

DEVELOPING ONLINE SALES CHANNELS FOR EMERGING SMALL AND MEDIUM ENTERPRISES

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Master of Business Administration in Supply Chain Management



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Statement of the Supervisor

The candidate has carried out research for the MBA in Supply Chain Management in the Department of Transport and Logistics Management of University of Moratuwa under my supervision.

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Abstract

The worldwide total retail sales hit \$23.4 trillion in 2020 of which 18.5 trillion are in traditional physical store sales and four trillion are in E-commerce related sales. With the twentieth century closing we have seen a great shift in the market from small retailers (mom and pop shops) to big box retailers. In the current century, these large shops are replaced by a digitized replication of the big box retailers at a more virtual complex than the physical kind. This paper would discuss the evolution of traditional retailing especially within the last 3- 5 years, specifically due to current world events such as the COVID-19 pandemic. In order to achieve the objectives of the research the author used both qualitative and quantitative research methods. The results demonstrated by the research provide a guided outlook on, how to upgrade an existing retailing business to an E-tailing hybrid business, as well as an understanding on what metrics will be enabled in terms of data and Key Performance Indicators (KPI's) that can be achieved within this implementation.

The thesis would have a detailed look at some of the benefits drawn by an implementation of the online sales channel as well as some barriers faced by the new adopters when trying to implement the technology in their respective organizations. The research focuses on understanding the development of ecommerce within Sri Lanka, by using a triangulation method which the author builds by creating a solid knowledge foundation on retail markets, e-commerce development, different types of e-commerce and finally ties the whole loop with literature that helps the reader understand the overall impact to the supply chain and the different data points gathered that enable a data analytics process, helping business gain new insights, and make much more informed decisions within a business. Using this knowledge, the thesis conducts a survey to understand the overall position of the online customer population using a sample and re-verifies these findings with six expert interviews with top officials representing corporates that have been performing outstandingly well when it comes to the e-commerce sector.

Finally, the research thesis depicts these learning on to a newly designed four stage ecommerce adoption model that will help any traditional business that is currently generating a significant amount of sale to identify which stage would best fit their business model and best strategy in implementing a digital strategy within their organization.

Key Words: E-tail, E-Commerce, Transformation, Digital Markets, Business Intelligence, Data Analytics, E-Commerce Supply Chain, Digitization, Omnichannel

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List Of Acronyms

SKU:	Stock Keeping Unit
B2C:	Business to Consumer
B2B:	Business to Business
C2C:	Consumer to Consumer
C2B:	Consumer to Business
ICT:	Information Communication Technology
IPG:	Internet payment gateway
ERP:	Enterprise Resource Planning
B.I:	Business intelligence
OLAP:	Online Analytics Processing
SLR:	Systematic Literature Review
LKR:	Sri Lankan Rupees
POS:	Point of Sale
O.S.:	Operating System
COD:	Cash on Delivery
OMS:	Order Management System
3PL:	3 rd Party Logistics
WMS:	Warehouse Management System
CRM:	Customer Relationship Management

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1 Chapter - Introduction

1.1. Background of the research

1.1.1. Introduction

The worldwide total retail sales hit \$23.4 trillion in 2020 of which 18.5 trillion are in traditional physical store sales and 4 trillion are in E-commerce related sales (Retail Market Worldwide - Statistics & Facts | Statista, n.d.). The almost forceful shift by many consumers to E-tail due to travel restrictions, social distancing, and Covid-19 related lockdowns, has enabled masses to adopt purchasing online and relying on home delivery. E-commerce can be identified as a method of buying and selling of products through the use of the Internet. The term was developed later and it was added “exchange of information” in addition to “buying and selling of goods”(Chong, 2008). Rainer and Cegielski (2011, pp.201) define e-commerce as a “process of buying, selling, transferring, or exchanging of products, services, and/or information via computer networks, including the Internet”(Ivanov, 2012).

Organizations use data in many ways to identify growth and the manners in which we identify customer behavior, and the organization uses its agile culture to fulfill the customer needs. In recent times many retailers were tested for its agility and leadership in adjusting to the requirement of the hour and how well business intelligence could be used to plan for contingencies to have business continuity during periods of uncertainty. In the past the customer depended a lot on the overall retail experience: face to face, shop appearance, touch and feel of products, location, hours of service, etc. Now with the improvement of information technology, standardization of goods, payment gateways, and other financing methods has enabled digitization of retail. Initially, a shift started by large corporations such as Walmart, as the pressures from online giants such as eBay, Amazon and Alibaba were starting to hit the bottom lines of the traditional businesses. As the giants of the retail industry has succeeded the transformation, many small and medium enterprises are following suit.

Many retailers utilize passive data found from Point of Sale (POS) systems to determine the customer buying patterns and predict inventory levels that must be maintained in order to increase customer satisfaction. However, larger corporates have started utilizing machine learning applications to understand the transition of customer buying patterns according to purchase history over time using the POS and Enterprise Retail Planning (ERP) system data.

This research would focus on exploring the methods in which a traditional business would be able to expand its sales process to new channels such as online sales using ecommerce platforms and social commerce techniques to gather the expansion expected. The research discusses the different levels of integrating online sales techniques at different stages of the business and give insights, on how additional data metrics are available through the digitization process enabling better customer segmentation, customer behavior analytics and better insight on how to serve the customer better. The expectation from the research is to give an overall understanding of the many levels of complexity an online business integration would bring about when a small and medium company ventures into the implementation process.

1.1.2. Retail Industry in Sri Lanka

Retail industry within Sri Lanka can extend from structured sale of grocery items at a supermarket chain to an individual selling hand crafted furniture from a small showroom in Moratuwa (famous area for wood craft). The retail industry covers the corner shop that sell tea, to the massive malls with international brands and footfall exceeding thousands a day. When looking at the retail landscape within Sri Lanka in the past decade much has developed and changed.

With a widening base of middle-income earners and bullish macro-economic policies adopted by the government has created plenty of opportunities for new business owners to flourish with shifting consumer trends. Pre Covid retail space in Sri Lanka was a highly competitive area where majority of the malls and commercial properties were much sought after. The country saw large scale supermarkets and hypermarkets doubling in size with the shift in consumer trends, and international brands creating a presence in flagship malls such as One Galle Face and Colombo City Centre for the growing brand conscious consumer segment.

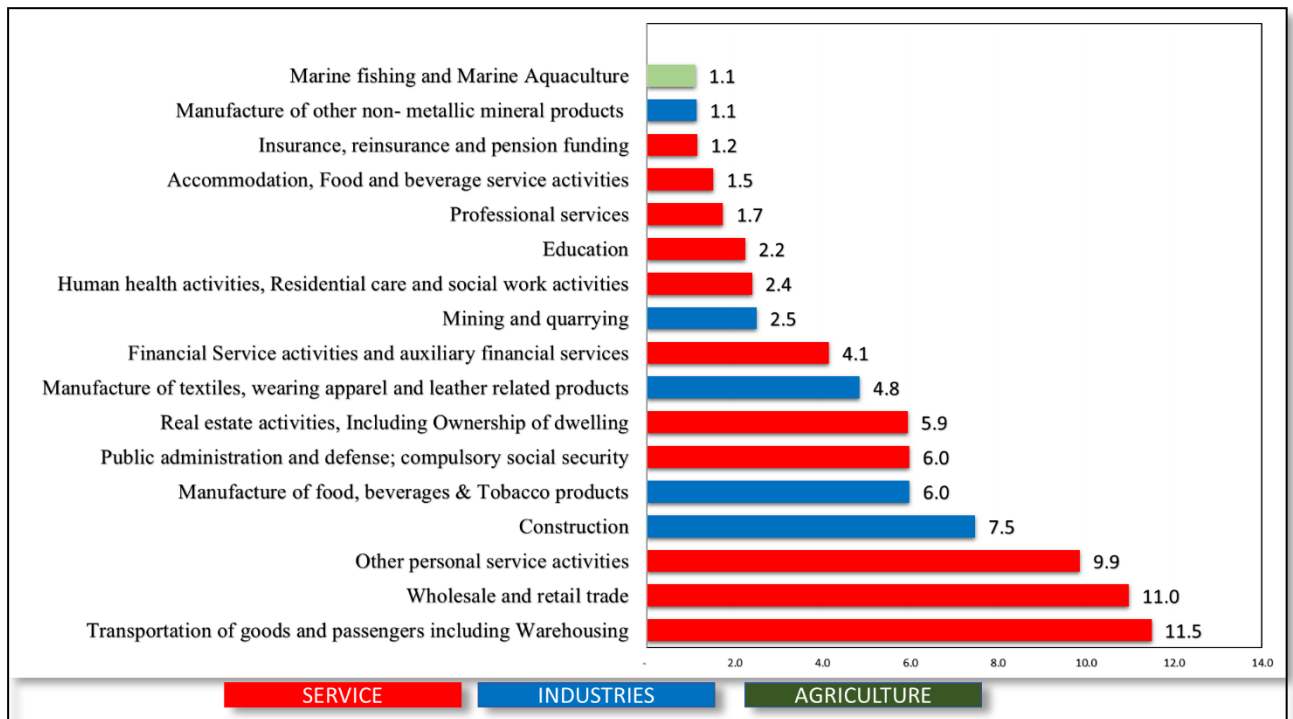


Figure 1: [(Department of Census and Statistics- Ministry of Finance in Sri Lanka, 2019), processed data]

To bring a bit of perspective in metrics, GDP per capita in current US dollars growing by over 50% from 2010-15 to achieve \$3794, according to the World Bank, while per capita income tripled from 2003-14, reaching \$3440. Sri Lanka’s most current consumer and household spending analysis, conducted in 2012/13, found the monthly mean household income was LKR45,878 (\$330), while approximate average monthly household spending was LKR41,444 (\$298), up 32% from the 2009/10 survey. (Oxford Business, 2016)

The nation is seeing a clear indication of consumer trends building towards a more capitalist economy and free markets are at work where individuals have more purchasing power and consumer confidence is rather high compared to the decade before. With gathered momentum from consumer confidence and rather open market philosophy within Sri Lanka we are seeing large scale development by larger organizations focusing on building critical mass to create efficiency within corporations, while small and medium enterprises are seeing an opportunity to create niches, segments that will allow them to create a larger customer base in the long run.

The Retail market is considered to be one of the largest contributor to the Sri Lankan economy along with transport and logistics sector, all of which are a part of the service sector, which accounts for 58.3% of total GDP (Department of Census and Statistics-Ministry of Finance in Sri Lanka, 2020) contribution break down calculated from 2019 (Figure 1). With this fact it is critical that the small and medium enterprises grow in an organized manner and incorporating modern technology would enable this industry to evolve further.

1.2. Problem Statement/Need for the study

1.2.1 Research Gap

Currently the research covers the part of both benefits of E-commerce and retail, however there is no extensive research that outlines the process of transition as well as an updated understanding of data collection from within the context of customer segmentation and overall supply chain strategy. Within the initial research to understand the current requirement for the traditional retailers to enter the E-Commerce market we realized there is limited literature that gives an in-depth process to enable an organization to go online. Through research online few papers were found to reflect Sri Lankan E-commerce development from a marketing perspective. The supply chain and management restructuring required in order to successfully transform an existing traditional business to create an E-tail experience was not successfully captured by the literature studied so far. With this existing gap and large potential for many to transform given the current market conditions incentivizing the shift, this research seeks to validate models and research conducted in faster adopting markets such as Europe; gather data of existing large corporates in Sri Lanka who have successfully implemented E-commerce strategies within local markets, to build a case to persuade the transformation for SME sector.

1.2.2 Research Problem

With the surge of online platforms and traditional businesses finding it difficult to stay competitive in both price and user experience when it comes to shopping online, this research will firstly act as a guide for an existing business to understand the overall next steps required to take an existing traditional retail business online. According to the United Nations, in developed countries such as Canada, the United States and 10 European nations, over 70% of the adult population purchase online. But that proportion is well below 10% in most low- and lower-middle-income countries. (Switzerland Climbs to Top of Global E-Commerce Index | UNCTAD, n.d.), this shows the growth potential available.

The uncertainty as to why a company needs to explore an online presence and create a E-Tail market is no more a question but a necessity, now at what level you want to implement it and what is your digital strategy for the organization is the real question.

The main problem that this research paper looks to answer is:

- What are the main considerations required to consider when preparing to take a traditional business online?
- What are the main decision points and how can data be analyzed to help take those decisions?

The decision to take a business online comes with added pressure on your existing supply chain, the management of inventory and resources to enable a limited time marketplace to an always active marketplace with customer inquiries that are generated 24hours/ 7 days a week. As the main questions for the business start queuing the solutions for these issues lie within your past data to help the organization understand who the current demographic is and what they are purchasing. The expectation to create growth for a business can tested with the use of data on which demographics are responding to new products or marketing campaigns and where you should invest will be evident with the different iterations of this exercise.

Currently many organizations are tackling this issue using a few methods, some organizations have moved to a strictly social media-based solution, where the physical store remains as the main retailing method, however an online presence has been made through one or more social media platforms. This is a cost-effective method as it opens the market to a global or national level but still enables the servicing to be restricted to the current design supply chain capacity. Another category of organizations has built websites that generate inquiries on specific SKUs, however the actual purchasing is only through cash on delivery or bank transfer, which is a hybrid between the completely online; and strictly social media-based E-Tailing method.

Finally, a full integrated online business with purchase and payment capability that enables the customer to complete its total purchasing task online without the support of any offline resources making it completely self-sufficient even though the backend operations have to physically align with the online operations. With all this we must understand e-commerce growth potential is huge and currently only fully servicing the larger countries that adopted it really fast. The pioneer in the industry, United States of America is the best test case Online segment of total retail sales has steadily grown as E-commerce penetration touching 21.3% in 2020, that has constantly grown from 15.8% in 2019 and 14.3% in 2018 (Pandemic Causes US E-commerce to Surge North of 32% in Q4 | Digital Commerce 360, n.d.)

1.3. Research Questions and Objectives

With the existing gap and large potential identified previously, and understanding of the research problem stated above, the following research questions would prove highly relevant and effective in creating a meaningful impact.

1.3.1. Research Questions

- **RQ1** What are the barriers a traditional enterprise face when trying to take their business online?
- **RQ2** What are the opportunities created after the transition to E-commerce for a traditional business?
- **RQ3** How should a traditional enterprise begin the process of an E-commerce channel within the existing business?
- **RQ4** How a business can use data analytics to support the transition process from a traditional company to an E-commerce enabled enterprise?

