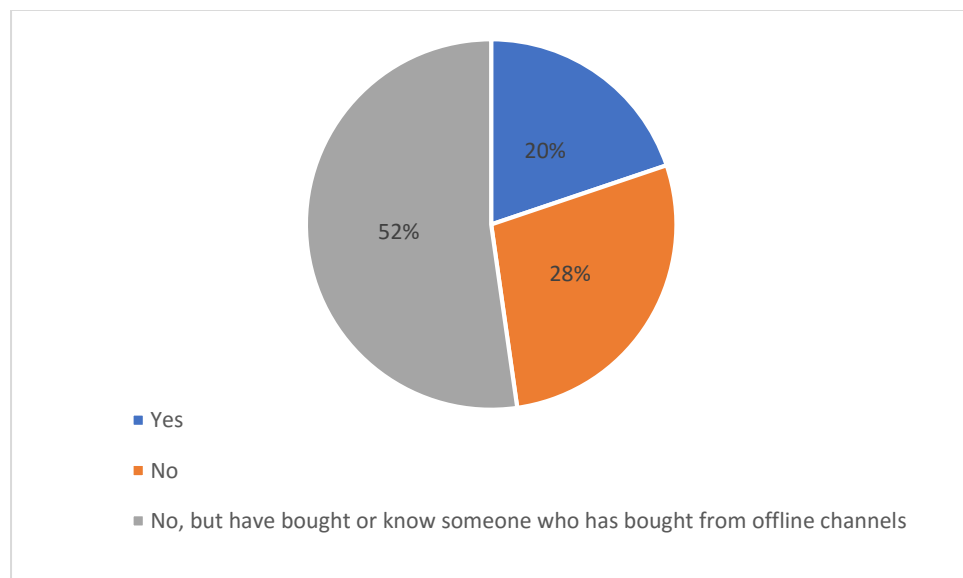
Figure 12: Pie chart showing distribution of respondents that have seen fenestration products being sold online.



The researcher first investigates the number of respondents that have seen fenestration products being sold online; some of them answered with 'yes', some with 'no' while others responded with 'don't know'. The results are presented in pie chart as given in **Figure 12**. It was observed that 21% of the respondents say that they have seen fenestration products being sold online, whereas, a big share of 53% of the respondents

haven't seen fenestration products being sold online. 26% of the respondents are not sure whether they have seen fenestration products online or not. The responses do not surprise the researcher as there are handful of companies selling fenestration products online. The researcher feels that fenestration Industry needs a stronger marketing tactic to capitalise on the niche market.

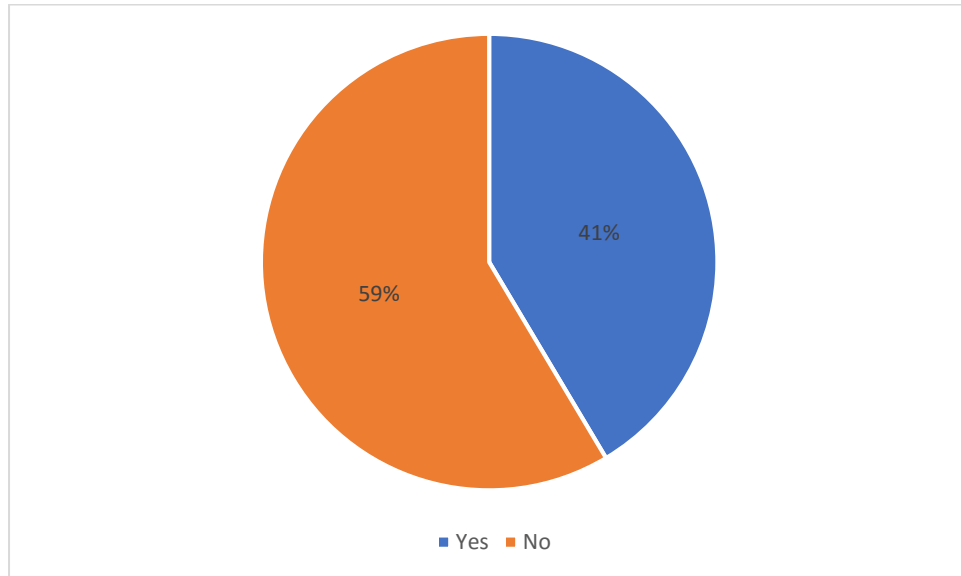
Figure 13: pie chart showing frequency distribution of respondents who have purchased fenestration products from either online or offline channels.



Then the researcher investigates the number of respondents who have purchased fenestration products from either online or offline channels. The results are presented in pie chart as given in **Figure 13**. It was observed that 20% of the respondents have bought fenestration products from online portals, whereas 28% of the respondents have never purchased fenestration products from either offline or online channels. 52% of the respondents have purchased from brick and mortar stores. The researcher understands that the market share of brick and mortar stores are higher compared to online channels when it comes to selling fenestration products. Such figures are

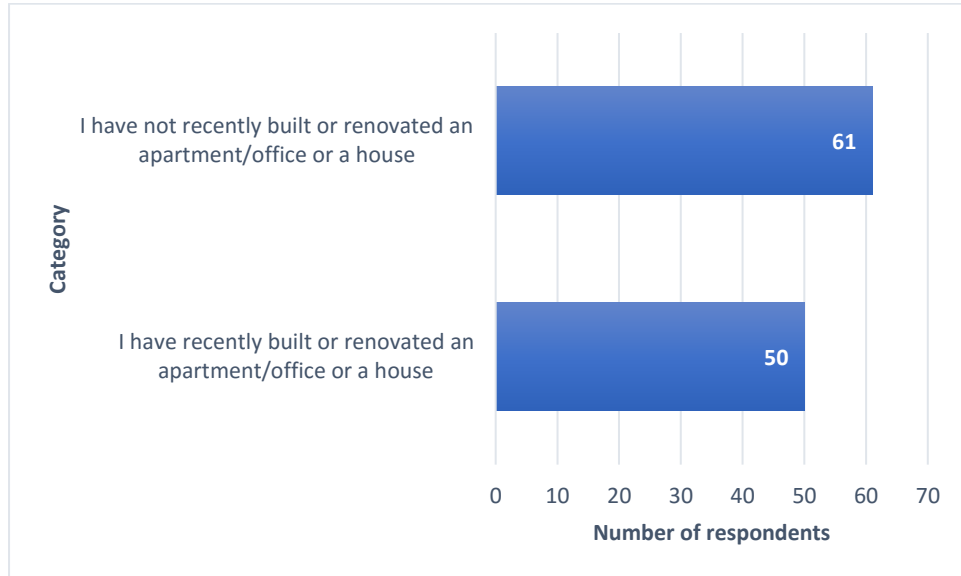
understandable since these products are not widely being sold online. Also, these products require a physical touch and feel.

Figure 14: Pie chart showing respondents responses on whether they would consider buying fenestration products from an online portal in the future.



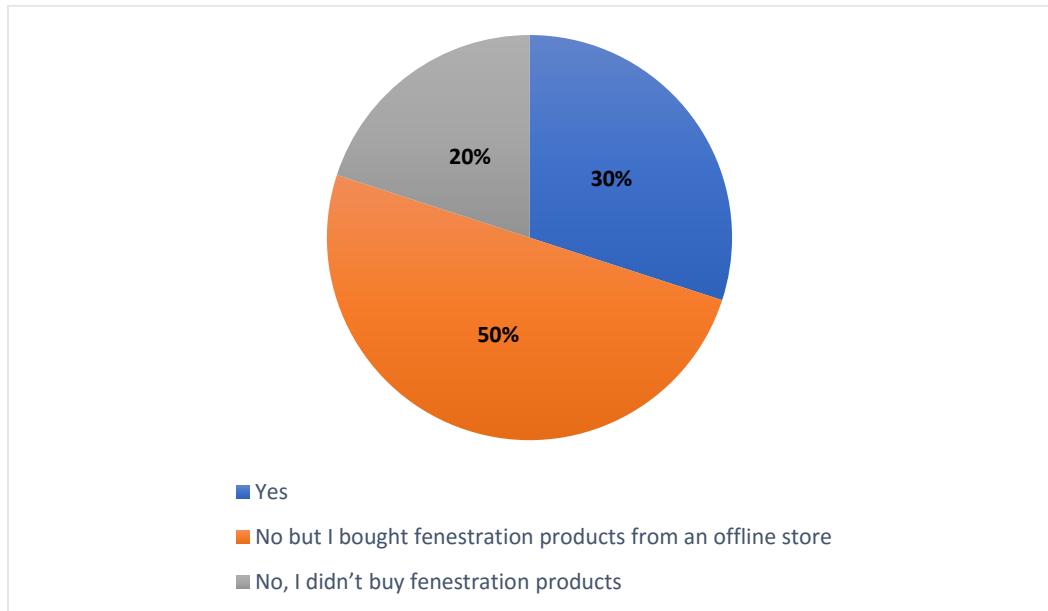
Then the respondents were then asked whether the respondents would consider buying fenestration products from an online portal in the future. Their responses were presented in pie chart as given in **Figure 14**. It was noted that 41% of the respondents agreed on using an online portal to purchase fenestration products, whereas 59% of the respondents felt they would be comfortable using offline channels. The data collected shows that majority of the respondents prefer offline channels to purchase fenestration products. This gives deep learning of the consumer behaviour as majority of their shopping done online but how some products still demand to be bought through brick and mortar stores.

Figure 15: Bar chart showing respondents have renovated or built a house/apartment/office or not.



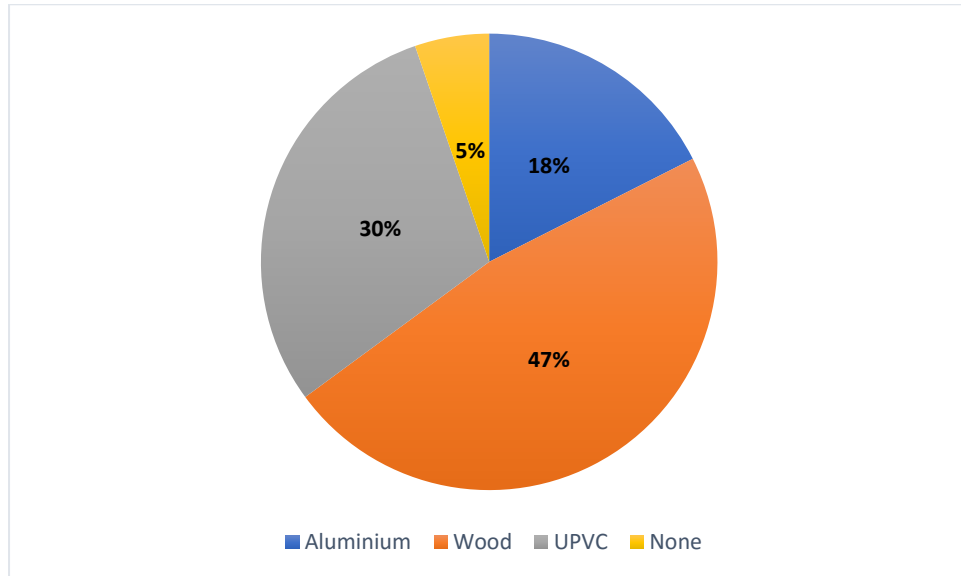
The respondents were asked whether they have renovated or built a house/apartment/office or not. The responses were presented in bar chart as given in **Figure 15**. The following question will lead to other questions which will give an insight to the purchase influencer when it comes to purchasing fenestration products. It was observed that 45% of the respondents have recently built or renovated an apartment/office or a house, whereas 55% of the responses have not recently built or renovated an apartment/office or a house.

Figure 16: Pie chart showing whether the people who renovated or built an apartment/office/house, purchased fenestration products from an online store.



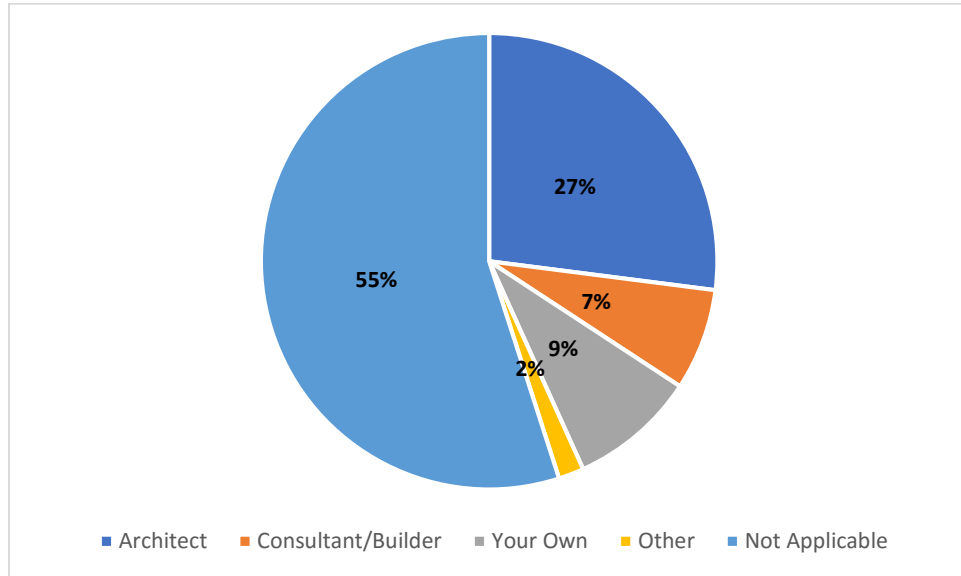
It was then investigated whether the people who renovated or built an apartment/office/house, purchased fenestration products from an online store and the results were presented in pie chart as given in **Figure 16**. The researcher gathered that offline (brick and mortar) stores are preferred as compared to online stores when it comes to purchasing fenestration products. This conclusion was drawn because the maximum number of respondents (c.50%) selected brick and mortar stores to purchase fenestration products. 30% of the respondents bought fenestration products from an online store, whereas 20% of the respondents didn't purchase fenestration products while building/renovating their houses/apartments/offices. People are less aware of fenestration being sold online which can also be a reason why it's not the preferred platform to purchase.

Figure 17: Pie chart showing the different types of fenestration products that have been bought.



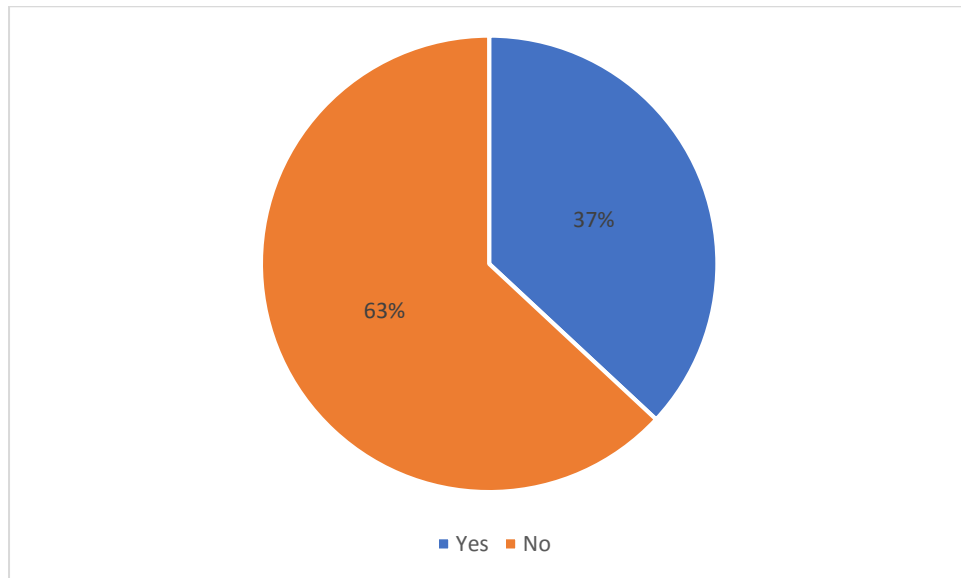
The researcher then investigates the different types of fenestration products that have been bought. The results are presented in pie chart and given in **Figure 17**. The responses were collected from those respondents who have purchased fenestration products. It was noted that maximum number of respondents (c.47%) bought wood fenestration products, whereas 30% of them bought UPVC. 18% of the respondents purchased aluminium fenestration products, and the lowest (c.5%) of them didn't know the material type. The data collected shows that majority of the respondents prefer wood finish products. Such data can be helpful in designing the products for the consumers.

Figure 18: Pie chart showing the factors that influence the purchase of the respondents who purchased the fenestration products.



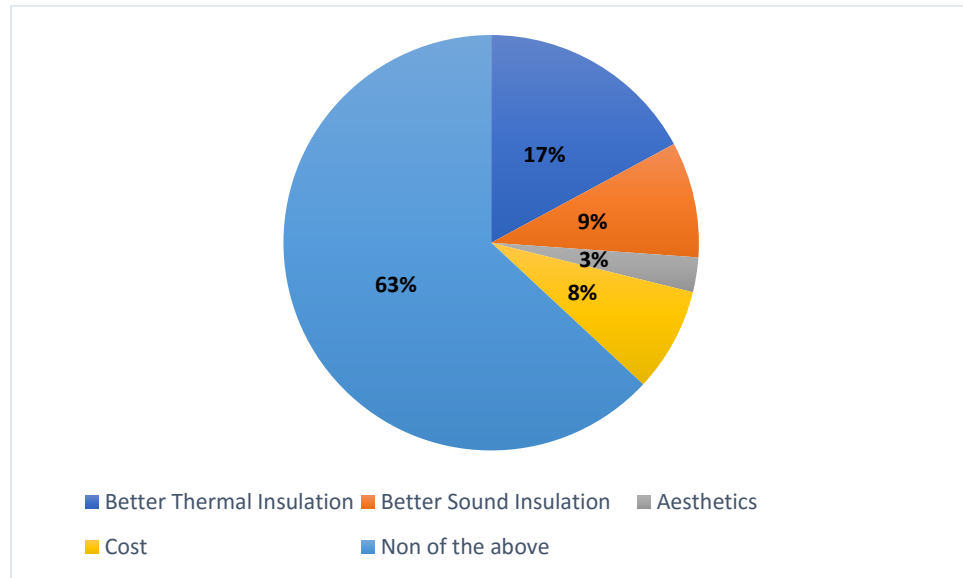
Then the research investigates the factors that influence the purchase of the respondents who purchased the fenestration products. The responses are presented in pie chart as given in **Figure 18**. The responses give a meaningful insight to the researcher suggesting that businesses should focus more towards marketing themselves to Architects and Consultants/Builders as they have the influencing power. Also, collaborating with them can get more businesses. More than half (c.55%) of the respondents were not applicable to the question. 45% of them were applicable, out of which 27% of the respondents believe that the architects play an important role in the purchase decision, whereas 7% feel that a consultant/builder helps them make this decision. Only 9% of the respondents feel that they influence themselves during the purchase, whereas only 2% rely on sources other than these.

Figure 19: Pie chart showing whether the respondents have searched online to gather information regarding fenestration products.



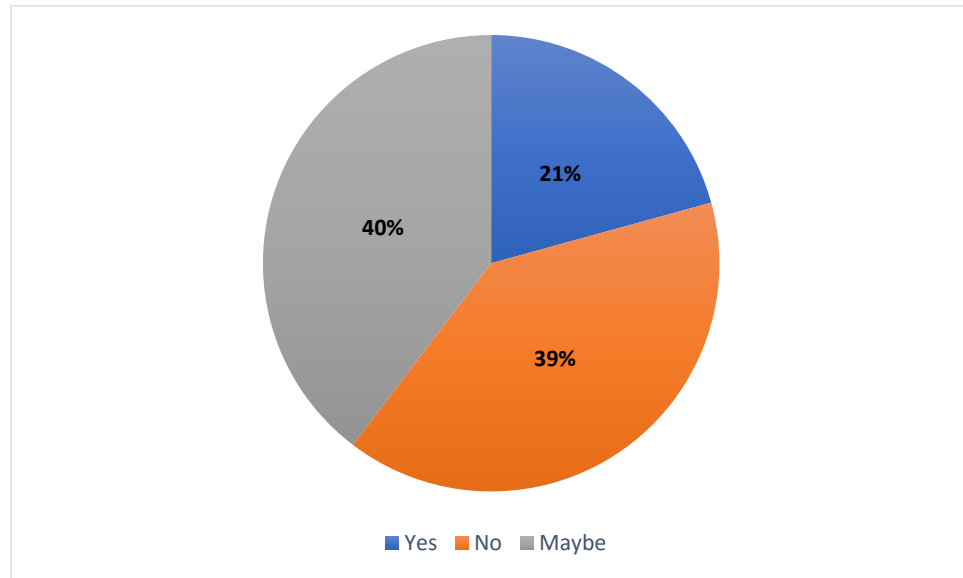
Then it was investigated whether the respondents have searched online to gather information regarding fenestration products. The researcher wants to understand the characteristics that the respondents are looking for when gathering information regarding fenestration products. The results are presented in pie chart in **Figure 19**. It was noted that 37% of the respondents have searched online, whereas 63% have not.

Figure 20: Pie chart showing characteristics searched by the respondents regarding the fenestration products.



Then the characteristics searched by the respondents regarding the fenestration products were investigated and the responses are presented in the pie chart given in **Figure 20**. It was observed that 63% of the respondents haven't searched for fenestration products, whereas 17% of the respondents searched for better thermal insulation. 9% of the respondents looked for better sound insulation, whereas 8% and 3% of the respondents looked for cost and aesthetics respectively. This gives the researcher a deep understanding of the features the respondents are looking for when they are searching for fenestration products online. Such characteristics which the respondents give importance to can be used to market fenestration products.

Figure 21: Pie chart showing whether the respondents would be interested in knowing more about buying fenestration products online.