1.3.2. Research Objectives

To answer the above questions, the following objectives are expected to be addressed during the conduct of this study.

- **RO1** To Identify the challenges faced by a small and medium enterprise in Sri Lanka when going through the E-Commerce transformation process
- **RO2** To discover how the transition to E-Commerce has benefitted companies in terms of growth and opportunities
- **RO3** To develop a process to transform a strictly traditional retail business into an E-Commerce enabled Small and Medium Enterprise (SME).
- **RO4** To identify data points to support the analytics of business milestones during the transition process from a traditional company to an E-commerce enabled enterprise

1.4. Research Scope

To enable comprehensive research within the limited time span of sixteen weeks, a clear scope must be laid out. The study would be limited six top tier organizations: three E-commerce apps and websites, two in Supermarket retailing, and one in Consumer-Durable retailing, and their strategic approach towards creating online presence, and the overall journey it took to accomplish this task. In this research we strive to validate the difference in the level of data visibility in terms of customer demographics, trends and overall adjustment in decision making for a business and the competitive advantage created by these metrics compared to a traditional retailer in a similar industry without the visibility gathered from an E-commerce integration into its business.

Further, the research is geared towards understanding how pioneering markets have implemented similar strategies in their home countries through academic research published as well as journal articles within the last decade that would guide this research to parallels from both markets to enable a cross comparison. The research is based on articles, reports published by both government departments and independent organizations to factor in potential impact the transition from Retail to E-tail in economic and social terms.

In contrast, this research would only be looking at the benefits of E-Tailing in the consumer durable and grocery markets, other sectors such as tourism, fashion and education services would not be covered within this research. Further this study does not intend to incorporate the human resource aspects of E-commerce and business specific costs involved in the implementation of a website or any online presence in terms of product cataloging and content creating that can vary principally with the industry.

One might question as to why two sectors such as consumer durables as well as supermarkets are both factored into the research without focusing on one topic. The main reason is to enable the audience to make it more relatable by slightly widening the scope for both fast moving, short shelf-life items which have swift supply chains, as well as a non-perishable, consumer durable market whose items have much longer shelf life, and the supply chain constraints are rather diverse. The main objective is to enable the reader to understand the benefits, barriers, and framework in which any level of electronic commerce implementation to an existing offline business would act as an enrichment to the overall business portfolio. The research aims to cover the process that a business decides to take its portfolio live for a worldwide market and how the supply chain may need to align depending on the depth of the digital strategy incorporated to the organization.

Finally, this research only covers the Business to Consumer (B2C) markets, where the E-commerce or social commerce platform is trying to connect the end users from different markets and enable the business to understand its true potential beyond the organic footfall that it attracts into its physical stores.

1.5. Significance of the study

The research will bring insight across a few major retailers within Sri Lanka to draw parallels on how the movement from traditional retailing to E-Commerce (E-Tailing) has enabled growth and benefits to their overall supply chain with the data insights they gathered from the different platforms available. The purpose of the research is to show traditional retailers on all the metrics they are currently not exposed to in the current business context and the tremendous opportunities and threats that can be foreseen with the transformation to the E-tail platforms. The decision making within an organization is completely based on the information the leadership and managers are exposed to, in the age of fact-based decision-making business leaders are able to collect more data and store it with the use of information technology. This research will help you understand what these metrics that a CEO of an organization should be keen on looking at, how the move to E-tail (Social and E Commerce) would expose them to metrics like clicks, cart abandonment, average session duration, ratio of new to returning visitors, etc. These new metrics will enable retailers to better understand customer requirements according to demographics and serve each customer closer to the experience they would like to indulge in.

Since the inception of trade, from the barter system to traditional retail shops we see now, commerce has evolved through every specific juncture in history. We witnessed a large shift in the second half of the century from small and private establishment retailers or mom and pop stores towards big box discount chains operating larger stores (e.g., Wal-Mart, Home Depot) that are seen present in multiple markets with multitudes of product range (Toma, 2020), this was the case with most developed countries. With the entrance of the internet and mobile connectivity (4G or higher) we are seeing smaller retailers in developing countries grow at a rapid pace with the help of technology and skipping the requirement for multiple outlets or large stores to gain the economies of scale to grow the organization. With the introduction of an e-tail platform the organization can scale at the same level as a big box store given the supply chain capability matches the requirement. A prime example of this is the likes of early-stage clothing stores like G-Flock and Mimosa in Sri Lanka, who saw the success of Asos, and other international retailers ship globally through the use of simple postal service, saw tremendous traction with customers now being able to shop from the comfort of their homes, have the item directly shipped to their homes. This shift has been beautifully embraced by the apparel market in Sri Lanka due to the lower complexity of the supply chain.

This research will focus on how more businesses trying to explore modern methods of growth at a lesser capital expenditure with the use of pre-existing supply chains and platforms to gain the planned development in a much more information driven market.

Due to above reasons, it can be understood that the research topic “Developing online sales channels for emerging small and medium enterprises” is highly relevant and timely for business adaptation.

2 Chapter - Literature Review

This chapter has the objective to support a thorough evaluation of the related literature on the subject of Retail and Ecommerce to help build a solid foundation of knowledge on the subject and fulfill the objectives set out to accomplish within the thesis. The structure of this chapter is to create a holistic understanding of retail and drill down to the core knowledge required to understand about e-commerce, its pros and cons, the impact on the supply chain and the byproduct of data analytics to support the overall supply chain strategy.

2.1 Retail

When understanding the topic of commerce, we generally look at buying and selling of different items for a benefit, the world initially started this function for means of exchanging commodities. There are many different types of commerce in the world right now, local trade (wholesale and retail), foreign trade (import and export), and auxiliaries to trade such as insurance or logistics (Toma, 2020). Retail trade can be considered the last piece of the distribution chain between manufacturers and consumers the offering of products in retail size and price to the public ((Toma et al., 1969)

Before globalization, majority of trade was considered a domestic venture before the development of transportation networks it was very regional specific limited to certain cities. With both the development of transport networks: Truck, Rail, Air, and last mile delivery with the help of globalization impacts of specialization (comparative and competitive advantages) enabled through economies of scale and proximity to resources have enabled manufactures and service providers to change the landscape of the retail industry. We are now seeing delivery and taxi hailing service providers such as Uber founded in the United State of America, providing to over 85 countries with the help of technology to E-tail globally.

The internationalization of retail began relatively late due to a plethora of obstacles, as follows (Salmon, W. J. and Tordjiman, 2002),

- size of the retail companies, often small.
- focus on national extension.
- lack of enough financial and human resources for international expansion.
- insufficient knowledge of the foreign markets etc.

With the rapid expansion of global retailing thanks to the development of E-commerce and Social commerce (E-Tailing) has created a new line of challenges for retailing leaders and executives. The most basic question of how the business enters an online market space? is it through a website, adding a portfolio into (eBay, Daraz, Amazon, etc.), using social commerce sites such as Facebook and Instagram to generate footfall and inquiries. There are many different strategies that can be utilized. It is critical to firstly formalize the digital strategy to understand what E-Commerce and Social Commerce platforms will be utilized in the process, what is the overall market that you plan on capturing, by taking your business online and how you plan to enhance your service levels by taking the business online.

Secondly once the digital strategy is finalized setting up of one's current business practices to align with the new demand and how a business is going to service, the supply chain and last mile logistics, to complement the overall service levels that the facility is trying to accomplish with the new expansion in business through online retailing. These upgrades can further update existing business practices as well as brand new ventures only to align with the new demand. The advantages and disadvantages should be

weighed, and executive decisions must be taken in order to satisfy both the customers as well as business sustainability needs. The move to online should not be at the cost of exhausting your current work force and resources that will in the long run create degrowth for the business, this research is aimed at creating a sustainable growth plan that will enable this and help leaders understand the best course of action in the new venture.

2.2 E-commerce

E-commerce means all online financial transactions whereas E-retailing (e-tail, online shop, web store) means all items or services a consumer purchases (Thain & Bradley, 2012). In this research, the words E-tail, Online selling and online presence are mostly used to describe online marketplaces that are selling goods and/or services to consumers, using not only websites but also Social Commerce. When we look at the overall Electronic Retail market it can be broken down in many different segments.

2.2.1 Major E-commerce Business Classifications

B2B: Business to Business E-commerce – A platform for business purchasing from another business, this could include bulk purchasing or restricted access like a specialized supply companies like chemical or aircraft parts which are threat having strict access policy to their platform to proceed the purchasing requirements.

C2C Customer to Customer E-commerce – This segment of the E Commerce market also gained a lot of traction within the last decade, a few successfully growing and many plummeting as fast as it rose. eBay is perhaps the best-known global classifieds platform for bidding between consumers, however local offshoots such as Ikman and Hit Ad are early entrants to the C2C platforms in Sri Lanka, and Hit Ad being a good example of traditional platform now successfully transitioned to a hybrid model.

C2B: Consumer to Business E-commerce - The segment can be identified as the true beauty of technology that has enable individuals (freelancers) provide their goods and services to cooperates, almost like sole proprietors to businesses, however these platforms such as Upwork, Fiverr and quickhelp.lk where people can list their services and the total value chain is tracked within the website, making it easier for businesses to locate and use these individuals. The added benefit of having the value chain on the website, if any concern with the product or service arises it is easier to keep the individual accountable through ratings and dispute resolution methods within these platforms allowing accountability for the smallest vendors, which can be identified as the biggest reason businesses choose larger players in the market, due to accountability.

Government / Public Administration E-commerce

B2G/ C2G: Government / Public Administration E-commerce – The models listed above are mainly retail structures that are highly relevant within the study, for the sake of inclusive detail B2G was added to give all round idea of the total. The B2G/C2G can be a platform that allows businesses and consumers to sell their products or services to governments. In many cases, organizations have government or public administrative offices as their only customers and awarded contracts on an extended-term.(Row, 2019)

B2C: Business to Consumer E-commerce – This is the most famous classification that majority of the general public are exposed to partially due to the large marketing campaigns and most experience using, especially during the years within lockdown during the pandemic. B2C E-commerce sales are similar to traditional retail model, where a business offers to individual consumers, but the transaction is conducted electronically as opposed to in a physical store (DeMatas, 2021).

The benefits of B2C as an E Commerce model can be identified as a low-cost startup model especially with the new social commerce platforms that require little to no initial starting capital other than man hours. The level of expertise to create a Facebook or Instagram based product portfolio is extremely basic, the level of expertise required for a more matured page through a service such as Shopify or Wix is rather effortless as it has a remarkably simplified user experience, known as E-Commerce platform.

This model creates flexibility as the analytics within these apps and website has built in analytics and real time efficient data collection allowing you to simplify the understanding of market demand, which is a critical piece of starting a business. In addition, the target marketing within a page is more customer specific which is great at generating a practice of impulse purchases since you can create targeted promotions or advertisements for clients that are not seeking for an item to purchase. (Row, 2019)

With the implementation of a B2C channel for an existing traditional retail store, this will allow the organization to create cross collaborations between the platforms to create a very simplified user experience that will allow customers to use across all available platforms to purchase products and services with ease, this method is now identified as omni channel.

2.2.2 Single Channel

A Single Channel is an example of a traditional retailer who only utilizes a single model of distribution to meet potential customers, irrespective of whether its online, traditional retailing, or telemarketing. Accessibility is an important aspect of retailing and depending on the industry many businesses utilize the best fitting method and create differentiation within, to help generate more customers. As the digital age has grown, most businesses are utilizing online methods as their first single channel to enter the market due to the relatively low set up cost through platforms such as Uber and PickMe for entrants within the food and grocery sector, while E-commerce platforms such as Daraz and classified posting sites such as Ikman.lk are low-cost methods for electronics and other consumer durables. (Lumen)

2.2.3 Multi Channel

In terms of online to offline, multi channels work independently from one another and because there is little to no communication between the channel's operators, consumers cannot move from one channel to another during the purchase journey (Liao & Yang, 2020).

Multi-Channel gives the customer the ability to find the same product across different platforms, its ideal if the customer has already decided on a single product and can use several platforms in order to purchase it. The objective is to make it convenient for a consumer to purchase it

2.2.4 Cross Channel

The cross-channel approach to retail is having multiple touch points for the same business channel but with better coordination between channels. This could be when a customer is approached through social media, but the final sale is made by a telephone conversation, where the lead was generated through social media, however the process is not seamless as all data points are not simultaneously communicated across all channels, a resource or interface is required to create that coordination to simplify the customer movement.

2.2.5 Omni-Channel

The omni-channel approach of retailing has been considered the fusion of the many different types of retail channels, seamlessly integrated to create a smooth eco system for customers to be targeted through. Amazon's acquisition of Whole Foods Market Inc. and Walmart's purchase of Jet.com is clear evidence of the borders between virtual and physical retailers are already fading (fastest growing e-commerce company). With mergers such as what amazon and Walmart have executed recently and the spread of Omni- channel retailing strategies with the objective of ensuring a smooth transition from different channels for the shopper it is only expected to further intensify in the future. (Tushar Oka, Sachi Ghai, 2017)

Omni Channeling is different from multi-channel E-commerce from a central standpoint, The main difference between omnichannel and multichannel is that omnichannel involves all channels and revolves around your customer, while multichannel involves many independent channels which revolves around a single product/service.