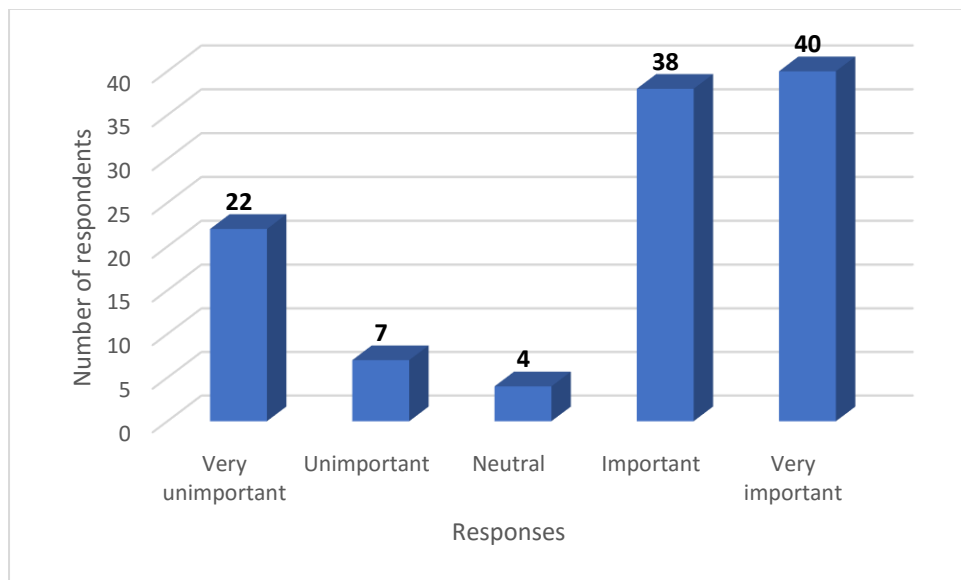
The researcher then investigates whether the respondents would be interested in knowing more about buying fenestration products online. The responses are presented in pie chart as given in **Figure 21**. It was observed that 40% of the respondents were unsure, whereas 39% of the respondents shared their interest on knowing more about fenestration products being sold online. 21% of the respondents refuse to get any other information. This data helps the researcher to understand willingness of the respondents to get more information on buying fenestration products online. Businesses should make it easy for the consumers to make the purchase of fenestration easier.

5.5 IMPORTANCE OF CHARACTERISTICS OF RETAIL WEBSITES

Research Question 3

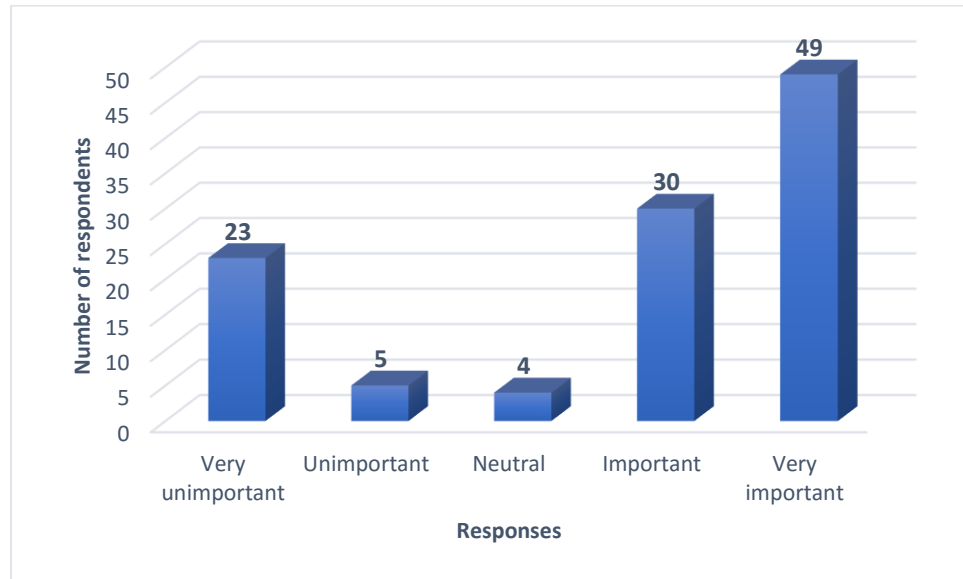
This section of the analyses covers the research question regarding the importance of characteristics of retail websites.

Figure 22: Bar chart showing the respondent's responses on easy access of retail websites.



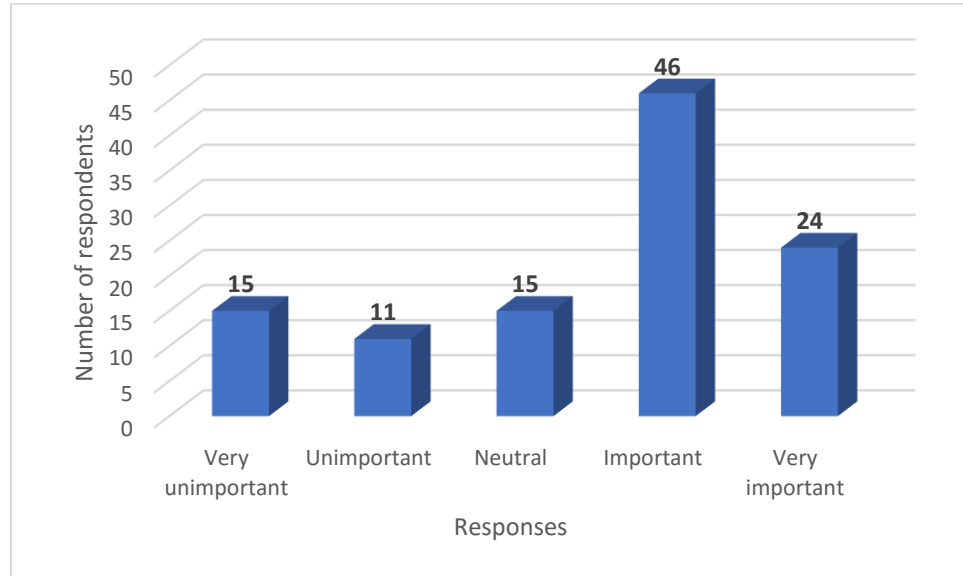
We first investigate the respondent's responses on easy access of retail websites. The researcher used the Likert scale measurement approach to get a clear understanding of the responses and the results are represented by the bar chart in **Figure 22**. It was observed that approximately 71% of the respondents feel that easy access to a retail website is very important or important. Next in line, approximately 26% of the respondents feel that easy access is unimportant or very unimportant. Only 3% of the respondents feel neutral on this characteristic. Not everyone is tech savvy, which makes the researcher believe that easy access to retail websites gives confidence to consumers to make purchases and helps the businesses to target various types of consumers and boost their sales.

Figure 23: Bar chart showing the respondent's responses on degree of importance of user-friendliness of retail websites.



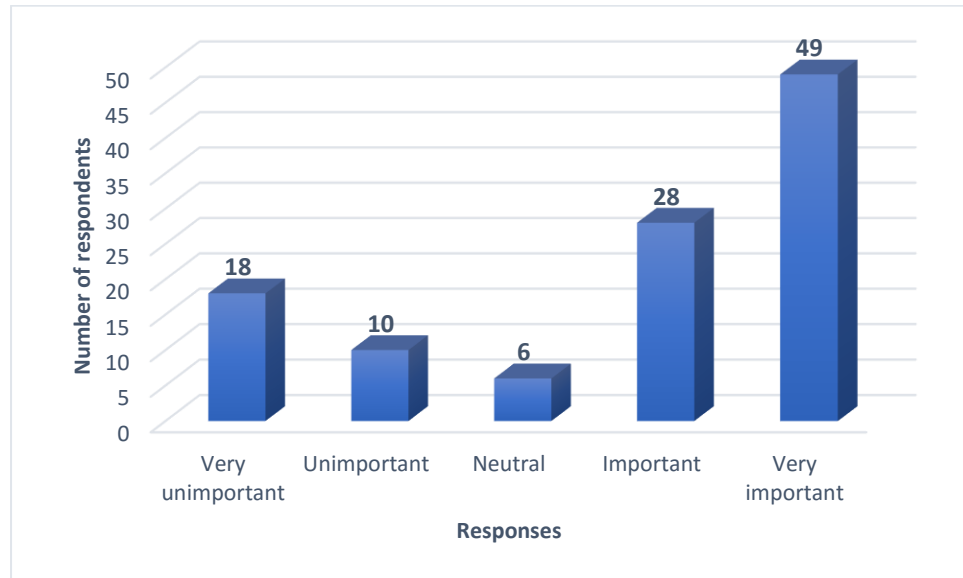
Then the researcher investigates the respondent's responses on degree of importance of user-friendliness of retail websites. The researcher used the Likert scale measurement approach to get a clear understanding of the responses. The results obtained were represented by the **Figure 23**. With only 3% of the respondents being neutral, the maximum number of respondents (c.72%) feel that user friendliness is the very important or important and approximately 25% feel otherwise. The responses conclude that a retail website needs to be user friendly to let consumers be at least to operate and understand them. The researcher believes that an intuitive user interface can help target more consumers.

Figure 24: Bar chart showing the respondent's responses on importance of design of retail websites.



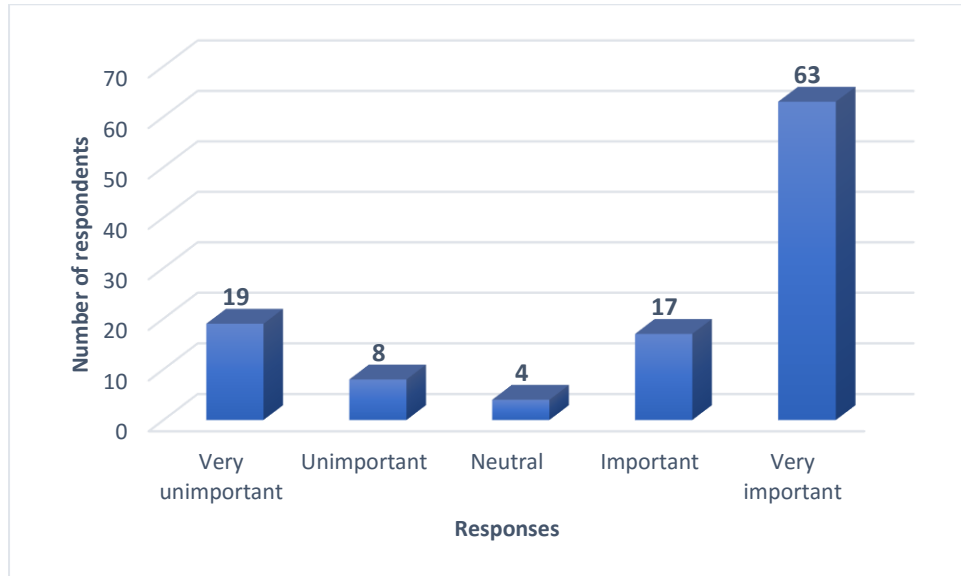
Then the researcher investigates the respondent's responses on degree of importance of design of retail websites. The researcher used the Likert scale measurement approach to get a clear understanding of the responses. The results obtained were represented by the bar chart in **Figure 24**. More than half of the population (c. 63%) believe that design is very important or important for a retail website, whereas approximately 24% of the respondents think otherwise. Only 13% of the respondents were neutral with this characteristic. The researcher feels that the design does play a vital role on the overall look of the retail website since that's all that the consumer gets to see unlike the touch and feel in an offline store. This indicates that the businesses should focus on the design of their retail website so as to draw more consumers towards them.