The benefits of Omni Channel business can be further understood when demonstrated: a customer enters a website xyz.com to purchase a pen, logs out due to losing interest, later reminded through social target marketing of the same pen and similar pens customer re-enters to find a 10% discount pushed through the advert, having found a

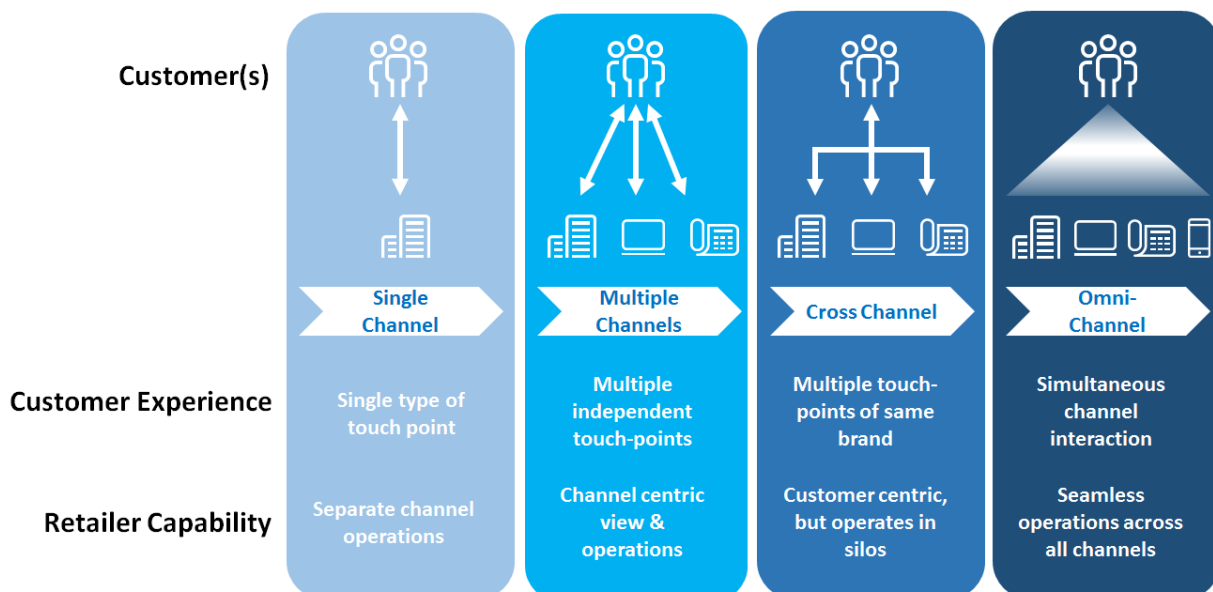


Figure 2: Comparison of Single Channel, Multi-Channel, Cross Channel, and Omnichannel

suitable pen the customer decides to purchase it online with the discount but chooses to pick it up from the store to experience the touch and feel of the product, once in the store the customer experiences the pen and finds a matching notebook and purchases it as well. Buy online, pick up in store; Browse in store, buy online; Buy in store, ship to customer; Online returns and exchange. (Patel, 2020) Overall a seamless purchasing experience that is optimized towards the customers convenience and seller's efficiency.

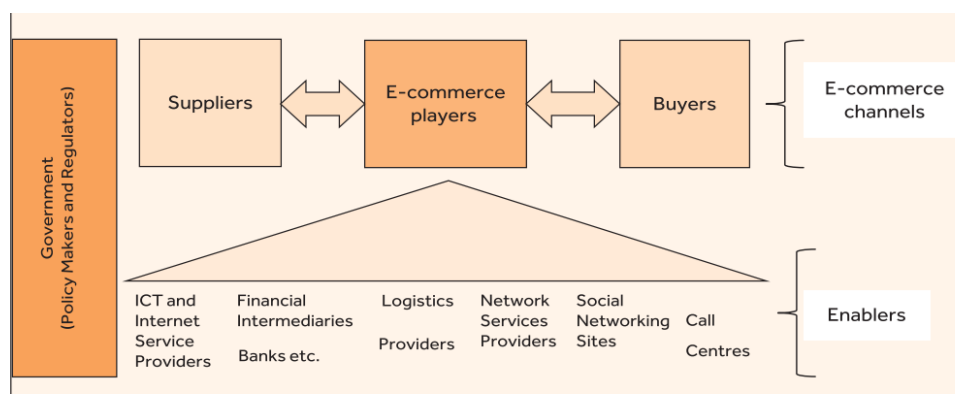
2.3 Development of E-Commerce and the process of adoption for Businesses

The process of E-Commerce adaptation has been defined by many procedures and stages throughout different literatures. The following can be identified as the best way to recognize the manner in which the process can be adopted within Sri Lanka. The following model developed by a Danish researcher (Adascupola, 2003).

1. Promote brand image/ Provide product information.
2. Collect information about customers/ Perform market research.
3. Provide customer support and service.
4. Develop internal support and service.
5. Provide online transactions.

From the study we found a rather accurate process developed to the current line of thinking that is to be adopted within this research. While many researchers were focused on issues such as internet penetration and government policies that promote E-commerce, and other infrastructure-based improvements, the adaptation is more to do with businesses understanding the added benefits that will automatically drive consumers to such platforms with the availability. While internet penetration and infrastructure are key, in 2021 such discussion is hardly relevant with all major cities having minimum of 4G coverage and some with fiber optic facilities throughout Sri Lanka.

Figure 3- Generic e-commerce ecosystem Government (Commonwealth Secretariat, March 2020)



Source: Grail Analytics

The figure above shows that E-Commerce is not just a manner of business but an ecosystem that enables a business to create a new type of marketplace to connect a set of suppliers to buyers. In order for the e-commerce channels to function and the market to

function a set of enablers are critical within the supply chain. The Information communication technology (ICT) and the service providers are a critical enabler in this process, they provide the technology that enables the connectivity between the market stakeholders. Financial Intermediaries such as banks and Internet payment gateway (IPG) providers play a critical role in the transfer of funds to enable a seamless ecommerce transaction experience. The enablers create the support services (eco system) required to make a pleasant purchasing or selling experience and it has evolved greatly in the past 5 years to create the growth achieved in the market today.

Literature clearly indicates that the overall understanding of E-commerce for both sellers and consumer are critical, and its benefits need to be understood in order for the transition to occur. The global E-commerce market received a unique catalyst from the impacts of the COVID-19 pandemic as it opened the doorways for many consumers to experience online purchasing for the first time. From the conservative stay-at-home spouse to technologically backward husbands were burdened with procuring groceries for the household with limited options of mobile shops, with trucks selling food from the back of their vehicles to the sophisticated, yet easy to use interface of the likes of uber eats, messaging through social media and calling to place an order through an online or (WhatsApp) messaged menu. These were all different levels of adaptation of how the local businesses integrated its traditional businesses to be more Electronically sound to use the open markets of the inter webs to generate more orders and in turn service more customers.

Regardless of this development most of emerging and transitional nations are still hesitant to use online services for purchasing products unlike community based sales methods which are easily adapted in developing countries, the causes may be lack of trust, limited choices, language barriers and poor delivery services (UNCTAD, 2015) (Kabugumila et al., 2016). The above statement gives a clear indication to understand some of the key factors many developing countries tend to mark as important when transitioning into an E-commerce platform. As we have learnt before the key is to implement according to the readiness of the market and inhouse capability gradually transitioning each critical piece to enable a seamless purchasing process regardless of which process is being digitalized.

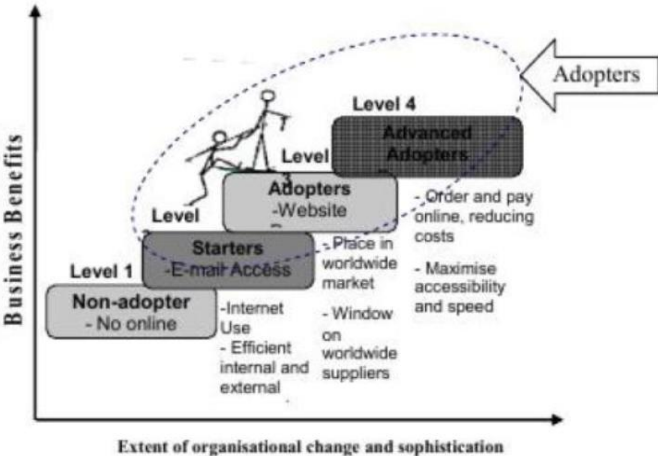
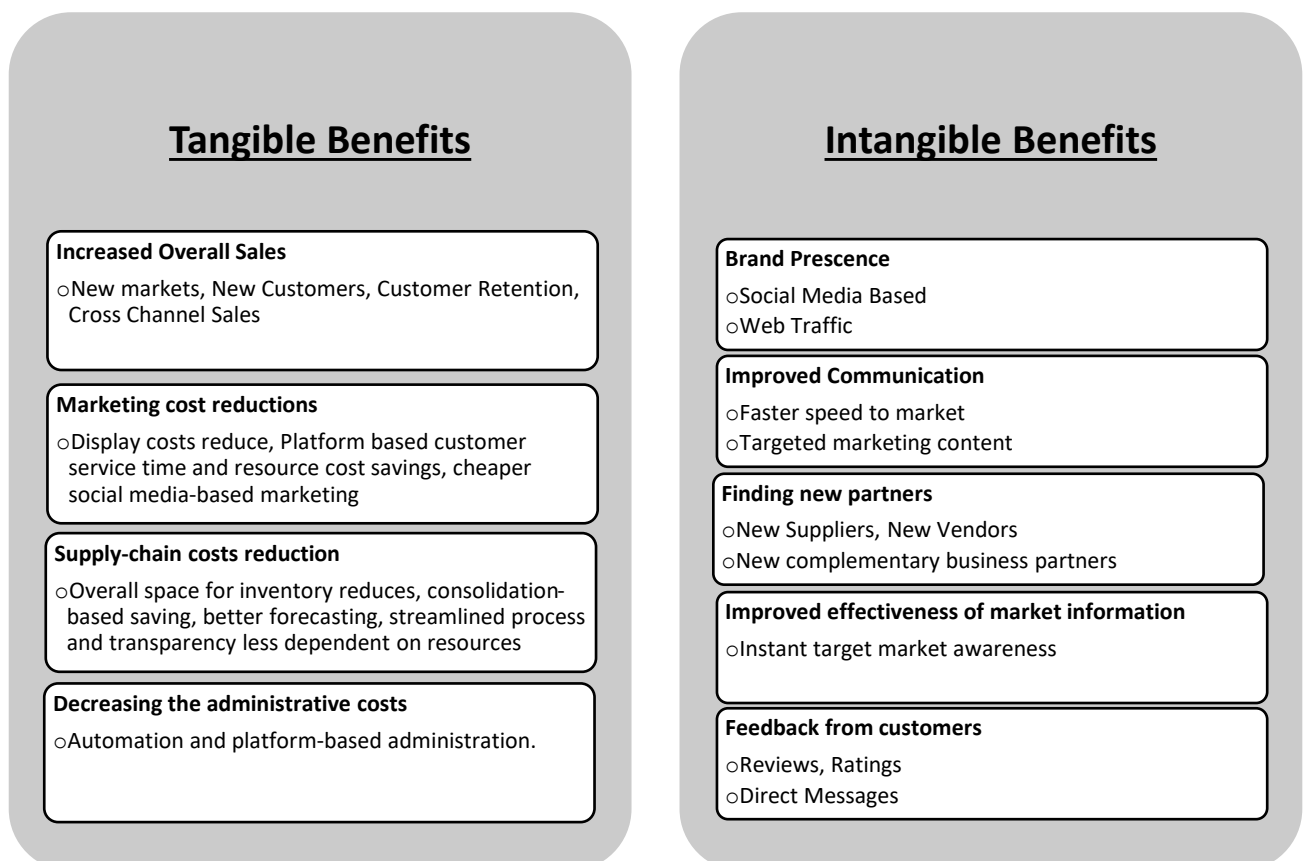


Figure 4: E-commerce adoption ladder in small companies (Xu & Quaddus 2009, pp.304)

Papers also suggest that the adaptation ladder for consumers is based on a four staged process as illustrated above in figure 4. This figure suggests that with every additional aspect such as access to internet, more vendors sign up online, the adaption rates increase and the overall business ecosystem gains benefits through efficiency. When looking at the Sri Lankan market we can understand that we are already at the level 4 of advance adopters. However, the speed and accessibility to online markets have room for improvement, majority of the commercial cities are equipped with resources and if a customer has a considerable purchasing power, they will invest in a smart phone with mobile broadband connection.

2.4 Benefits of E-Tail adoption in SME's

The literature takes on many different views on the benefits through the year 2000's, to early 2020's as E-commerce adaptation is increasing. The benefits can be categorized into two main divisions, tangible, and intangible benefits. The benefits can vary depending on a few factors, the main being the countries adaptation of E Commerce, industry of the company and culture within the organization. When categorizing the benefits (Ivanov, 2012) has used the illustration table from Chaffey (2009) to segment the tangible benefits such as increased sales figures, added customer count and cost reductions; however, intangible benefits that cannot be quantified are recognized separately. It must be also recognized intangible benefits can directly affect the tangible benefits in the short and longer term that will bring in additional benefits from factors such as brand awareness and finding new partners and suppliers which will benefit all channels of business.



The above benefit clearly illustrates the advantages an E-commerce integration an existing business would be able to achieve. The research also shows that many non-quantifiable metrics in the traditional methods have transformed into tangible benefits through the E-tail conversion as well. The business that adopts to an E-Commerce vertical within the corporate would not take long to see the increased visibility of the business even though the overall ecommerce segment may not perform immediately. (Arawwawala & Gunawardane, 2017)

2.5 Barriers for E-Tail adoption in SME's

Through the literature the authors talk of some drawbacks due to an implementation of E Commerce as well. The drawbacks may vary from different industry to industry, some may not be affected by these barriers at all, while some industries this may be the decision-making factor. Illustrated below are the six main elements that can deter an organization from opening up an ecommerce channel within their respectable sector.