Figure 25: Bar chart showing the respondent's responses on degree of importance of reputation of retail websites.



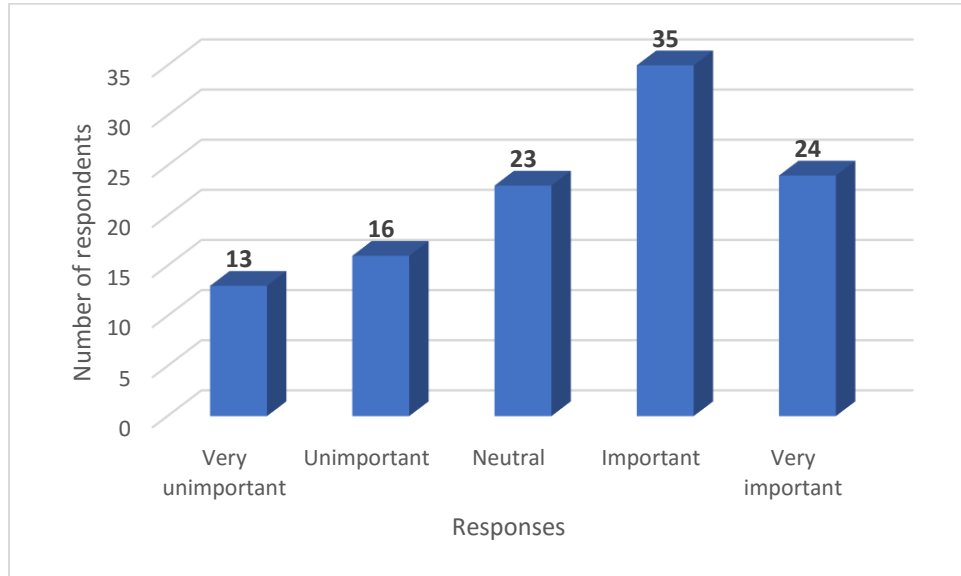
Then the researcher investigates the respondents' responses on degree of importance of the reputation of retail websites. The researcher used the Likert scale measurement approach to get a clear understanding of the responses. The results obtained were represented by the bar chart in **Figure 25**. Approximately 70% of the respondents feel that reputation is very important or important, whereas 25% of the respondents feel otherwise. This leaves only 5% of the respondents feeling neutral about this characteristic. The researcher believes that having a good reputation is always beneficial for the business when it comes to online retail and should be of utmost importance.

Figure 26: Bar chart showing the respondent's responses on importance of security in retail websites.



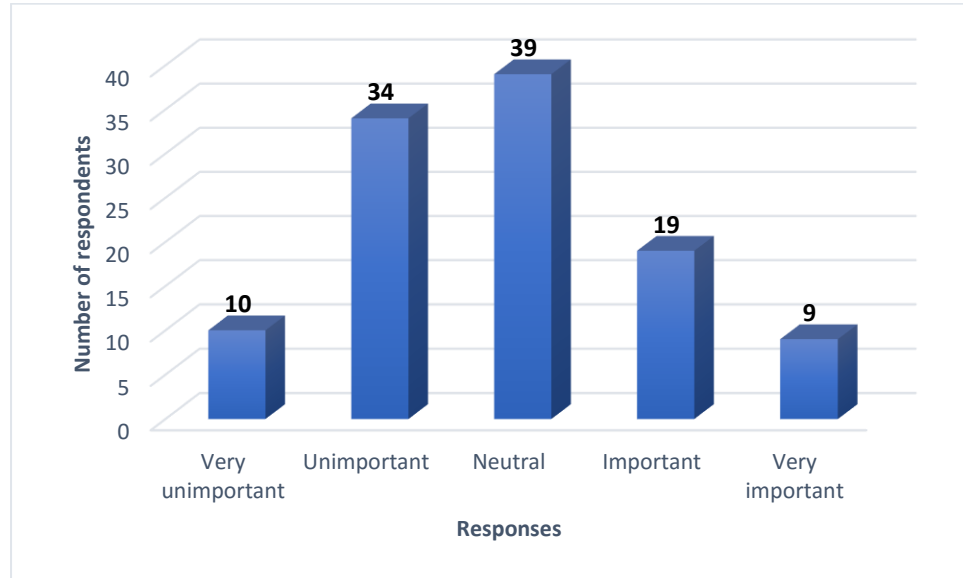
Then the researcher investigates the respondent's responses on the importance of security in retail websites. The researcher used the Likert scale measurement approach to get a clear understanding of the responses on the statements and believes that online retail websites ensure security to its consumers. In the age of digital era and the rising theft in cyber-crime and identity theft, security of consumers is of highest priority. The results obtained were represented by the bar chart in **Figure 26**. Majority of the respondents (c.72%) do agree with the same and feel that security in retail websites is of utmost importance, whereas approximately 25% feel otherwise. 3% of the respondents are neutral to this characteristic.

Figure 27: Bar chart showing the respondent's responses on importance of interactive elements in retail websites.



The researcher then investigates the respondent's responses on the importance of interactive elements in retail websites. The researcher used the Likert scale measurement approach to get a clear understanding of the responses on the statements where the researcher believes that these elements can play an important role in the decision making for the consumer. The results obtained were represented by the bar chart in **Figure 27**. About 53% of the respondents feel that interactive elements do play an important role, whereas, 26% of the respondents feel that its unimportant. 21% of the respondents feel neutral about this characteristic. Interactive elements include an on-site chat which provides help to the customers, also various elements such as 360-degree view, zoom in and out and various other factors which helps the customer to know the product more.

Figure 28: Bar chart showing the respondent's responses on importance of entertainment factor in retail websites.



The researcher then investigates the respondent's responses on the importance of entertainment factor in retail websites. The results obtained were represented by the bar chart in **Figure 28**. The researcher used the Likert scale measurement approach to get a clear understanding of the responses on the statements. Approximately 25% of the respondents feel that entertainment factor in retail websites is important or very important, whereas, approximately 40% of the respondents feel otherwise. 35% of the respondents feel neutral about this characteristic. The researcher feels that the entertainment factor depends on the kind of a retail website it is. Although, as per the responses it doesn't seem to be an important characteristic of a retail website.

5.6 DIGITAL CUSTOMER EXPERIENCE AND SOCIAL MEDIA INTERACTION

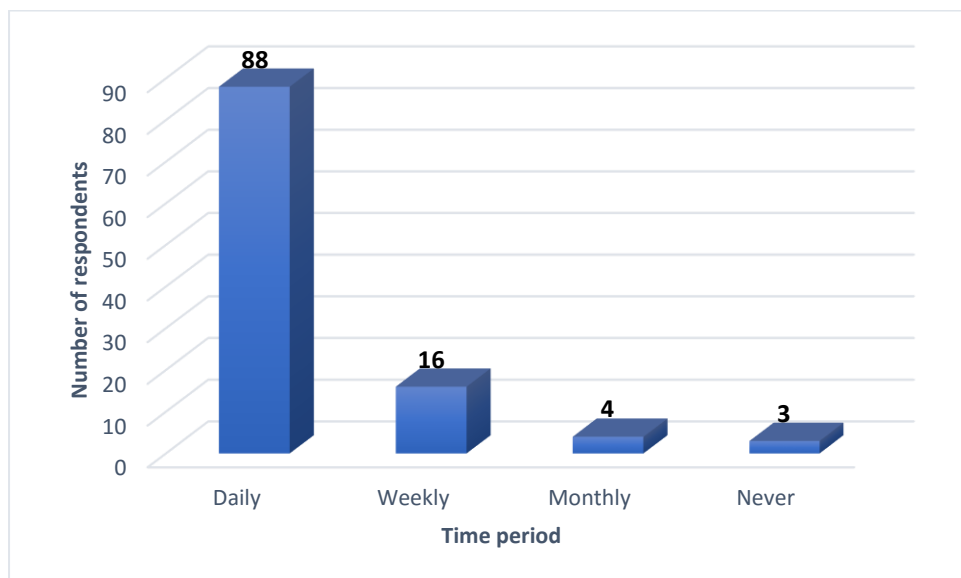
Research Question 4

What is the role of digital customer experience in their buying decision?

- What is the role of social media in the decision-making process of a consumer?
- Is there significant interaction between the consumers and their favourite brand's social media handles?

This section of the study discusses about the digital customer experience, focusing on the interactions of consumers with the social media handles of their favourite brand. The researcher also tends to understand the best way to market the product to their potential customer by getting insights on the respondent's usage of the internet. The researcher has neatly presented bar graphs and pie charts to explain the data collected.

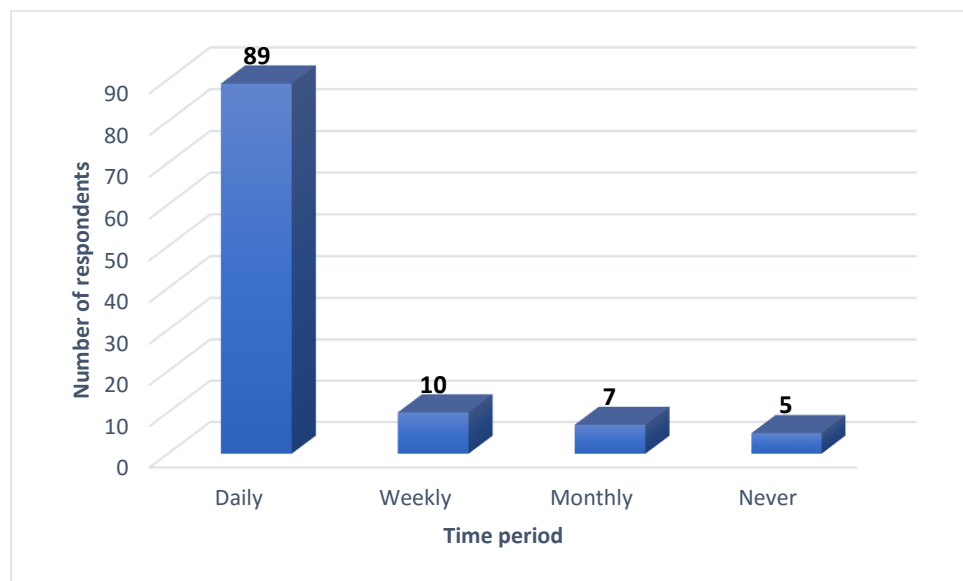
Figure 29: Bar chart showing frequency distribution by time of respondents checking and sending email messages.



The researcher first investigates the rate at which the respondents check and send email messages. The results are represented by the bar chart in **Figure 29**. It was observed

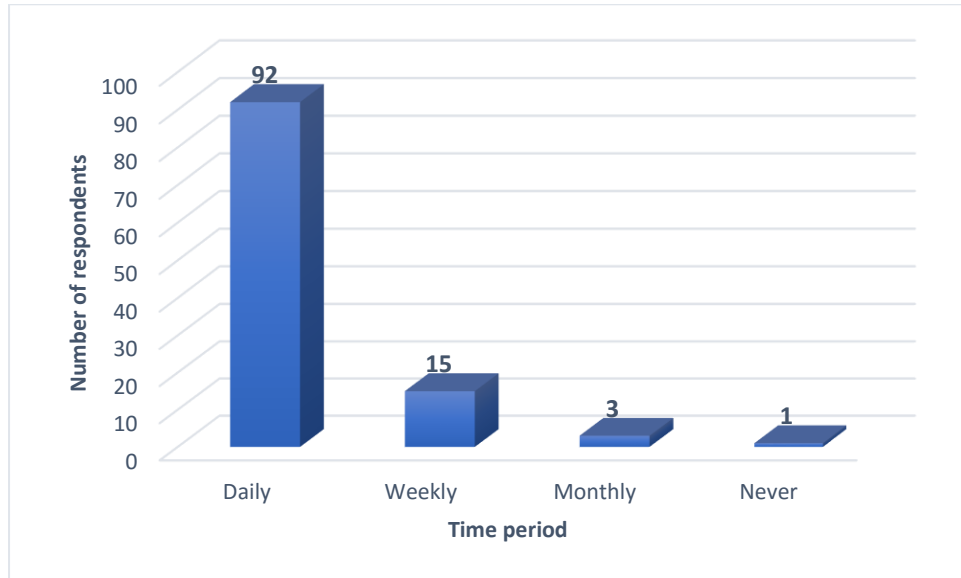
that a big share of c.79% of the respondents check or send email messages on a daily basis and c.15% on a weekly basis. Approximately 4% check or send e-mails at least once a month, whereas 2% of the respondents never do it. The researcher feels that this kind of insights can be of use as businesses can take advantage of this data and create e-mail marketing campaigns to target their customers.

Figure 30: Bar chart showing frequency distribution of respondents networking on social media platform.



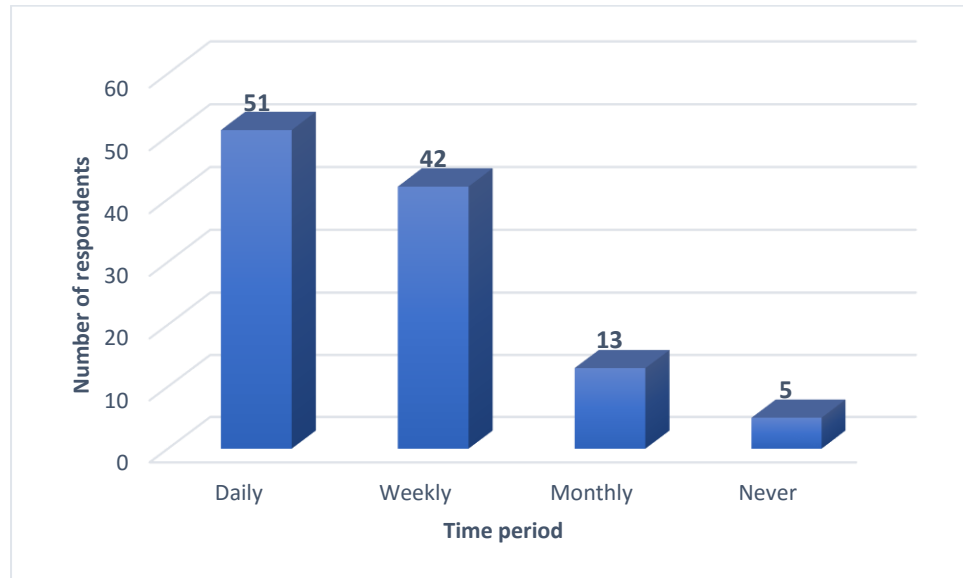
Then the researcher looked at the rate at which the respondents are networking on social media platforms such as Facebook, Instagram etc. The results are presented in the bar chart in **Figure 30**. It was observed that 80% of the respondents socialise on social media platforms daily, whereas 9% of the respondents do it on a weekly basis. Approximately 7% socialise once a month on social media platforms, whereas 4% of the respondents never socialise on social media platforms. The researcher can conclude that it will be a viable option to target social media platforms to market our products/service as majority of the respondents use these platforms on a daily basis.

Figure 31: Bar chart showing frequency of the respondent's services provided by Google.



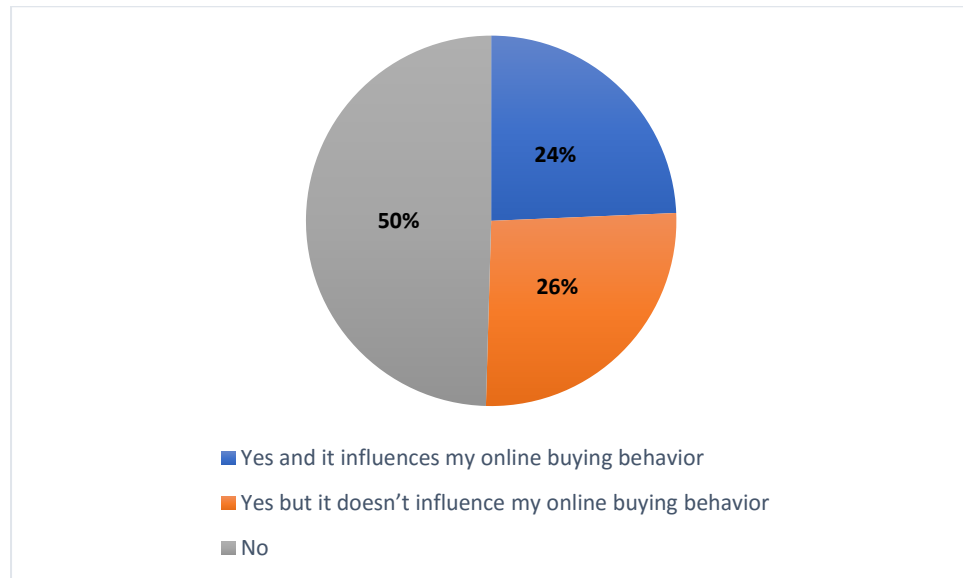
The researcher then investigates the frequency of the respondent's services provided by Google. The results are presented in the bar chart in **Figure 31**. A very large portion of the respondents (c.83%) use Google services on a daily basis, whereas approximately 14% of the respondents use it weekly. Only 2.5% of the respondents use Google services at least once a month, whereas 0.5% of the respondents never use it. Understanding the usage of Google services, the researcher has gained deep insights and believes Google marketing services such as google analytics can be of good use to market the product.

Figure 32: Bar chart showing frequency distribution of the respondents reading blogs online.



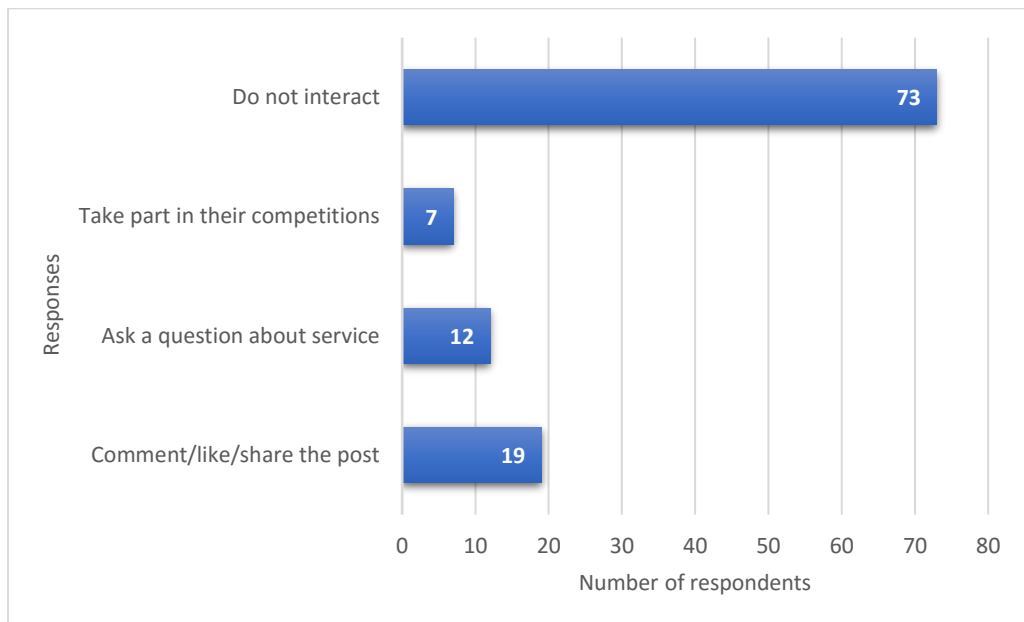
Then the frequency of the respondents reading blogs online was investigated and the results are presented in bar chart given in **Figure 32**. It was observed that approximately 46% of the respondents read blogs online on a daily basis, whereas approximately 38% of the respondents read blogs on a weekly basis. 12% of the respondents read blogs online on a monthly basis and only 4% of the respondents don't ever read them. The researcher feels that tapping an influencer can be beneficial for the brand depending on what kind of people does the target market follow. Such insights on daily, weekly, monthly usage has given the researcher some meaningful data on the activities of the respondents. These can be applied to marketing the products which can be beneficial for the company's success.

Figure 33: Pie chart showing the number of respondents following the official social media handles of their favourite retailers or service provide.