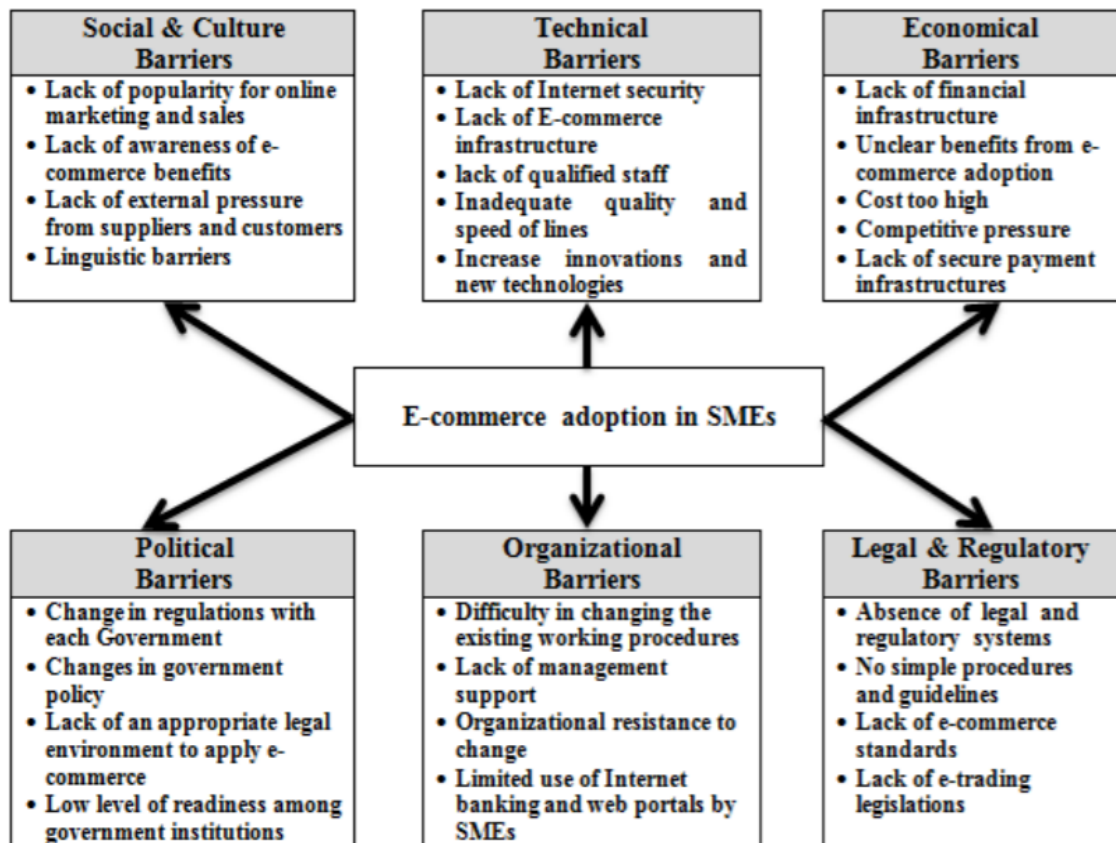


Figure 5- Conceptual framework for e-commerce adoption barriers in SMEs (H. Zaid, 2012)

As mentioned within the literature the barriers that can affect a business are vast, however due to the current situation within a pandemic social and cultural barrier for online business has drastically reduced, people had to largely adapt to the new normal after being forced to stay indoors. Technical barriers still remain a concern within Sri Lankan and South Asian context. Lack of logistics infrastructure is a concern among many early adapters even in developed commercial cities such as Kandy, Sri Lanka.

The rest of the barriers are things that will take time and as people adopt the policies will change accordingly, which can be somewhat beneficial for early adopters as they may be able to enter before some of the regulations are implemented. Certain lack of procedures and guidelines can help create a barrier for new entrants creating a niche for organizations that pioneer in an industry like some of the early implementers of E-Commerce are enjoying now in many different markets.

2.6 E-Commerce and Supply Chain Management

2.6.1 E-Commerce Supply Chain Journey

Many businesses adopt E-Commerce strategy as a method of increasing awareness and a strategic approach of acquiring new markets. Organizations dream of acquiring new market share, online expansion through E-Commerce is relatively easy with the help of developing a website or a social media page, generate good content and promoting it to a certain region or segment. However, just having the front end of the online business set up is not enough for a business to thrive on the digital side of business, the value chain that an organization creates must be dynamic and support to earn the trust of the customer at every point.

The basic method of enabling such integration is to be able to serve the basic requirements a customer expects, in order for the customer to feel that his purchase decision is backed up by a trusted method of delivery, and a transparent order tracking method for the customer to feel confident that the purchase is as seamless as, or better than an instore experience. The most important aspect of the total experience is the customer base and how they feel to the changes that you have done, the value chain can be created at many different level, from a simple social media page that is designed to showcase products and the rest of the value chain is handled by a traditional supply chain process that handles orders through a call center and dispatched using an in-house delivery agent can be set up if the individual organizations order quantity and customer base is happy with that service. The most important aspect is to be able to support up to or beyond the customers expectation.

The industry in which a traditional business operates has a lot to do with how complex the backend supply chain must be in order to satisfy the customer. For example, perishable goods or medicine require temperature controlled and fast paced delivery requirements which inevitably creates a complex supply chains for industries such as grocery and pharmaceuticals, whereas non-food products such as ornaments and clothing do not require such complexities in terms of temperature control and time critical deliveries. (Wollenburg et al., 2018)

Furthermore, all industries bring different levels of complexity or specific requirements that a business would have already been exposed to which require further fine tuning in

**Table 1-Major role of participants in a typical e-commerce ecosystem
Participant (Commonwealth Secretariat, March 2020)**

Participant	Role	Remarks
Suppliers of products and services	Make available goods and services	Could be manufacturers, traders and even individuals
Buyers of products and services	Buy goods and services and pay for them	Could be companies, businesses and individuals
Transporters and logistics companies	Transport goods from seller to buyer and back; manage supply chain	Transporters, warehouse owner and supply chain participants
Banks and financial institutions	Facilitate digital payment	Banks and non-banking institutions
Service providers	Technology and non-technology services	Telecom and internet companies, internet service providers, digital marketers, e-commerce platform providers and technology support service providers
Government	Make policies, laws and regulations	Regulators and law makers

Source: Grail Analytics

order to ensure, the addition of an ecommerce market supports the created value chain that already exists. Through my reading on a publication made by Commonwealth Secretariat in March 2020; table above illustrates the many major roles that are required to make the overall supply chain of an ecommerce company a success. When we speak of a supply chain we mainly focus on the movement of goods or delivery of a service, but it is evident we must start thinking of the movement of products to the level of facilitating a fund movement in order to purchase the service and similar to a traditional sale eco-system. The concept of supply chain is not new in terms of practical implementations as many of these value chains have already been created within traditional businesses, just that the necessary planning and thought process of how each activity is interconnected and traceability of these actions have not been accounted for. The data gathered through these integrated networks can be the critical component in continuously developing the functions within a value chain.

Deloitte published “Disruption in Retail Through Digital Transformation” (Tushar Oka, Sachi Ghai, 2017) here they discussed how traditional supply chains have information movement on a more linear pattern where predecessor activity dictates the information flow as the value chain is dependent on a highly structured supply chain with little transparency on many levels. Tracking and tracing of inefficiencies at every critical node is tough without the help of a digital network that enables to reduce cascading effects of underperformance by any part of the supply chain.

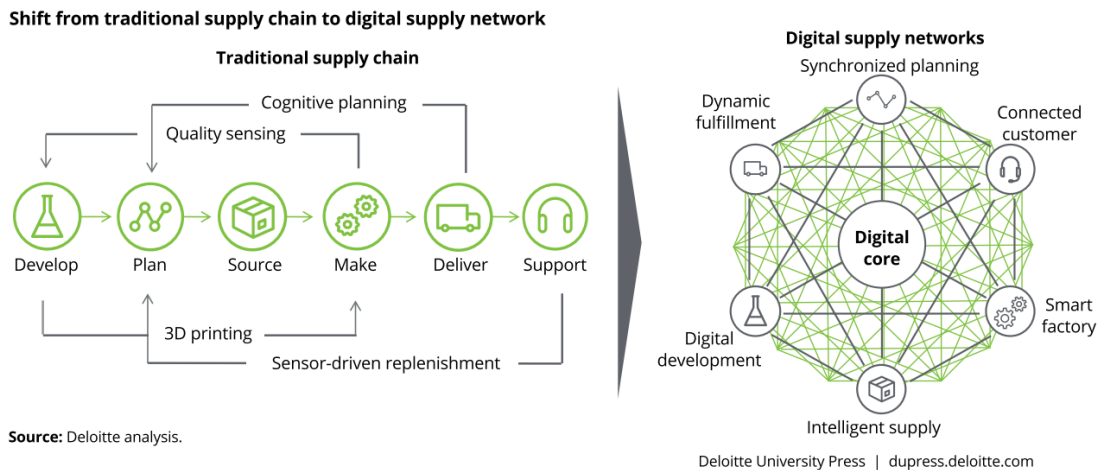


Figure 6- Shift from traditional supply chain to digital supply network (Tushar Oka, Sachi Ghai, 2017)

As illustrated in figure 6, above the digital core enables a dynamic integrated supply chain which creates a “Digital Supply Network (DNS)”, the DNS enables all nodes to be connected and transfer information on supply chain activity in real time, which enables better transparency and ability to recover any inefficiencies through cohesive efforts across the supply chain. The main reason behind the success of a DNS system is the ability to take informed decisions at every point within the supply chain, which enables strategic decision making by top management and a more holistic approach from middle management, as now the supply chain is an agile, transparent, integrated optimization engine built to serve the overall picture rather than a singular process like in a traditional supply chain.

The above shows the maturity and the journey that an organization supply chain graduates to as the online business grows, from a small integration to a full digitally integrated business.

2.7 Business intelligence (BI)

The business intelligence aspect can be identified as a key benefit from the transition from a traditional business to digitalized online business. A traditional business that currently has majority of its sales process on an instore or offline only model would have very limited access to data. The main reason for this is due to inability to capture all the different conversations between salespeople and customers, majority in person or over phone calls, none of the customer inquiries capture any data, and to convert this data is a tedious task. The implementation of an E Commerce platform would drive customer traffic to these portals. As a result of this traffic and the sales conversion happening online, a byproduct would be how the customer reached his decision of purchasing within the website, this can be captured with different techniques.

Business Intelligence can be briefly explained as a method of understanding the large sum of collected data by refining it using different tools, to understand occurrences in the past to help make business decision. The question that a reader maybe pondering, what is the difference between data analytics and business intelligence? This can be best answered by the statement made by Mark Van Rijmeman CEO of Big Data-Startups “the difference between Business Intelligence and Data Analytics lies in the fact that Business

Intelligence helps in making business decisions based on past results while data analytics helps in making predictions that are going to help you in the future.”

According to Beatriz Estay a Small Business Content Marketing Specialist at BigCommerce there are five functions within Business Intelligence that every business should evolve into.

1. Reporting

Corporate trends and insights extracted using analytics tools applied to collected data

2. OLAP (Online Analytics Processing)

Predictive forecasting using powerful technology that utilizes complex calculations by software packages such as: IBM Cognos, Oracle Business Intelligence Enterprise Edition and Jedox

3. Analytics

Collecting and sorting data, both current and historical in order to deliver understandings about the industry and the business

4. Data Mining

Collecting data from multiple sources which will be later processed to find and analyze patterns

5. Benchmarking

Using industry standards as a guideline to compare metrics to understand performance in terms of costs, time, and quality between different businesses and sectors within the same industry.

Similarly, it can be understood that business intelligence is a tool that is used to understand how the business is functioning and usually utilized by CEO’s and other C-Level management to make informed decisions through the use of Dashboards and KPI Reports that have structure intelligence on how the business is functioning. The dashboards hold critical data points that management use to understand the health of the business function. A sample dashboard from marketplace.clicdata.com to show the potential of having structured information for management to be able to understand business health and make decision at a glance, especially with a trained eye.

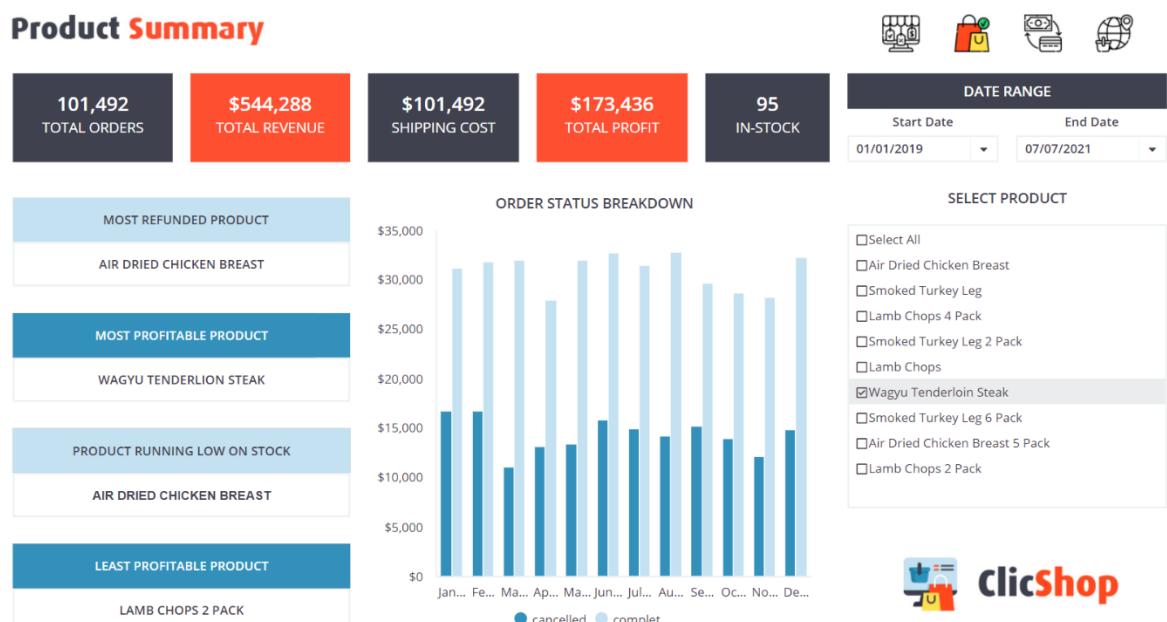


Figure 7-Sample Dashboard (marketplace.clicdata.com)

2.9 Chapter Summary

From the learnings gathered from within the literature review, the influence created through online market presence for traditional businesses is significant. Especially when you study the expansion in global context and how a globalized economy that is interconnected through the internet is a much different retail market than we knew a decade ago. Through this investigation we also learned that e-commerce does not alter the overall method of a business but rather enhance and act as a set of modern tools to complement the overall business strategy. The chapter allows the readers to understand the different levels of integration available and how each phase has its unique set of challenges and well as opportunities created. The level of integration for each different organization and the timing of implementation is critical, while each phase has certain levels of cost attached to it, the literature further stresses on the importance of aligning your support systems to be able to really cater to the customers' needs. E-commerce is not a plaster solution for all the problems that an organization is going through in terms of sales and conversions.

3 Chapter - Research Methodology

3.1 Introduction

The research methodology capture within this thesis can be described as a triangulation method. The study was conducted utilizing three key approaches in research: A systematic literature review (SLR), semi-structured focus interview with industry experts and empirical survey to gather both qualitative and quantitative data from participants to give a well-rounded approach to the research. The interviews would give specific industry-wise insights on the actual implementation of E-commerce within the Sri Lankan context whereas the empirical survey is conducted towards the customers that use these online platforms, who have transitioned from traditional retail to E-commerce within the last decade themselves, giving practical insights from a user's perspective which is highly relevant for planned adoption validation.

The adoption of a mixed approach would give both subjective and measurable data points that can be analyzed to create a holistic view of the subject that is researched by the author. The systematic literature review would facilitate the researcher to understand the established knowledge of the subject at hand from previous research and build the relevance to the topic selected by the author and create market specific insights relevant to Sri Lanka.

3.2 Research Design

The main purpose of this thesis is to understand the various implications developed through the transformation of a traditional retail business to an E-Commerce business, and its overall implication on the supply chain strategy. The initial literature review is structured to understand the retail market as a whole, and how the markets have evolved alongside the development of the industry, later it goes on to understand the different types of online channels and markets that are currently functioning in the market.

The literature review finally looks at some of the benefits of adopting E-commerce and how the switch helps gather data which can be further analyzed to continuously improve a business. Secondly, the interviews look to build insights into specific perceptions from top Sri Lankan companies that have successfully adopted an online sales channel, drawing in expertise and challenges faced when implementing such strategies in markets in South Asia. The interviews were conducted specifically for Grocery, Consumer foods and E-Commerce markets to draw focus towards the fastest growing segment in terms of E-Commerce, to draw parallels to other industries. Lastly, the survey is conducted with current customer bases who have experience purchasing online to understand what the market is doing well, as well as how the businesses can further improve its offering. This triangulation method to look at three different angles of the topic from a globally relevant theoretical perspective, local expert views validated by the actual customer reviews give a rounded and balanced understanding of the topic at hand. The empirical finding will be analyzed to create recommendations and draw conclusions for the readers to ponder and resonate with.

Research Model Developed

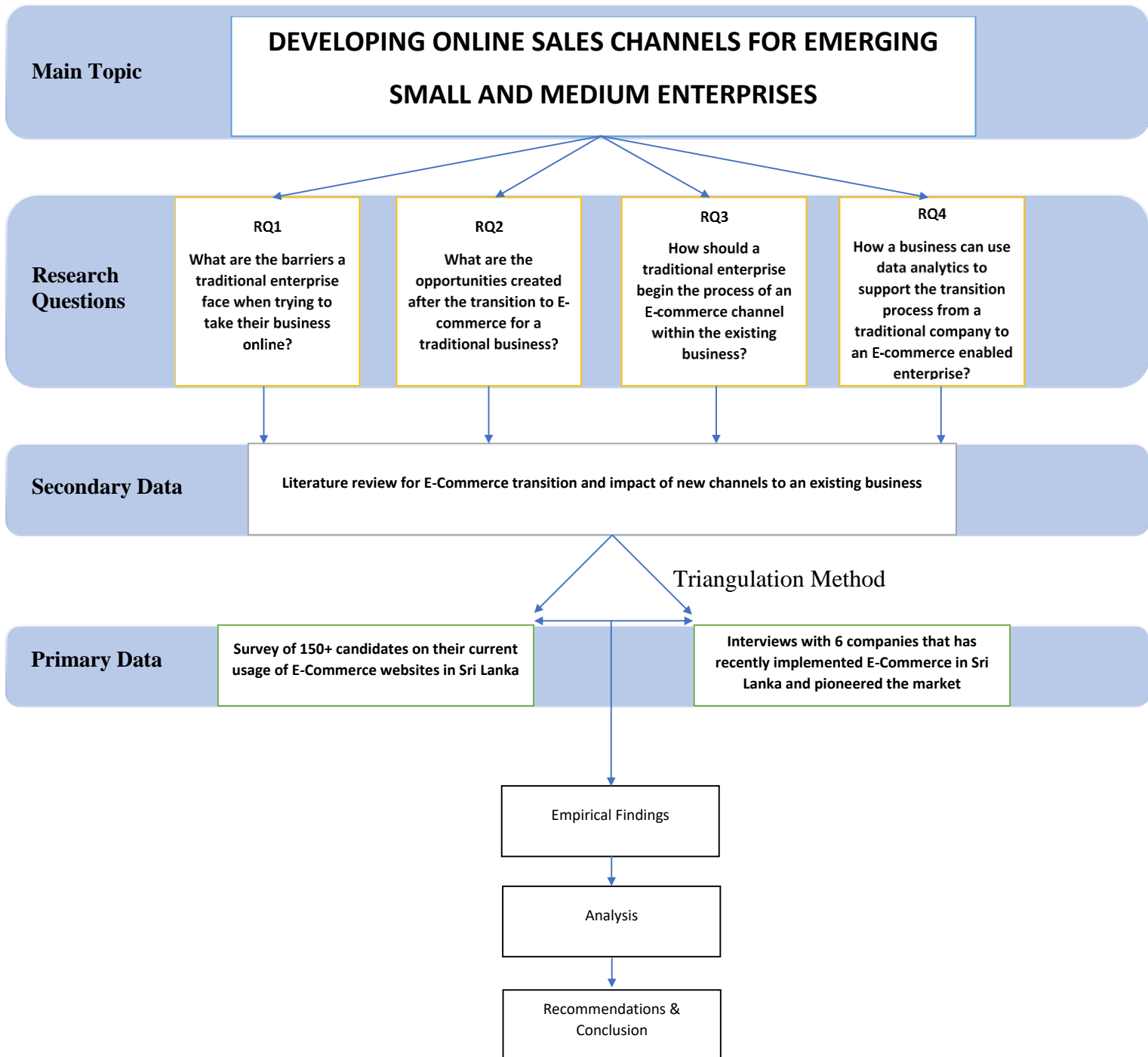


Figure 8- Research Model Specific to this Research

3.3 Selection of population and sample

3.3.1 Population

The population for this study represents all individuals who would have potentially purchased online and have experience in using an online platform in Sri Lanka. The population of the survey was restricted to residents of Sri Lanka or any individual who has used online platforms in Sri Lanka. The different techniques utilize different levels of expertise to triangulate recommendations that are well rounded.

3.3.2 Sample

The sample set that was used in the survey had 157 responses, out of which 6 were invalidated due to the quality of data and some inconsistencies in the method in which the survey was answered.

3.4 Data Collection

Data collection for the thesis was collected in two main methods, the first Primary data which is new data that was collected solely for the purpose of this research by this researcher, while secondary data can be recognized as data that was available from previous research subjects and industry data that can be sourced from different mediums such as books, articles, journals, and the world wide web (internet).

3.4.1 Primary data sources

There are two main methods of primary data utilized within this research. One method utilized is focus interviews with individuals from selected companies, the second method utilized is a survey from users of E-Commerce to understand the customers perspective when using online businesses to cater to their needs.

Firstly, six interviews were conducted in the year 2021 with industry experts from different industries that have transitioned or help transition from solely traditional businesses now adding E-Commerce or Online channels to enable customers to shop and trade using their platforms. Interviews can be identified as a good method of collecting primary data especially during pandemic times as it can be conducted through video conferencing technology which is a median between a face-to-face interview and a phone conversation. Although interviews can be considered time consuming and requires more preparation than other data collection techniques, interviews give the ability to gather critical insights and data from firsthand implementers which are highly relevant to the research questions in hand.

Three interviews representing platforms that enable small and medium businesses to go online with ease, using their business model; and three prominent businesses within Sri Lanka that have successfully implemented different levels of E Commerce into their overall business strategy that adds to the methods of purchasing their products and services for customers. The interviews that were conducted as semi- structured interviews as it gave the author the ability to follow a preset guideline in questioning the

participants, which gives the ability to capture as much insight within a short period of time. Semi-structured interview can be recognized to be a better choice when the author is knowledgeable about the subject matter and there is not much of a difference in the interview question structure (Crawford, 1997).

From the six interviews, all six interviews conducted are with companies from Colombo, Sri Lanka; even though two companies represent multi-national unicorns that has started operations in Sri Lanka within the last decade, and another start-up which is founded locally in Sri Lanka that is following the same business model as an E-Commerce platform.; while three companies are publicly listed in the Sri Lankan stock exchange. The interview can be segmented to three main parts, the first section focuses on obtaining insight as to why each organization has ventured into implementing an Ecommerce channel for their business and how it has helped the business in qualitative terms. The second segment is structured to discuss the quantitative aspects of E-Commerce. Finally, the third segment is aiming to bring in expert insight on the overall E-Commerce market in Sri Lanka and any advice given to new adopters who are venturing into or thinking about transitioning a channel to E-Commerce business segment.

The total interview consists of twelve open questions which lasted a duration of 40- 60 minutes, and the responses were recorded and transcribed to allow further analysis afterwards, to not allow to miss details as absorption in short 60-minute period is a daunting task. All candidates were sent the questions ahead for approval and preparation, which may be considered a disadvantage as some candidates were influenced not to answer a few specific data related questions in the interest of non-disclosure.

The table below portrays the interview organizations, the industry, the candidate's role and the length of the interview and method of interviewing.

Company	Industry	Candidate Role	Time Taken
A	Supermarkets	CEO	60 min
B	Supermarkets	Head of Digital	45 min
C	Consumer Durables	CEO	60 min
D	E-commerce	COO	60 Mins
E	Food Delivery	Country Head	40 Mins
F	Food Delivery	Head of Markets	40 Mins

Secondly, the author has used a survey to gather critical insights from actual users of Ecommerce platforms within Sri Lanka, this would give a third perspective of the market to prove what the customers appreciate and where they see opportunities for enterprises to improve their offering to their king. The questionnaire is structured to provoke thoughts on frequency of purchase and quality of different retailers available online.

3.4.2 Secondary data sources

The secondary data in this research mainly embody facts and figures gathered from research publications that were found in different mediums. Overall, over thirty-three books, journals and articles were referenced as secondary data out of which 15 publications we prioritized due to the relevance to the topic at hand.

Secondary data is structured in a manner where initially a broad aspect of the research and general understanding of Retail sector is built, later drilling down to the specific different types of E-Commerce. As the understanding of E-commerce is gathered the research cultivates learning on different developments as a result of the execution of E-tail channels from businesses worldwide.

Lastly, the study looks at the overall impact and alignment required for a supply chain when implementing new sales channels to the business, helping the reader understand the method of thinking when transitioning their respective business to this channel, and how different data points are enabled from this digitization and how it can create meaningful information for executives to make informed decisions.

Secondary data can be considered a critical phase of a research as it helps the author build the research problem and help the investigative stage of the research. As I.M Crawford mentioned in his publication “Market Research and Information systems” in 1997, secondary data may be adequate enough to wholly solve a problem and draw conclusions and can be considered one of the cheapest methods of collecting data when compared to research budgets expended on primary data collection.

3.5 Questionnaire

3.5.1 Overview

The questionnaire method was utilized to get the opinion of over 150 individuals who are potential users of e-commerce in their daily lives. The survey was structured to be completed within 10 minutes to not be a burden the participants and a fast method of extracting data to support the research. The questionnaire is comprised of 12-22 questions depending on the choices made throughout the survey, it is structured in three stages, firstly to cover demographics data, secondly to understand the usage of online retailing and lastly improvements for the industry. The survey was conducted on Google Forms platform which enabled real time updates and structured collection of data. The questionnaire was structured with both multiple choice, Likert scale and qualitative short answer questions. A cover letter was provided to help candidates understand the purpose of the survey and even gave an opportunity to win a voucher. The finalized questionnaire that was shared with the candidates will be included as an Annexure.

3.5.2 Structure of the questionnaire- Stage 1

The first stage of the survey is created to understand the demographic of the candidate being surveyed such as gender, age group, relationship status, occupation, average monthly income, and previous experience in purchasing online. The completion of these six questions will decide which section the candidate will be directed to, if the candidate has previous experience purchasing online, the respondent will be directed to the section “Online Purchasing Habits” which is the second stage. If the candidate has not purchased online the survey is directed to “How can we make Online Shopping Better” segment that tried to understand why customers do not shop online and why certain individuals refrain from shopping online.

3.5.3 Structure of the questionnaire – stage 2

The second stage of the questionnaire is comprised of questions that are directed at understanding the online purchase habits. There are ten questions that are structured to understand what the candidates purchase using E-Commerce, how frequently they shop, what retailers are preferred, the reason for purchasing online and how certain aspects like refund and return policies should align to customer requirements. This segment is structured with 3 Likert scale questions, six multiple choice and 1 typed in answer question. The 3 Likert scale question is developed to understand the frequency of purchase of online grocery and consumer durables, later to understand the ideal return and refund policies as well as timelines. The Likert Scale is developed to capture variables of frequency of purchase such as Daily, Weekly, Monthly, Quarterly, Annually, 1-2 occasions, never purchased on each different preselected vendors who are considered prominent in Sri Lanka. The ability to add any choices not given in the list were also incorporated and a few vendors initially not on the question were later added as an improvement with the respondents.

3.5.4 Structure of the questionnaire- stage 3

The final stage of the survey is structured to cover two aspects depending on how the respondent has answered questions previously. The segment titled “How can we Make Online Shopping Better?” enables candidates who have purchased online before to answer based on their previous experience e-commerce in Sri Lanka and how it can be improved to better the overall experience. On the other hand, candidates who have not shopped online before would be able to respond in a manner that goes to understand why they do not shop online and what the E-tailers can do to create a more inclusive environment for all customers. This segment is comprised of six questions, of which four questions are multiple choice, one fill in answer and one question is Likert scale. The Likert scale question is targeted to create a relationship between industry and individual opinions based on why they do or do not shop online for that segment of retail. For example, a respondent can say they do not shop furniture online because of a “bad experience”, while some candidates responded “Love It” when questioned about food ordering online. Finally, the questionnaire tries to understand the manner in which companies can adapt to make the experience better and help convert them to online customers.

3.5.5 Implementation of questionnaire survey and interviews

As mentioned earlier the survey was developed within the Google Forms platform, due to the ease of delivery and data collection. The questionnaire once developed was peer reviewed, corrected and the distributed among a population that can be considered current and future users of E-tailing. The candidates were responded using a link shared through email, social media, and personal messages on a volunteer basis. The candidates were incentivized by an entry to a raffle for volunteering their time.

Furthermore, the interviews that were conducted on video conferencing technology with the prior consent of the candidates and their respective organizations, while some organizations requested some questions shared be omitted for confidentiality reasons.