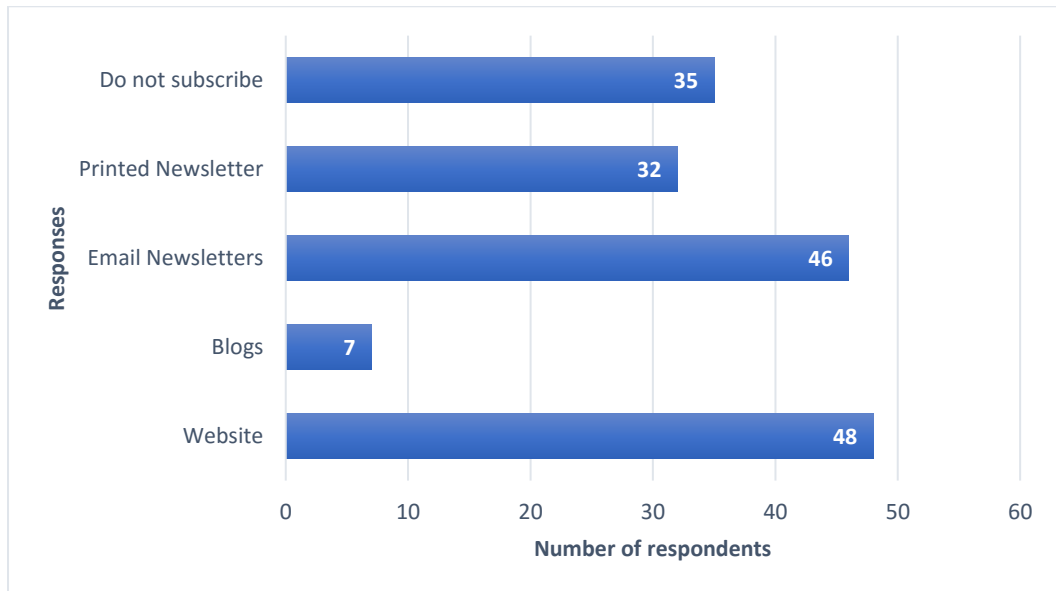
Then the number of respondents following official social media handles of their favourite retailers or service providers was investigated next. The results are represented by the pie chart in **Figure 33**. It was observed that the responses have come in half and half. 50% of the respondents do not follow the official social media handles of their favourite retailers or service providers, whereas 50% of the respondents do follow. Interestingly, 24% of the total respondents who do follow their favourite retailer or service provider gets influenced by the campaigns or posts they share on their handle. If compared to the total number of respondents following the official handles, about 48% of the respondents do get influenced by the posts which is quite a high number to drive sales. The researcher feels, interacting with the consumers on a regular basis on social media handles keeps the consumers up to date with the latest offering of the brand.

Figure 34: Bar chart showing distribution of respondents interact with their favourite retailers or service providers on social media handles.



Then the researcher investigates the way the respondents interact with their favourite retailers or service providers on social media handles. The results were presented in bar chart in **Figure 34**. It was observed that a large portion (c.66%) of the respondents do not interact with their favourite retailers or service providers on social media platforms. On the other hand, c.34% of the respondents interact with them through various ways such as taking part in their competitions, asking questions about their service and commenting/liking/sharing the post. This gives deep insights to the researcher on how do the respondents interact with their favourite retailers or service providers on social media handles. The researcher believes that businesses should use those social media handles that their target audience use. Having a digital presence in this age has become mandatory but the businesses should invest in those platforms where they feel they can connect with their target audience better.

Figure 35: Bar chart showing distribution of other channels apart from social media platforms of respondents' favourite retailers or service providers.



Then, other channels apart from social media platforms of their favourite retailers or service providers the respondents might subscribe, to keep themselves updated with their latest offerings were investigated. The results are presented in bar chart as given in **Figure 35**. They were asked to select multiple answers as applicable. It was noted that 21% of the responses haven't subscribed to any other channels to keep themselves updated, whereas 29% of the respondents visit the website of their favourite retailers or service providers to stay updated. 27% of the responses depend on e-mail newsletters to stay updated, whereas 19% of the responses like to be updated by printed newsletters. 6% of the responses depend on blogs to keep themselves updated. This gives good knowledge on the marketing aspects for the businesses. The responses show that businesses should keep their websites up-to-date and majority of the respondents still rely on the age-old newsletter service, be it printed or e-mail.

5.7 TESTING FOR DEGREE OF RELATIONSHIPS BETWEEN THE PARTICIPANT'S RESPONSES TO THE VARIOUS VARIABLES

(1) In this section, the researcher investigates if significant relationship exists among the participant's degrees of belief on various advantages of online shopping over the offline channels. Such advantages include: more time-saving, more money-saving, more efficient, and more convenient than the online channels. The five-point Likert scale used here include: Strongly Disagree (SD), Disagree (D), Neutral (N), Strongly Agree (SA), and Agree (A). The data are as given in the Table 1 below. The Pearson product moment correlation coefficient technique was used with the aid of the MINTAB version 17 software to obtain the correlation coefficient between the participant's level of belief on each of the given pairs of advantages of online shopping. The correlation coefficients (output) generated by the Minitab software are given in form of correlation matrix in Table 2 that follows.

TABLE 1: Respondents level of belief on advantages of online shopping over offline channels

Scale	Saves more time	Saves more money	More efficient	More convenient
SD	7	6	4	7
D	4	9	5	1
N	26	42	45	27
SA	46	50	47	56
A	28	4	10	20

Table 2: Correlation: Saves more time, Saves more money, More efficient, More convenient

	Saves more time	Saves more money	More efficient
Saves more money	0.741		
More efficient	0.797	0.981	
More convenient	0.967	0.846	0.859

Cell Contents: Pearson correlation

From this output, it can be seen directly that there is strong and positive correlation between the respondent's degree of belief that online shopping is more time-saving and more money-saving, more efficient, and more convenient, than the offline channels. Strong and positive correlation also exist between their degree of belief that online shopping saves more money and is more efficient, and more convenient than the offline channels. Lastly, strong and positive correlation also exist between the respondent's belief that online shopping is more efficient and more convenient than the offline channels.

(2) In this section, the researcher investigates if significant relationship exists among the participant's responses on importance of each of the given series of characteristics of retail websites. Such characteristics include, easy access, user-friendliness, design, reputation, security, and interactive elements. The five-point Likert scale used here include: Very unimportant (VUI), Unimportant (UI), Neutral (N), Important (I), Very Important (VI). The data are as given in the Table 3 below. The Pearson product moment correlation coefficient technique was used with the aid of the MINTAB version 17 software to obtain the degree of relationship between the participant's responses for each of the possible pairs of these characteristics. The resulting correlation coefficients (output) are given in form of correlation matrix in Table 4 that follows.

TABLE 3: Respondents' level of belief on the characteristics of retail websites

Scale	Easy access	User friendliness	Design	Reputation	Security	Interactive elements
VUI	22	23	15	18	19	13
UI	7	5	11	10	8	16
N	4	4	15	6	4	23
I	38	30	46	28	17	35
VI	40	49	24	49	63	24

Table 4: Correlation: easy access, user friendliness, design, reputation, security, interactive elements

	easy access	user friendliness	design	reputation	security
user friendliness	0.947				
design	0.749	0.521			
reputation	0.909	0.981	0.484		
security	0.75	0.917	0.197	0.951	
interactive elements	0.551	0.346	0.908	0.382	0.136

Cell Contents: Pearson correlation

From this output, it can be seen directly that, there is strong and positive relationship between the respondent’s level of belief on each of the pairs of the characteristics under consideration except the relationship between interactive element and user-friendliness, interactive element and reputation, interactive element and security, security and design and reputation and design. The correlation coefficients for these pairs of characteristics are given in boldface above and they are weak. That is, the relationship between the responses given by the respondents for each of these pairs of variables is very weak.

- (1) Lastly, we looked at the degree of correlation between the rate at which the respondents send/check email messages online and the rate at which they read blogs online. The scale used here include daily, weekly, monthly and never. The output is given under the table and we observed that the correlation is also strong and positive.

Table 5: Sending/checking email messages and reading blogs online

	Sending and checking Email messages	Reading blogs online
Daily	88	51
Weekly	16	42
Monthly	4	13
Never	3	5

Correlation: send email messages, reading blogs

Pearson correlation of send email messages and reading blogs = 0.794, which indicates a strong and positive relationship between the responses of the two variables.

6. DISCUSSION

Objective one of this study was to understand how likely are consumers to purchase products and services online as compared to traditional channels. The researcher wanted to comprehend the consumer behaviour and their concerns while purchasing products and services online. This can benefit in the designing of an online portal keeping the concerns and the behaviour of the consumers in consideration. Smith (2016) explains consumer behaviour as the study of individuals and organisations as to how they select and use the products and services that they buy. He stresses upon on the importance of understanding the consumer behaviour as it helps the marketers to adapt and improve their marketing campaigns in order to influence the consumers.

The respondents of the questionnaire expressed on how often do they shop online and the types of products they purchase online. The results show that they purchase a wide range of products online at least once a month.

Despite carrying an extensive research on online behaviour of consumers, the researcher didn't uncover anything different from the current academic literature.

Gallino and Moreno (2012) discuss the shift of retailers from offline to online to reduce the cost and provide customers with better value proposition. Littlefield *et al.* (2000) article stresses on the effectiveness and convenience of online portals as they help with increased information and efficiency. The respondents of the questionnaire felt the same as they felt that online portals are convenient and efficient to use and help in saving time and money. Moreover, the researcher unveiled that the respondents also feel that online portals are more time and money saving along with being more efficient than brick and mortar stores.

Respondents were also asked to express any concerns while shopping online. The current academic literature focused on the consumers concern on security and delivery logistics. However, the researcher unveiled that though the respondents were concerned about lack of security, quality standards stood as the highest point of concern of the respondents followed by unclear return and guarantee policy. Such responses suggest that online portals have been successful in creating a secure platform but need

to deliver good quality products and lay stress on providing adequate information regarding the return and guarantee policy.

Objective two of this study was to understand the application of digital customer experience and the role of social media platforms. Digital customer experience is the understanding of the consumers activity online. What products do they purchase, how often do they purchase and how do they interact online? Neti (2011) emphasises on social media enabling businesses to share their expertise and knowledge with their consumers which increases the probability of generating revenue and reduction of cost by decreasing staff time. For example, a business is promoting their product online by sharing all the valuable information regarding the product. One post can reach thousands of interested consumers with a single staff member devoting its time rather than a business employing numerous staff members at stand-alone places and trying to promote the product.

Karr (2015) infographic shows that majority (59%) of consumers surf on social media platforms at least once a day, which is similar to what the researcher of this study unveiled. Majority (80%) of the respondents of the questionnaire of this study agreed on surfing online at least once a day while also using email services on a daily basis.

Alafeef (2014) highlights that social media handles encourages users to spread information and interact which builds brand loyalty. However, the respondents of the questionnaire of this research felt otherwise. Half (50%) of the respondents didn't follow their favourite brand's social media handles. Also, majority (73%) of the consumers did not interact with their favourite brand on social media platforms but followed them through email/printed newsletters and surfed on their website to gather information.

While the current academic literature matches with the responses on daily usage of social media platforms, the responses of the questionnaire on interaction on social media shows a completely opposite picture with respect to the current academic literature. The strength of the arguments presented by the respondents forces the researcher to agree that marketers should focus more on maintaining a well updated website and send occasional newsletters. Also, social media websites can be an

excellent platform for marketers to create advertisements and target their audience accordingly.

Objective three of this study aimed at understanding the degree of knowledge the consumers have regarding doors and windows (fenestration products) being sold online. This section of the study lacks academic literature and the researcher focused on the primary data collected by the responses of the questionnaire. Majority of the respondents lacked knowledge of fenestration products being sold online. However, consumers have purchased fenestration products from brick and mortar stores. To gain more insights the researcher further examined whether the respondents were comfortable in purchasing fenestration products from an online portal in future to which majority of the consumer showed no interest. Although, majority of the respondents did show interest in gathering more knowledge on how to buy fenestration products online but did not search to gather information regarding the same. The findings suggest that fenestration products are demanded offline as majority of the respondents (52%) have purchased it from a brick and mortar store. This industry needs more research on how to develop an online platform for a product which demands technical knowledge and tangability.