3.5.6 Strategies for error control

A few different strategies were employed to minimize the error rate within the survey especially. Firstly, all candidates must share an email address as a method of deterring false responses. Move over, the questions were made compulsory so sections of the survey cannot be skipped to create partially filled section invalidating responses. The multiple choices also enabled to streamline the answering process while helping reduce confusion within candidates. Lastly, the survey had the email address as a unique key that allowed to filter any duplicate entries.

In addition, the interviews conducted with industry professionals using video conferencing technology using software such as Microsoft Teams and Google Meet, allowing a face-to-face meeting without physically being present during pandemic crisis enabling a fusion between the convenience of a telephone call and character of a in person meeting. All meeting held were recorded with the consent of each professional, for referencing purposes as understanding all the information within a 60-minute time period is challenging.

3.6 Data Analysis

The data analysis was set up as a method of knowledge triangulation. The systematic literature review would act as a base which is used as a foundation to validate local findings with international benchmarks. The two primary data gathering mechanisms, survey questionnaire and expert interviews act to create credibility from a user's perspective as well as the vendor. This is clearly illustrated from the figure below.

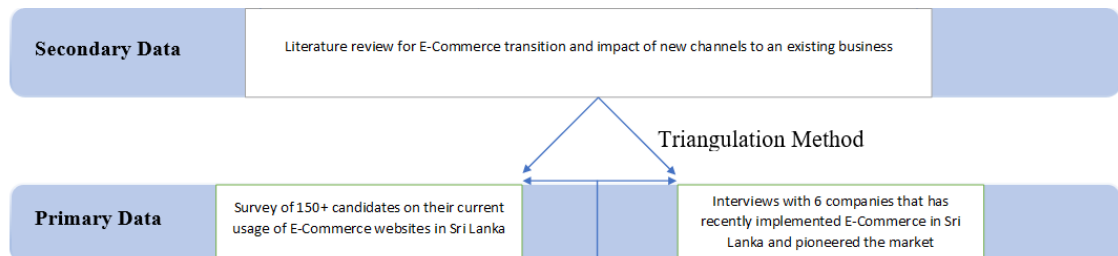


Figure 9- Triangulation Method

To examine the data gathered through primary information sources such as the questionnaire and interview, the author utilized a few analytical tools. Firstly, the data from the questionnaire was fed into Microsoft Excel where further processing was required to create descriptive data, later some of this data was further analyzed using IBM SPSS software platform, which is a software specializing in statistical analysis with many open-source analytics tools available on its platform.

3.6.1 Identify the barriers faced by businesses during transition

The research aims to focus on understanding some of the capital expenditure incurred to a business during the process of transitioning to an online channel, this information is gathered from both literature as well as industry experts to understand the many cost factors. Further the interviews with industry experts would act as a barometer on how traditional businesses gather information to counter the lack of knowledge within staff and leadership on both technical and operational requirements to successfully implement the ecommerce strategy. The survey would act as validation on industry performance, where data collected on what factors are survey candidates unhappy about and see potential to improve. As Sri Lanka is a population that is largely exposed to foreign developments and social media outlets such as YouTube give us a glimpse of the comforts and lifestyles outside of Sri Lanka, many customers have opinions on the many weaknesses the Sri Lankan corporates have.

3.6.2 Understanding opportunities by adding E-Commerce

The opportunities created by the adding e-commerce as a sales channel are vast and tempting for any business big or small. The research is devised to gather information on how new markets were added to organizations by transitioning and a certain segment of the customer base could only be captured by the adoption of e-commerce. The interviews with industry experts also added a side-effect of e-commerce as a continuous flow of additional data points are added to the arsenal. Some insights from FMCG retailers added that new product range additions were required with the introduction of the online channel that generated significant income that accounted as untapped market prospects which can be considered a big positive from the implementation of this digitization strategy. Later we also study the responses given by the survey candidates to understand what industries the population is comfortable purchasing online.

3.6.3 Identify the process of an E-commerce channel within the existing business

The research aims to cover this segment of analysis mainly through industry insight and systematic literature review process to identify the many routes taken by firms globally to achieve an ecommerce segment within their business, how different markets reacted to the strategies. Furthermore, this draws attention to different strategies utilized to minimize risk and understand markets by using litmus tests to validate certain investments and explore the overall market potential. The process is not aimed at creating a strict step by step blanket solution for all adopters, more a guideline on how to pace the growth and understand individual markets as the segment grows, with customers adopting this as viable method of purchasing.

3.6.4 Recognize the use of data analytics to help transition from traditional enterprise to an ecommerce enabled enterprise

Data analytics has become a vital role in many organizations since the birth of ERP, Point of Sale (POS) systems, and Ecommerce platforms. All three of systems mentioned prior are data gathering mechanisms as a byproduct of its core function. To understand the

impact of such critical information for an organization, the insights from the interview candidates were vital and informative. The secondary data from research conducted prior has also been critical to understand how organizations extract data as well as use analytics to sharpen decision making and more importantly organize the user experience to better suit customer expectations with these learnings. Data analytics enable businesses to understand customer patterns better and help shape the business by many customers behavior que's that were always available but never documented or collected due to tediousness of the process. With technology and the many platforms' data collection is rather easy and, analyzing data through the many techniques and tools have become rather straightforward without much need for large capital expenditure especially in the early stages of adoption.

3.7 Descriptive Analysis

To explain the data collected, descriptive analysis methods will be utilized in the form of tables, graphs, charts, and diagrams. The expectation would be to create visual representation of the information for the reader to easily understand the information presented. For example, the correlation between income and frequency of purchase would be better represented in a bar or histogram chart than a tabular form where the data is a rather separated and the information that is trying to be communicated maybe distorted. The expectation of the analysis is to develop a process in which a traditional business can understand why and how an online sales channel can support their respective business depending on industry patterns as well as to develop a process in which the adaptation of an online channel is set based on the maturity level of the organizations supply chain allowing them to fully reap the benefits of e-commerce segment without disrupting the well-functioning traditional sales methods of an organization.

3.8 Model development

3.8.1 Adoption framework

Based on the findings from the triangulation methods of structured literature review, survey, and expert interviews there are two main concepts that are formed. Firstly, the understanding of the barriers and opportunities created by transition into online business segment. Secondly, the research wants to create a generic process of adoption that helps new entrants' flexible methods of easing into the segment without large capital and resource expenditure to reap the benefits of the maturing market segment.

4 Chapter – Research Findings

4.1 Introduction

The Research findings chapter aims to analyze the qualitative and quantitatively data gathered from the triangulation method and formulate learnings. From the survey data it was observed nearly 97% of total population has already been exposed to the e-commerce channel from different methods such as direct websites, e-commerce platforms and social commerce techniques. The observations were segmented into two categories, individuals who have previously been exposed to e-tail sales methods and non-users who have not utilized the many options for online purchasing due to various reasons. This content of this chapter includes, demographic factors, mode development which includes global, local, and interviewed segment analysis, and finally process development. Finally using this insight, a four-stage model is to be developed to support the integration.

4.2 Data screening

When capturing data from a sample population exceeding one hundred candidates from the survey and interviews of 6 industry experts averaging 50 minutes each, certain procedures had to be applied in order to authenticate responses captured. As an incentive was provided for the completion of the survey, a few duplicate responses were captured in the screening process which were cleansed from the data set prior to analysis. Further some techniques developed within the survey to capture invalid responses that skew the data were also utilized, and the requirement of adding an email address was added as a deterrent to prevent distorted entries to have a method of accountability. In addition, the interviews were semi-structured that allowed a uniform flow when recoding the answers to the questions.

4.3 Descriptive Analysis – Demographic Factors

This segment of the research is focusing on the factors which best describe the sample population that participated in the survey. The demographic factors within this research cover age group, gender, monthly income, occupation, and Relationship/ Civil Status. The following demographics illustrated below show the sample set in a more descriptive method. If you look at the data set only 151 candidates are validated even though 157 responses were recorded by Google Forms. The following descriptive statistics would be presented for the reader to understand the background of the participants of the survey to further give credibility to the information presented.

Table 2- Age Group-wise Gender

Age Group	Female	Male	Percentage	Total
Below 18 years		2	1%	2
18-24 years	6	14	13%	20
25-34 years	36	60	64%	96
35-44 years	6	7	9%	13
45-55 years	4	9	9%	13
56-65 years		1	1%	1
65+	3	3	4%	6
Percentage	36.4%	63.6%		
Grand Total	55	96		151

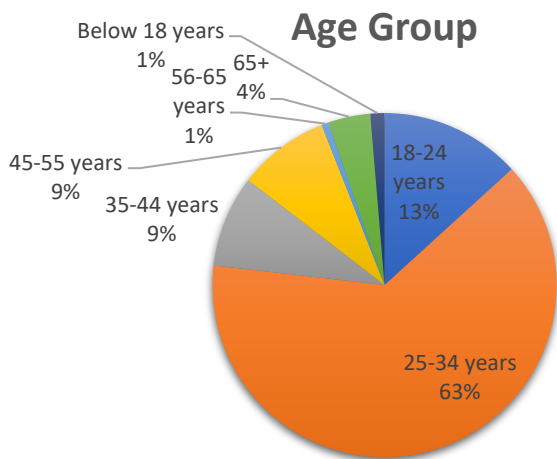


Figure 11- Age Group Distribution Pie Chart

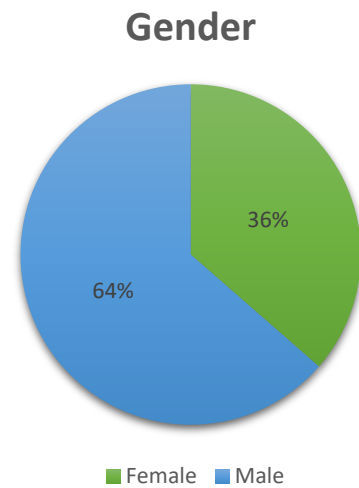


Figure 11- Gender-wise Distribution

The income vs. age group gives an idea of the purchasing power of the survey participants, and also current purchase habits of 18years- 55 years would go to predict which way the market is moving towards within the next 20 years. Figure below gives a more descriptive visual of the data

Table 3- Income vs Age Group

Income/ Age Group	> 18 years	18-24 years	25-34 years	35-44 years	45-55 years	56-65 years	65 years+	% of Total
Dependent	1	10	9		1			14%
Less than 100,000		3	21		2			17%
100,000 - 199,000			23	7	3		5	25%
200,000 - 500,000			29	3	3		1	24%
More than 500,000+			2	2	3			5%
Prefer not to say	1	7	12	1	1	1		15%
Grand Total	2	20	96	13	13	1	6	151

When questioned about the purchasing habits of the sample population, what the experience purchasing online was like? It was positive to see over 97% of the respondents have purchased online and over 67% have been purchasing online before the pandemic. In contrast, the conversation on businesses, has at least 67% of the small and medium enterprise businesses created at least an entry into the online sales channels?

Table 4: Income Category vs. Online Adoption

Income Category/ Online Purchase Experience	No, I Have Never purchased online	Yes, After COVID (2020 Pandemic)	Yes, Before COVID (2020 Pandemic)
Dependent	1	7	13
Less than 100,000	2	7	17
100,000 - 199,000		12	26
200,000 - 500,000		13	23
More than 500,000+		2	5
Prefer not to say	1	4	18
% of Sample Population	3%	30%	68%

When trying to understand the frequency of purchase online against different age groups we are seeing over 50% of the sample population purchasing online at least once a month, with 34% shopping weekly. From a total of 147 participants in the survey that answered yes to shopping online, only 27 (less than 19%) said they shop online rarely. This again is a very positive signal that not only is the population shopping online, but they are shopping online frequently.

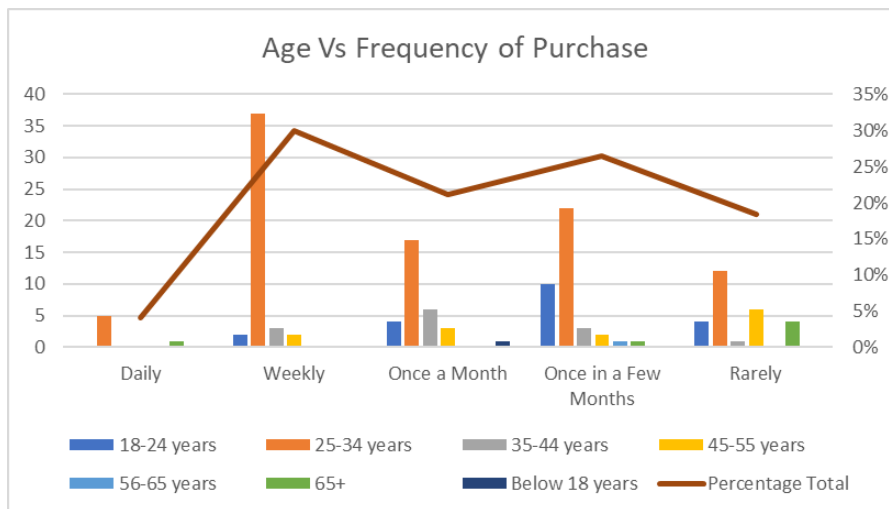


Figure 12: Age Vs. Frequency of Purchase

Similarly, when analyzing the shopping frequency based on the income segments, two income groups; 100,000 – 199,000 and 200,000 – 500,000 have a significantly high percentage of participants who order on a weekly basis. In contrast the income group who have less than 100,000 LKR monthly income tend to order less frequently show a positive correlation between income and order frequency. However, the candidates who earn more than 500,000 LKR show a less frequent purchase pattern.

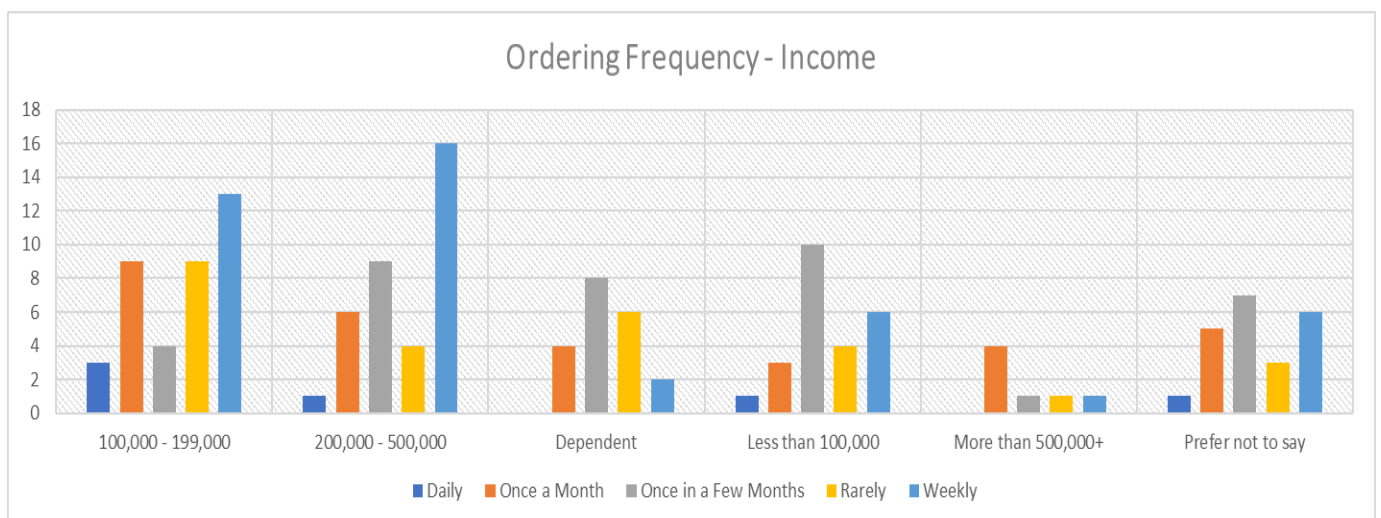


Figure 13: Monthly Income Vs Order Frequency

When analyzing the demographic, it was evident COVID-19 had quite an impact on the overall adoption of E-commerce as a serious channel for retailing in Sri Lanka. This can be seen reflected in the figures below.

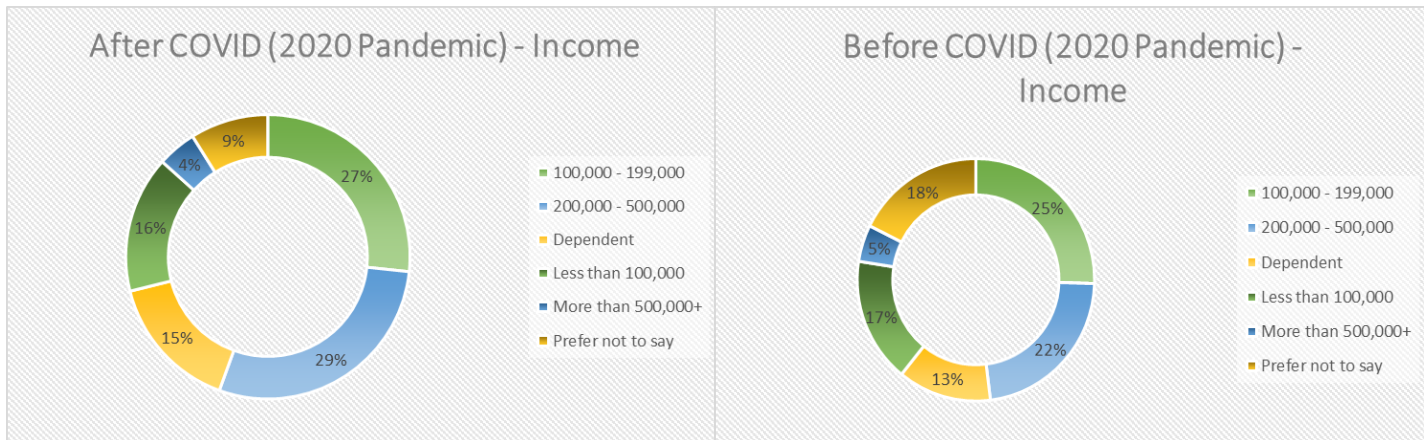


Figure 14: Online Adoption COVID19 Impact

The analysis of Income shows that the highest percentage of participants are from the 200,000 – 500,000 income group. However, participants from three income groups; 100,000 – 199,000, 200,000 – 500,000 and less than 100,000 have moved towards online purchasing after Covid 19. The figure below exposes occupation-based distribution of the same metric.

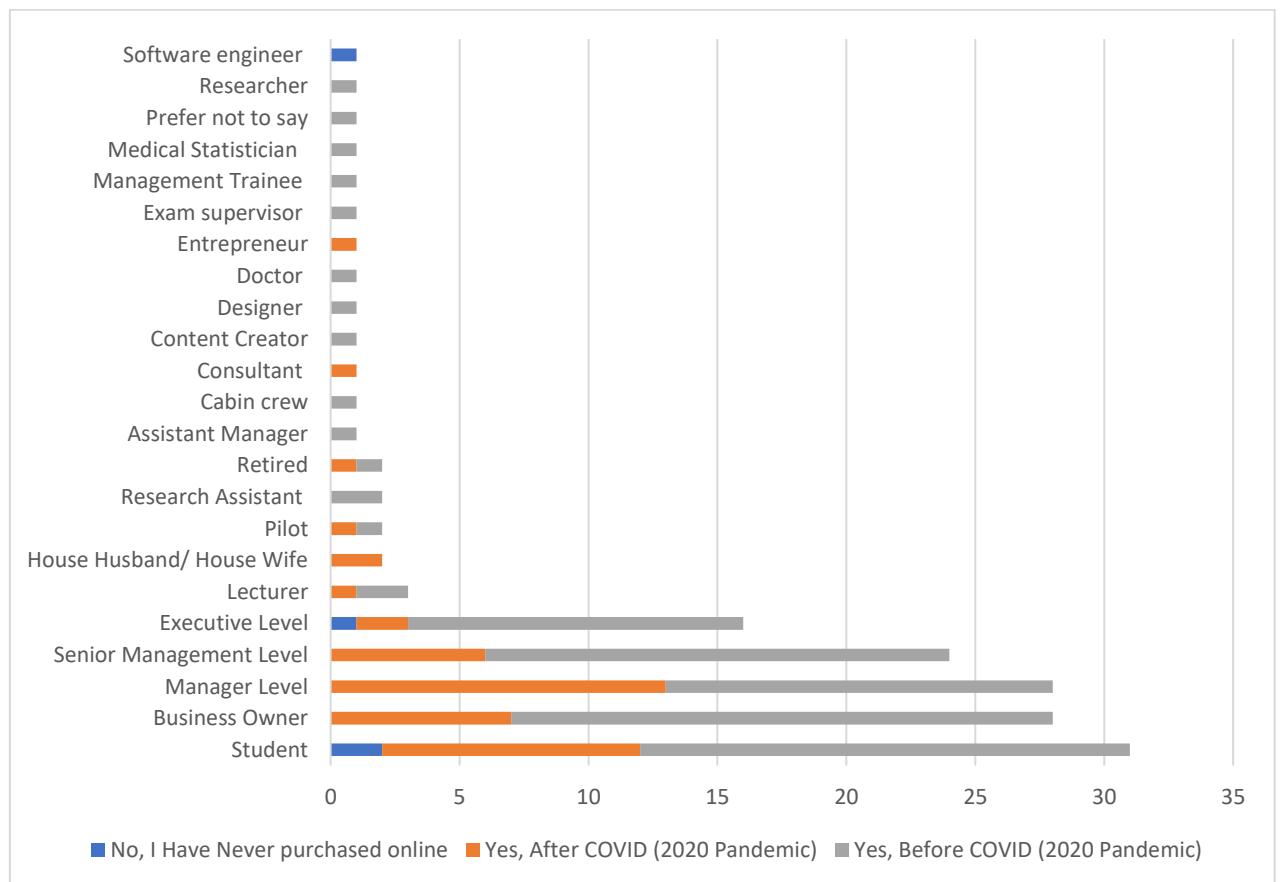


Figure 15- Occupation vs. E-Commerce Adoption

Similarly, we tried to understand what type of operating system that each candidate uses when connecting with their mobile phones, the distinction is important to understand when developing mobile applications which operating system is preferred by the customer base.

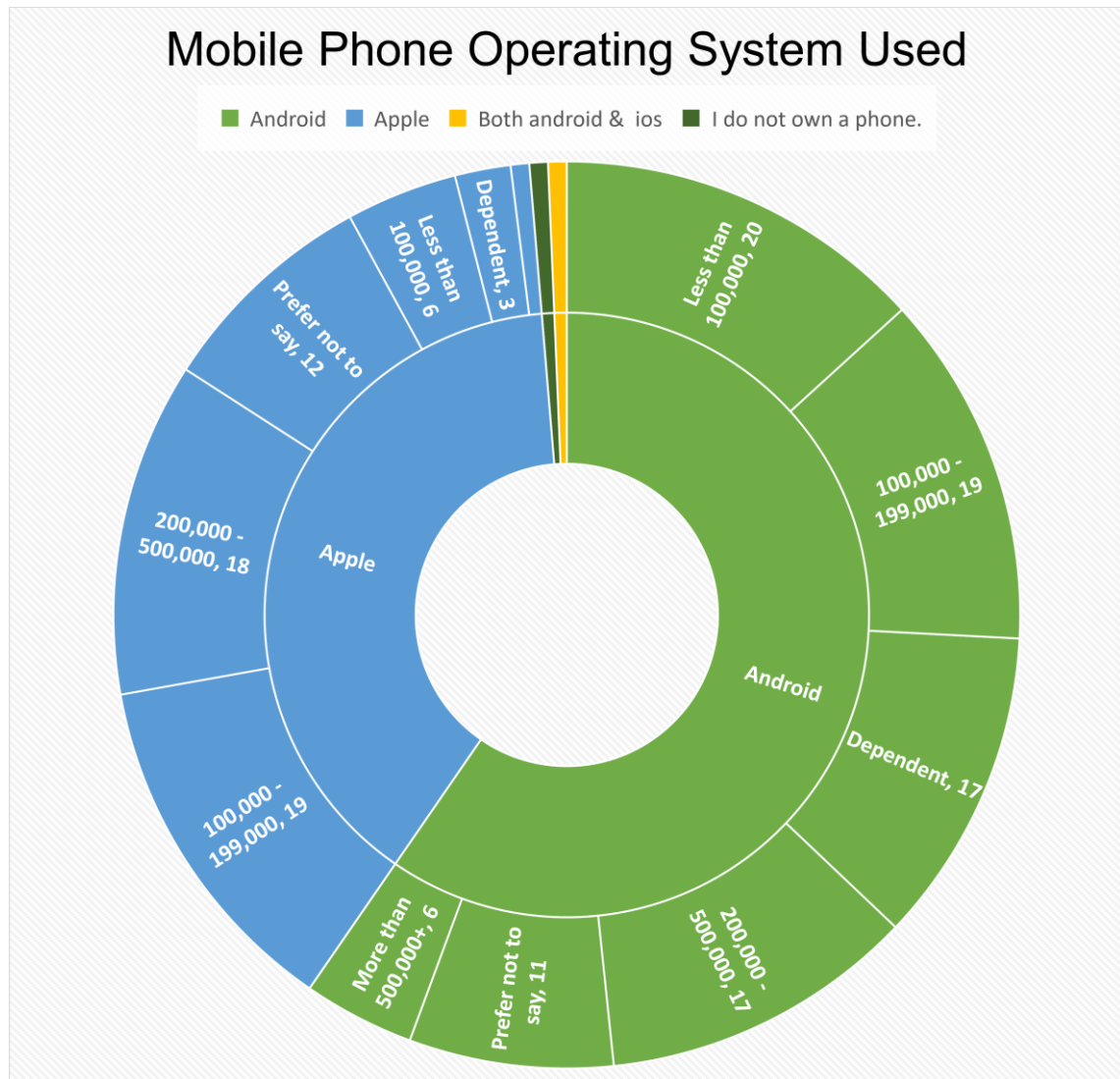


Figure 16- Mobile Phone Usage (OS wise)

The above statistics and visual representations enable the reader to get a good idea on how the sample of population used in the survey is represented. With a mix of students, managers, business owners and executives as majority of the population between ages 25-34 years of age, this segment covers the middle-income earners who represent the customer base for the next 20-30 years. This segment could be analyzed as major portion of the market in the next decade and highly relevant to business decisions in today's market, especially for organizations focused on growth.

4.4 Model development

To understand which industries are most popular amongst online shoppers and expose some of the challenges faced by some of these industries when executing an E-commerce channel within an existing business, the researcher has developed a few models using the data gathered through the questionnaire.

4.4.1 Phase 1 Development of Ecommerce Globally

Through the literature review there is significant proof to deduce that majority of big box retailers in grocery, supermarkets, consumer durables and fresh markets have transitioned to e-commerce to increase their footprint and recognized a segment of customers that prefer to purchase online. The customer is evolving for different industries in varied manners where some industries that require a touch and feel in put customers tend to “Research online, purchase offline” (Gallino & Moreno, 2014). This research gives significant evidence to this finding in both the expert interviews and literature where customers are purchasing goods such as furniture and fashion items that might require a physical confirmation, still being researched online for other customer reviews as well as item specifications such as dimensions, color options, etc. where part of the decision-making process has already started at home. Due to this reason, we have seen big box retailers convert to online stores, as well as complete cloud retailers such as Amazon, create a physical footprint through acquisitions such as Whole foods to embrace the balance between both worlds.

E-Commerce giants have further invested in their overall infrastructure to better the technology for logistics and last mile delivery. Amazon, Alibaba and JD for example have improved their automation capacities and even integrated to develop automated cars and robots for contactless last mile delivery to customers. (Alfonso et al., 2020) The overall market has adapted and reacted to many opportunities created by the pandemic, and it has become a craze to figure out how the new normal will support online commerce, and how businesses will hold on to the newfound traffic.

4.4.2 Phase 2 – Development of Ecommerce within Sri Lanka

E-Commerce development within the island of Sri Lanka has been a subject of importance in the last two years mainly because of the impacts to traditional retail due to the pandemic. However, there has been a steady rise in the usage of internet-based shopping in the years before that. Having worked for a last mile delivery company two years back, the researcher saw clear evidence of how the market growth and demand for faster delivery and more competitive pricing for 3PL and last mile logistics solutions. In 2016 retail was recognized as the fastest growing sector in Sri Lanka as tourism markets were soaring and many diaspora citizens were looking at options of returning to the calmer island lifestyle. (Oxford Business, 2016)

With this newfound growth in retail specifically through e-commerce the importance of supply chain planning and logistics sector has had a boost in investment and attention. In the last 5 years many ecommerce solutions have started operations and heavily invested in trying to capture market share early in the game.