Objective four of this study aimed at understanding the degree of influence of the respondents while purchasing fenestration products. Understanding the influencer will help the marketers to ascertain the target market. Jackson (2016) argues that understanding the target market is fundamentally the most important task for a marketer. She suggests that marketers should question themselves “Who is this going to appeal to?” or “Whom do I want it to appeal the most?” Johnson (2014) stresses on understanding the factors that influence the consumer purchase decisions. He highlights that marketers must be aware of their consumers purchase influencer.

The respondents of the questionnaire were asked to express their purchase influencer when purchasing fenestration products. The majority of the responses suggest that architects play a pivotal role in the decision-making process of consumers. The responses suggest that fenestration industry should target architects and collaborate them on becoming the middlemen so as to influence the audience.

6.1 LIMITATIONS

The researcher has tried to mitigate the limitations of this research. Nonetheless, some still exist. One of the major limitations of the study includes the limited sample size especially the demographic sample size, which would give an understanding of consumer behaviour and the degree of knowledge for fenestration products being sold online in different parts of India.

The second limitation includes the lack of academic literature available on fenestration industry. This obstructed the researcher's ability to compare the results from online questionnaires to academic literature.

Lastly, the selection of non-probability convenience sampling. Convenience sampling is not considered as sturdy as a simple random sampling. Although, convenience sampling is convenient and inexpensive, the degree of generalizability is questionable. Thus, any research question linked by this sampling is limited to the sample itself. Whereas, simple random sampling ensures high degree of representativeness and allows the researcher to make generalisations from sample to the population.

7. CONCLUSION

This research was carried out to understand the comparative analysis and strategies that can be implemented to influence the purchase decision of a buyer purchasing fenestration products online which are traditionally sold through offline channels (brick and mortar stores). The research included understanding the online consumer behaviour and the application of digital customer experience playing a pivotal role in the decision making of consumers.

The purpose of this research was to understand whether consumers are willing to purchase fenestration products online, which demand technical knowledge and tangibility. The sample mainly concentrated Delhi (NCR) and few other cities of India. To conduct this research, quantitative analyses was used and an online questionnaire was conducted to gather the data. The results from the study support the existing academic literature but extensive research is needed in the field of fenestration products being sold online.

The significant findings of the study unify with the existing academic literature, while the larger critical additions to findings were about the fenestration industry. The first key finding was that majority of respondents shopped online for various products at least once a month but were unaware of fenestration products being sold online and were reluctant to make a purchase of fenestration products online in the future. However, construction material was being purchased more than household item and cosmetics combined. This concludes that construction material products which are similar to fenestration products (as they require specifications, touch and feel) have succeeded in creating an online portal. Fenestration products industry should have an online presence which can increase awareness and provide information to interested consumer.

The second key finding was that majority of respondents were influenced by architects to make decision before purchasing fenestration products. This is a major addition to the findings as strategies can be drawn to collaborate with or target the architects as a viable target market to reach the end consumer.

The respondents of the questionnaire of this study feel that online portals are more convenient and efficient than offline channels but when it comes to purchasing fenestration products, an offline channel is preferred. Fenestration products require a technical detail and a physical touch and feel which can be difficult to deliver through an online platform. However, it is not impossible to develop a system that delivers a rich digital customer experience and all the technicalities of the product. The responses suggest that respondents are more comfortable in purchasing fenestration products from an offline store rather than an online portal. However, businesses should develop a multi-channel strategy to tap a wider audience. The business selling fenestration products can invest in an online platform, a rich social media presence and an offline channel to maximise sales. The business can have an online platform to sell and also to provide information to customers who are interested in buying fenestration products, whereas social media presence can help in brand awareness and carry out digital campaigns. An offline store will be the channel where consumers can have a physical touch and feel of the product and make the final decision.

8. REFERENCES

Alafeef, M. (2014). The Impact of Social Media on Sales Promotion in E-commerce Companies. *European Journal of Business and Management*, 6(16).

Ashton, S. (2015). *How Ecommerce Can Help Your Business Grow*. [online] Mycommerce.com. Available at:
<https://www.mycommerce.com/blog/howcanecommercehelpyourbusinessgrow.html>
[Accessed 17 Jul. 2017].

Brassington, F. and Pettitt, S. (2000). *Principles of Marketing*. 2nd ed. Harlow, London: Financial Times Management.

Betts, L., & Hartley, J. (2012). The effects of changes in the order of verbal labels and numerical values on children's scores on attitudes and rating scales. *British Educational Research Journal*, 38, 319-331.

Biddix, J. (2014). *Instrument, Validity, Reliability*. [online] Research Rundowns. Available at: <https://researchrundowns.com/quantitative-methods/instrument-validity-reliability/> [Accessed 24 Jul. 2017].

Blaikie, Norman. (2000). *Designing the Social Research*, Cambridge: Polity Press, pp. 9-24

Brooker, W. (2010). 'Now you're thinking with portals'. *International Journal of Cultural Studies*, 13(6), pp.553-573.

Cave, J. (2016). *Digital Marketing Vs. Traditional Marketing: Which One Is Better?* [online] Digital Doughnut. Available at:
<https://www.digitaldoughnut.com/articles/2016/july/digital-marketing-vs-traditional-marketing> [Accessed 3 Jul. 2017].

Cognizant. (2016). *Putting the Experience in Digital Customer Experience*. [Online Video]. 12 April 2016. Available from: <https://www.youtube.com/watch?v=qzA--T44mol>. [Accessed: 7 July 2017].

Deloitte. (2015). *Deloitte Digital Customer Experience*. [Online Video]. 4 November 2015. Available from: <https://www.youtube.com/watch?v=CZPP-sCOjbs>. [Accessed: 7 July 2017].

Farber, M. (2016). *Consumers Are Now Doing Most of Their Shopping Online*. [online] Fortune.com. Available at: <http://fortune.com/2016/06/08/online-shopping-increases/> [Accessed 3 Jul. 2017].

Fishbein, M. and Ajzen, I. (1975). *Belief, attitude, intention, and behaviour*. Reading, Mass.: Addison-Wesley Pub. Co.

Foddy, W. (1993). *Constructing Questions for Interviews and Questionnaires*. 1st ed. Cambridge, GBR: Cambridge University Press, p.127.

Ford, J. S. and R. C. Rutherford, *The Effects of the Internet on Marketing*, University of Texas-San Antonio, Institute for Studies in Business, Working paper, 2001.

Frank, M., Roehrig, P. and Pring, B. (2014). *Code halos*. 1st ed. New Jersey: John Wiley & Sons.

Frankfort-Nachmias, C. and Nachmias, D. (1992). *Research methods in the social sciences*. 4th ed. New York: ST. Martin's Press.

Gallino, S. and Moreno, A. (2012). *Integration of Online and Offline channels in retail*. [online] Available at: <https://faculty.wharton.upenn.edu/wp-content/uploads/2012/09/BOPS.pdf> [Accessed 19 Jan. 2017].

Gilly, M. and Gelb, B. (1982). *Post-Purchase Consumer Processes and the Complaining Consumer*. *Journal of Consumer Research*, 9(3), p.323.

Hawkins, D., Best, R. and Coney, K. (1998). *Consumer behaviour*. 7th ed. New York: McGraw-Hill.

Heale, R. and Twycross, A. (2015). Validity and reliability in quantitative studies. *Evidence Based Nursing*, 18(3), pp.66-67.

Howard J. A., Sheth J.N. (1969), *The Theory of Buyer Behaviour*. *Journal of the American Statistical Association*, 65(331), p.1406.

Hox, J. and Boeije, H. (2005). Data Collection, Primary vs Secondary. *Encyclopaedia of Social Measurement*, 1, pp.593-598.

Jackson, B. (2016). *The Importance of Knowing Your Target Market*. [online] Manobyte.com. Available at: <http://www.manobyte.com/importance-knowing-target-market> [Accessed 31 Jul. 2017].

Jacoby, J., Szybillo, G. and Berning, C. (1976). Time and Consumer Behaviour: An Interdisciplinary Overview. *Journal of Consumer Research*, 2(4), p.320.

James, L. (2017). *Digital Marketing is an important tool in helping raise brand awareness*. [online] Stoke Sentinel. Available at: <http://www.stokesentinel.co.uk/comment-digital-marketing-is-an-important-tool-in->

helping-to-raise-brand-awareness/story-30185906-detail/story.html [Accessed 3 Jul. 2017].

Kuriachan, J. (2014). Online shopping problems and solutions. *New Media and Mass Communication*, 23, pp.1-4.

Karr, D. and Blog, M. (2015). *The Shift to Online Shopping with Retailers | MarTech*. [online] MarTech. Available at: <https://marketingtechblog.com/online-shopping-shift-2015/> [Accessed 15 June. 2017].

Karr, D. (2015). *Infographic: 46% of Consumers Use Social Media in Purchase Decisions | MarTech*. [online] MarTech. Available at: <https://martech.zone/social-media-infographic/> [Accessed 31 Jul. 2017].

Kaul, S. (2014). Buying Online. *Property Observer*, (1), p.19.

Kemp, S. (2017). *The incredible growth of the internet over the past five years - explained in detail*. [online] The Next Web. Available at: https://thenextweb.com/insider/2017/03/06/the-incredible-growth-of-the-internet-over-the-past-five-years-explained-in-detail/#.tnw_Gwnh3Sf1 [Accessed 17 Jul. 2017].

Klaus, P. (2014). Towards practical relevance — Delivering superior firm performance through digital customer experience strategies. *Journal of Direct, Data and Digital Marketing Practice*, 15(4), pp.306-316.

Kothari, C. (2004). *Research Methodology*. 3rd ed. Daryaganj: New Age International Pvt. Ltd., Publishers.

Kothari, C. (1990). *Research Methodology and Techniques*. 2nd ed. Daryaganj: New Age International Pvt. Ltd., Publishers.

Kotler, P. (2004) *Principles of Marketing*. 3rd ed. New Jersey: McGraw-Hill.

Kovacs, A. (1985). *The Research process: Essentials of skill development*. Philadelphia, Pa.: Davis.

Likert, R. (1932). A technique for measurement of attitudes. *Archives of Psychology*, 140, 5-55.

Lincoln, Y. and Guba, E. (2000). *Handbook of Qualitative Research*. London: Sage Publication Inc.

Littlefield, J., Bao, Y. and Cook, D. (2000). Internet real estate information: are home purchasers paying attention to it? *Journal of Consumer Marketing*, 17(7), pp.575-590.

Mady, Tarek T. 2011. "Sentiment toward marketing: Should we care about consumer alienation and readiness to use technology?" *Journal of Consumer Behaviour* 10: 192-204

Malhotra, N. and Dash, S. (2007). *Marketing Research: An Applied Orientation*. 5th ed. Pearson.

Mangold, Glynn W., and David J. Faulds. 2009. "Social Media: The New Hybrid Element of the Promotion Mix." *Business Horizons* 52: 357-365.

Miller, D. and Salkind, N. (2002). *Handbook of research design and social measurement*. 6th ed. Thousand Oaks [Calif.]: SAGE.

Mills, M., van de Bunt, G. and de Bruijn, J. (2006). Comparative Research. *International Sociology*, 21(5), pp.619-631.

- Mondal, S. (2010). *Training of Trainers on Interdisciplinary Field Research Methodology*. [online] Available at: http://www.saciwaters.org/CB/IFRM/IFRM/IV.%20Literature/Module%205_Quantitative%20Survey/5.1%20Quantitative%20Survey_Mondal%20Shahjahan.pdf [Accessed 13 Jul. 2017].
- Nair, R. and Shrivastava, A. (2014). *What Flipkart, Snapdeal are doing to attract more customers | Gadgets Now*. [online] Gadget Now. Available at: <http://www.gadgetsnow.com/tech-news/What-Flipkart-Snapdeal-are-doing-to-attract-more-customers/articleshow/35391925.cms> [Accessed 17 Jul. 2017].
- Nalzar, L. (2012). *METHODS OF DATA COLLECTION*. [online] Slideshare.net. Available at: <https://www.slideshare.net/ludymae/chapter-9methods-of-data-collection> [Accessed 14 Aug. 2017].
- NCSC, (2013). *Online retail - threat or opportunity for shopping centres*. [online] Available at: http://ncscnordic.org/wp-content/uploads/2014/07/NCSC-report-2013_Online-Retail_lowENG.pdf [Accessed 3 Jul. 2017].
- Neti, S. (2011). SOCIAL MEDIA AND ITS ROLE IN MARKETING. *International Journal of Enterprise Computing and Business Systems*, 1(2).
- Olson, J. and Zanna, M. (1993). *Attitudes and Attitude Change*. Annual Review of Psychology, 44(1), pp.117-154.
- Oppenheim, A. (1992). *Questionnaire Design, Interviewing and Attitude Measurement*. 2nd ed. London: Pinter.

Perloff, R. (2003). *The Dynamics of Persuasion: Communication and Attitudes in the 21st Century*. 2nd ed. Routledge, London.

Peter, J. and Olson, J. (2010). *Consumer behaviour & marketing strategy*. 9th ed. Boston: McGraw-Hill Irwin.

Punch, K. (1998). *Introduction to social research*. 1st ed. London: Sage Publications Ltd.

Putman, C. (2016). *Understanding Consumer Behaviour to Enhance Customer Experience | CX Conclave 2016*. [online] CX Conclave 2016. Available at: <http://www.cxconclave.com/understanding-consumer-behaviour-to-enhance-customer-experience/> [Accessed 7 Jul. 2017].

Satell, G. (2013). *4 principles of marketing strategy in the digital age*. [online] Forbes.com. Available at: <http://www.forbes.com/sites/gregsatell/2013/04/16/4-principles-of-marketing-strategy-in-the-digital-age/#261e6f4d495c> [Accessed 4 Jul. 2017].

Saunders, M., Lewis, P. & Thornhill, A., 2009. *Research Methods for Business Students* 5th ed., Essex, England: Pearson Education Limited.

Saunders, M., Lewis, P. and Thornhill, A. (2012). *Research methods for business students*. 6th ed. New York: Pearson.

Schmidt-Subramanian, M. and Hogan, A. (2016). *How to Measure Digital Customer Experience*. [online] Forrester.com. Available at: <https://kloudrydermcaas.s3.amazonaws.com/Forrester/RES125804.pdf> [Accessed 7 Jul. 2017].

Schulte, K., Rotke, N. and Pitsche, C. (2005). Transparency in the German real estate market. *Journal of Property Investment & Finance*, 23(1), pp.90-108.

Situma, S. (2012). The Effectiveness of Trade Shows and Exhibitions as Organizational Marketing Tool. *International Journal of Business and Social Science*, 3(2219).

Simon, M.K., 2011. *Dissertation and scholarly research: Recipes for success*, Seattle, W.A.: Dissertation Success LLC.

Skrovan, S. (2017). *Why most shoppers still choose brick-and-mortar stores over e-commerce*. [online] Retail Dive. Available at: <http://www.retaildive.com/news/why-most-shoppers-still-choose-brick-and-mortar-stores-over-e-commerce/436068/> [Accessed 28 Jul. 2017].

Smith, K. (2016). *How to Understand and Influence Consumer Behaviour*. [online] brandwatch. Available at: <https://www.brandwatch.com/blog/how-understand-influence-consumer-behavior/> [Accessed 31 Jul. 2017].

Solomon, M. (2009). *Consumer Behaviour: Buying, Having and Being*. 3rd ed. Pearson Education Limited.

Soergel, A. (2016). *As Online Sales Boom, Is Brick-and-Mortar on the Way Out?* [online] USnews. Available at: <https://www.usnews.com/news/articles/2016-12-20/with-online-sales-booming-is-brick-and-mortar-on-the-way-out> [Accessed 17 Jul. 2017].

Stamford, C. (2013). *Study: Research online before making big purchases*. [online] Chainstoreage.com. Available at: <http://www.chainstoreage.com/article/study-81-research-online-making-big-purchases> [Accessed 16 Jun. 2017].

Steluța Uță, D. and Popescu, P. (2013). *Shaping Attitudes – Analysis of Existing Models*. *Economic Insights – Trends and Challenges*, 65(3), pp.61-71.

Stevens, L. (2016). *Survey Shows Rapid Growth in Online Shopping*. [online] WSJ. Available at: <https://www.wsj.com/articles/survey-shows-rapid-growth-in-online-shopping-1465358582> [Accessed 3 Jul. 2017].

Surbhi, S. (2016). *Difference Between Primary and Secondary Data (With Comparison Chart) - Key Differences*. [online] Key Differences. Available at: <http://keydifferences.com/difference-between-primary-and-secondary-data.html> [Accessed 24 Jul. 2017].

Tamásy, C. (2007). Rethinking Technology-Oriented Business Incubators: Developing a Robust Policy Instrument for Entrepreneurship, Innovation, and Regional Development? *Growth and Change*, 38(3), pp.460-473.

Taylor, K. (2015). *The 'impulse buy' is dying - here's how companies are trying to revive it*. [online] Business Insider. Available at: <http://www.businessinsider.in/The-impulse-buy-is-dying-heres-how-companies-are-trying-to-revive-it/articleshow/49897968.cms> [Accessed 17 Jul. 2017].

Toledo-Pereyra, L. (2012). Research Design. *Journal of Investigative Surgery*, 25(5), pp.279-280.

Trochim, W. (2006). *Sampling*. [online] Socialresearchmethods.net. Available at: <http://www.socialresearchmethods.net/kb/sampling.php> [Accessed 13 Jul. 2017].

Tucillo, J. A., Technology and the Housing Markets, *Business Economics*, 1997, 32:3, 17-20.

Tyagi, C. and Kumar, A. (2004). *Consumer behaviour*. New Delhi: Atlantic.

Wahyuni, D. (2012). The Research Design Maze: Understanding Paradigms, Cases, Methods and Methodologies. *Journal of Applied Management and Accounting Research*, 10(1), pp.69-80.

Yen-Tsang, C., Csillag, J. and Siegler, J. (2012). *Theory of reasoned action for continuous improvement capabilities: a behavioural approach*. *Revista de Administração de Empresas*, 52(5), pp.546-564.

Yu, E. (2011). *Anything Can Be Sold Online | B2B Marketing*. [online] B2bmarketing.net. Available at: <https://www.b2bmarketing.net/en-gb/resources/blog/anything-can-be-sold-online> [Accessed 3 Jul. 2017].

9. APPENDICES

9.1 Appendix A

9.1.1 QUESTIONNAIRE

Q 1. What is your age (in years)?

Q 2. What is your gender?

Male

Female

Prefer not to say

Q 3. Which city/town are you located in?

Q 4. How often do you shop online?

More than once a week

Once a week

2-3 times a month

Never

Q 5. What types of products do you purchase online? (You can select multiple options)

- Books/Magazines
- Electronics
- Services
- Clothing
- Furniture
- Construction Material
- Household Items
- Cosmetics
- Sport Items
- None of the above

Q 6. Please indicate the degree of agreement with the following statement?

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Online shopping is more time saving than offline shopping.
Online shopping saves more money than offline shopping.
Online shopping is more efficient than offline shopping.
Online shopping is more convenient than offline shopping.

Q 7. How important are the following characteristics of online retail websites?

Characteristics	Very unimportant	Unimportant	Neutral	Important	Very Important
Easy Access
User Friendliness
Design
Reputation
Security
Interactive Elements
Entertainment Factor

Q 8. What are your biggest concerns (if any) when shopping online? (You can select multiple options)

- Quality Issues
- Delivery Logistics
- Digital Payment
- Additional Charges
- Unclear Return and Guarantee Policy
- Non-Availability of the product/size
- Lack of security
- None

Q 9. How often do you surf online for the following activities?

Activities	Daily	Weekly	Monthly	Never
E-mail messages
Network on social media platforms
Google services
Read blogs online

Q 10. Do you follow the official social media handles of your favourite retailers/service providers?

- Yes, and it influences my online buying behaviour
- Yes, but it doesn't influence my online buying behaviour
- No

Q 11. If yes, how do you interact with a retailer/service provider on social media platforms?

- Do not interact
- Take part in their competitions
- Ask a question about service
- Comment/like/share the post

Q 12. What other channels besides social networking platforms do you subscribe to stay up-to-date for your favourite retailers/service provider? (You can select multiple options)

- Do not subscribe
- Printed Newsletter
- Email Newsletter
- Blogs
- Websites

Q 13. Have you ever seen doors or windows (Fenestration) being sold online?

- Yes
- No
- Don't know

Q 14. Do you know anyone who has bought doors or windows (Fenestration) online?

- Yes
- No

No, but have bought or know someone who has bought from offline channels

Q 15. Would you consider buying a door or window from an online platform at some stage in the future?

Yes

No

Q 16. Which of the following applies to you?

I have not recently built or renovated an apartment/office or a house.

I have recently built or renovated an apartment/office or a house.

Q 17. If you have renovated or built a house/apartment/office, did you purchase fenestration from an online portal?

Yes

No, but I bought fenestration products from an offline store

No

Q 18. If you did purchase fenestration products, what finish did you buy?

Aluminium

Wood

UPVC

None

Q 19. Who influenced you to make this purchase?

- Architect
- Consultant/Builder
- Your Own
- Other
- Not Applicable

Q 20. Have you ever searched for fenestration products online to gather information?

- Yes
- No

Q 21. If you have searched online, which of the following characteristics did you search for?

- Better Thermal Insulation
- Better Sound Insulation
- Aesthetics
- Cost
- None of the above

Q22. Would you be interested in knowing more about buying door and window (Fenestration) online?

- Yes
- No
- Maybe