4.4.3 Phase 3 – E-Commerce development in Companies interviewed

E-commerce can be seen developed at different levels across Sri Lanka, through this research the author has selected 6 organizations that are considered to be doing E-Commerce at a higher level than the rest of the market. The table below clearly aggregates an illustration on how developed these Traditional businesses, some converting recently after the pandemic, successfully displays their accomplishment through the conversion process.

Level of Implementation Company:	A	B	C	D	E	F
Internet at Office	Yes	Yes	Yes	Yes	Yes	Yes
Customers can place orders by website	Yes	Yes	Yes	Yes	Yes	No
Mobile Application (Android/Apple)	Yes	Yes	Yes	Yes	Yes	Yes
Internet Payment Gateway (IPG)	Yes	Yes	Yes	Yes	Yes	Yes
Other Language version of website for Sri Lanka (Sinhala or Tamil)	No	No	No	Yes	No	No
Digital Strategy in Place	Yes	Yes	Yes	Yes	Yes	Yes
Marketing integrated to Omni-channel	Yes	Yes	Yes	Yes	Yes	Yes
Platform for external vendors	No	No	Hybrid	Yes	Yes	Yes
Data Analytics active within company	Yes	Yes	Yes	Yes	Yes	Yes
Inhouse Last Mile Logistics	No	Yes	Yes	Yes	Yes	Yes
Outsource Last Mile Logistisc	Yes	Yes	Yes	Yes	Yes	Yes

Table 5: E Commerce Development within Interviewed Companies

Phase 3.1 Barrier faced by businesses when implementing an E-commerce channel

When going into detail, the organizations that have been interviewed above are representing retail marketplaces in different forms. Company A and B represent the Supermarket industry in Sri Lanka, and both have recently invested a lot of resources into establishing a strong online presence, even though one of the corporates had ventured into e-commerce through a website a decade ago, however the market dynamic and the focus was still set on the brick-and-mortar stores as the volume of business was not online at that point. While company B is rather new to online sales, they have the largest footprint in terms of outlets across the island, being a big box store and having its warehousing and overall supply chain infrastructure is a key reason they were able to implement an e-commerce channel within 3-4 months. Both retailers are persistent on the fact that no BCP (Business Continuity Plan) could have prepared them for the challenges brought forward by the COVID-19 pandemic, the overall supply chain was totally disrupted, and their customers were let down; this is what motivated both organizations to develop the e-commerce channels as it realized this medium was the most appropriate to regain the trust of the customers and be able to once again serve the clients to ensure the overall customer satisfaction.

However, both had to face many different barriers during the implementation process. Company A which was struggling to fulfill 1,000 orders per day during April 2020, was able to develop the process to fulfill 10,000 to 15,000 orders a day by October the same year. There are two key learnings from this process, firstly creating your website and having a front-end marketplace is only half the battle, developing the backend

operation and aligning your overall supply chain to complement the new channel is critical, if you look at the reviews of any global enterprise, they are fulfilling the customers' expectations. This process includes item selection, order placement, paying, tracking, receiving and consuming. The second major learning from the process is that the organization requires to plan the growth and manage both the resources and customer expectations.

In Sri Lankan context, certain organizations hoggishly competing to capture orders from customers only to realize they were not able to fulfill the customer expectation as the organizational leadership nor the infrastructure was ready or able to cater to the orders accepted through the e-commerce portal. Organizations such as company A had an extensive plan and understood their capability, from the core values of the organization it talks about Trust, Caring, Excellence, Innovation, and Integrity. These values are reflected in how they responded to the COVID-19 pandemic, the manner in which they understood the customers pain points, innovated to the overall process to achieve success to regain the trust of the customers. The CEO from Company A explains the importance of securing integrity as the customer now trusts the service to pick and choose fresh goods on behalf of the customer and to ensure the utmost quality at the point of delivery. Unlike homogenous products choosing fresh produce for customers can be extremely complicated as fresh vegetables are never standardized and personal preference plays a big role, a significant reason why grocery shopping is largely an instore experience for most households. The evolution of this process has not stopped, and many groceries are still perfecting this process to ensure it is up to the customers standards; specially in South Asia where quality standard of fresh produce can drastically vary from store to store.

Furthermore, when talking about the quality of a website, and its features from a customer's perspective; not all companies interviewed had fully operational websites geared to generate sales, company "F" has a website only for its rider hailing and marketing segment of the business the food and product delivery portion of the business is completely based off its mobile application. In markets like Sri Lanka where mobile phone penetration is greater than computer use, a well curated mobile application is just as effective. From a global perspective 88% of companies in Europe had commercial websites with a sales platform whereas only 42% relied on an online marketplace in order to sell. (Jovanovic et al., 2020)

Through our research many of the successfully implemented organizations harped on the investment that is required in order to create meaningful ecommerce website and mobile application in house, for the small and medium enterprise as well as a traditional business that does not want to fully commit to an online strategy this can act as a barrier.

Fortunately, the solution can be found within many forms in different countries, online marketplaces or ecommerce platforms are available in many regions that specialize in creating multiple vendor marketplaces such as amazon or classifieds such as eBay. The platforms not only give solutions to the web development and Internet payment gateway (IPG) but also other non-core problems such as logistics and packaging material, which is also catered for by these platforms. This solution covers many of the concerns shared by traditional businesses when it comes to exploring technological

improvements, such as lack of knowledge, capital expense on website development as well as delivery networks for nationwide coverage, especially in less developed countries where the postal service is not reliable and lacks traceability. The above input from the interviews illustrates some key barriers faced by traditional businesses when starting the transition journey towards e-commerce. There are a few concerns to address when utilizing platforms for your online expansion strategy which will be discussed a little later in the discussion.

Phase 3.2 Understand the opportunities created after the transition to E-commerce

From the six organizations that were interviewed three organizations “A, B, C” have a large footprint in terms of physical stores in Sri Lanka and can be considered some of the best brands in their respective industries. While the other three organizations “D, E, F” are mainly considered online platforms that have little to no offline presence but have an equal brand recognition within the island especially with Western and Central provinces where majority of transactions take place. The latter three companies that were established within the last decade in Sri Lanka, and E-Commerce has been their main vertical of business. The statement above is proof on the ability for e-commerce to impact business expansion the same way physical expansion can. When considering the main impact, the opening of an online sales channel can benefit by giving access to new markets and the ability to reach customers from completely different geographic, economic, and social backgrounds than you are currently serving for.

An E-Commerce platform is a marketplace online that is able to showcase items and services using multimedia to communicate about a product to a customer, trying to replicate the experience a customer goes through instore, in some instances better, as visual representations such as videos and augmented reality enables customers to envision the product or service in consideration to their personal use better.

In addition, the holding cost is lower simply because the capital cost is saved by keeping stock of multiple items is not necessary, only images and content are required to convert sales, the same content can be cross utilized for different campaigns. When combined with the powers of social media and viral content, showcasing efficient solutions with products are grasped by populations extremely well, a well thought out marketing campaign which can be perceived as memorable or surprising given how much the content is shared among communities on social networks building a lasting brand image (Brzozowska & Bubel, 2015).

This kind of strategy is a part of a whole new set of e-business tools that are unlocked through this new channel of business, which would not be possible to be reached if a traditional business does not evolve itself to online channels. It must be noted that businesses do not have to expand to a fully integrated e-commerce platform to gain these benefits, small and medium enterprises use social networks to share content to reap similar benefits to some extent. The beauty of e-commerce is the ability to implement at the level that is affordable and according to the capability of the company’s overall operation. This can be considered one of the main advantages a retail business has when activating an online channel compared to any other sales

channel due to the flexibility of implementation based on the overall digitalization plan by the company.

Furthermore, according to the input from the CEO of company “C” even though a substantial number of brick-and-mortar stores exists around the island, there is a segment of customers that is growing that prefer to shop online. Even though company “C” has been in the E-Commerce market for the last 5 years with a website, the majority of the customer conversion happened post pandemic, this has catalyzed the expansion into the e-commerce sector for the consumer durables industry and created a race between the market leaders to implement the best e-tail solution. The rush of customers created a large opportunity for the consumer durables market that was dominated by distributors who were margin hungry, now consumers had the ability to directly come to the manufacturers and importers that allowed better pricing, availability, and online promotions through their respective e-commerce platforms cutting out the middleman.

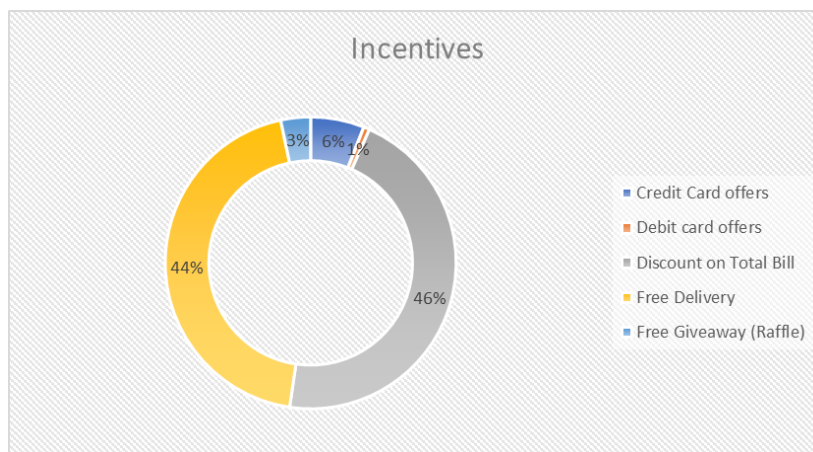


Figure 17: Incentive to purchase online

Analyzing the data available from the questionnaire, 47.4% of the population was looking for discounted billing, where consumer durable companies now have excess margin, they can easily allocate towards discounting and other promotions to drive traffic to the e-commerce sales channel. The figure above gives a clear indication on what can be done to incentivize customers to shop online. It is interesting to see discounting and free delivery are the two main methods of incentivizing customers accounting for almost 90% of the sample population surveyed, which can be easily planned when compared with some of the more complex promotions and marketing campaigns planned within a more traditional context.

With tools such as google analytics and firebase used in many of the interviewed companies to give many insights into customer behavior, corporates are now able to map customer purchase patterns and behavior better, and this level of insight is only possible through the implementation of an E-commerce portal that allows direct exchange with the customer. The additional data insight can be considered a big plus when considering the opportunities created by the implementation of an e-commerce arm to the current arsenal of sales methods. These methods elaborated above can act as evidence of the benefits the online sales segment can help a traditional business expand at a lower cost, with added flexibility to follow the customer and better cater to the needs and expectations, without having to grow physical presence.

Phase 3.3 Understanding the customer

Since we have understood the global context, local comparison, and specific top performers in the segment, we need to focus on the basic foundation of all the demand, the customer. As descriptively analyzed in the demographic segment of the research, the survey was structured to understand where these demographic shops, frequencies of purchase and what segments of the retail market they are willing to convert to online. The objective of the research was set early “To develop a process to transform a strictly traditional retail business into an E-Commerce enabled Small and Medium Enterprise (SME)” this would be the first step of that process. Assuming majority of the traditional businesses and SME’s have a revenue base with a set of customers already utilizing their service, the expectation of this segment of the research is to help understand where the sample set within the survey, shop.

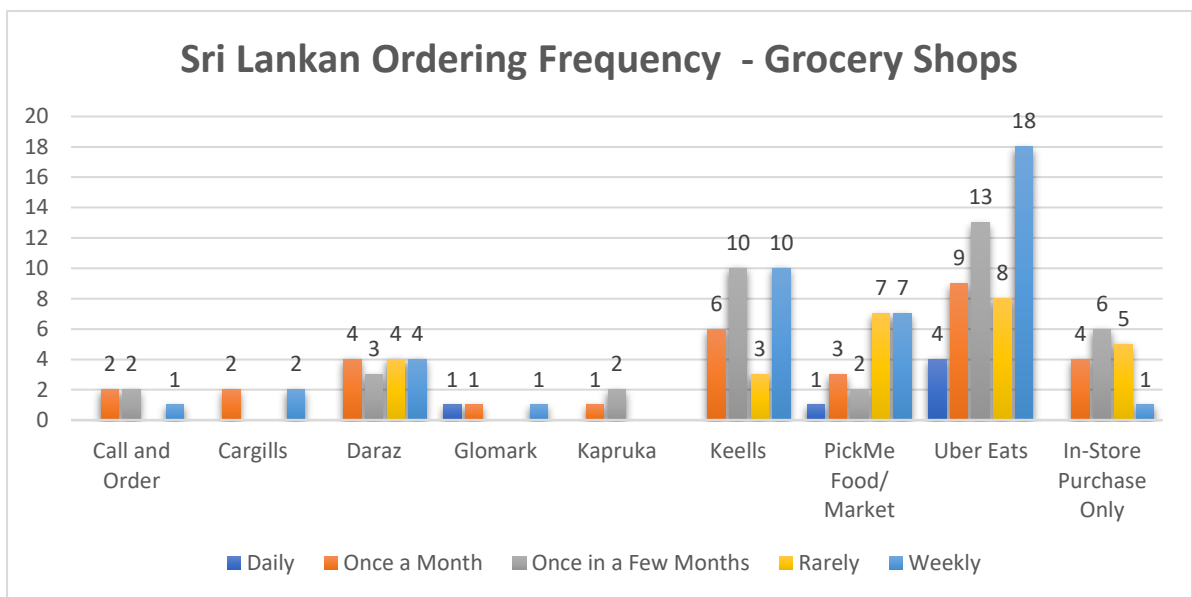


Figure 18- Local Retail Shopping Pattern

The figure above shows a clear indication on how frequently shoppers use online services such as UberEats and Keells at a very frequent rate. The sample set further iterates that many customers are considering online shopping and trusting these services to make critical decision such as choosing Fresh produce on behalf of the customer which is a positive aspect as brands have had to earn this reputation with customers and it is a very tough accomplishment. We must understand that UberEats is a platform that creates opportunities for traditional retailers, bakers, restaurants, and cloud kitchens to focus on their core business, as it takes care of the ecommerce marketplace development, logistics and Internet Payment Gateway services. The user experience within this app can be recognized as a main reason to its success, almost seamless experience that is used on a very frequent basis, proven over time and especially during the pandemic which many individuals depended on during quarantine period.

A similar frequency analysis was conducted on consumer durables segment within the market to understand how no fresh and grocery goods have been accepted by the Sri Lankan consumer base.

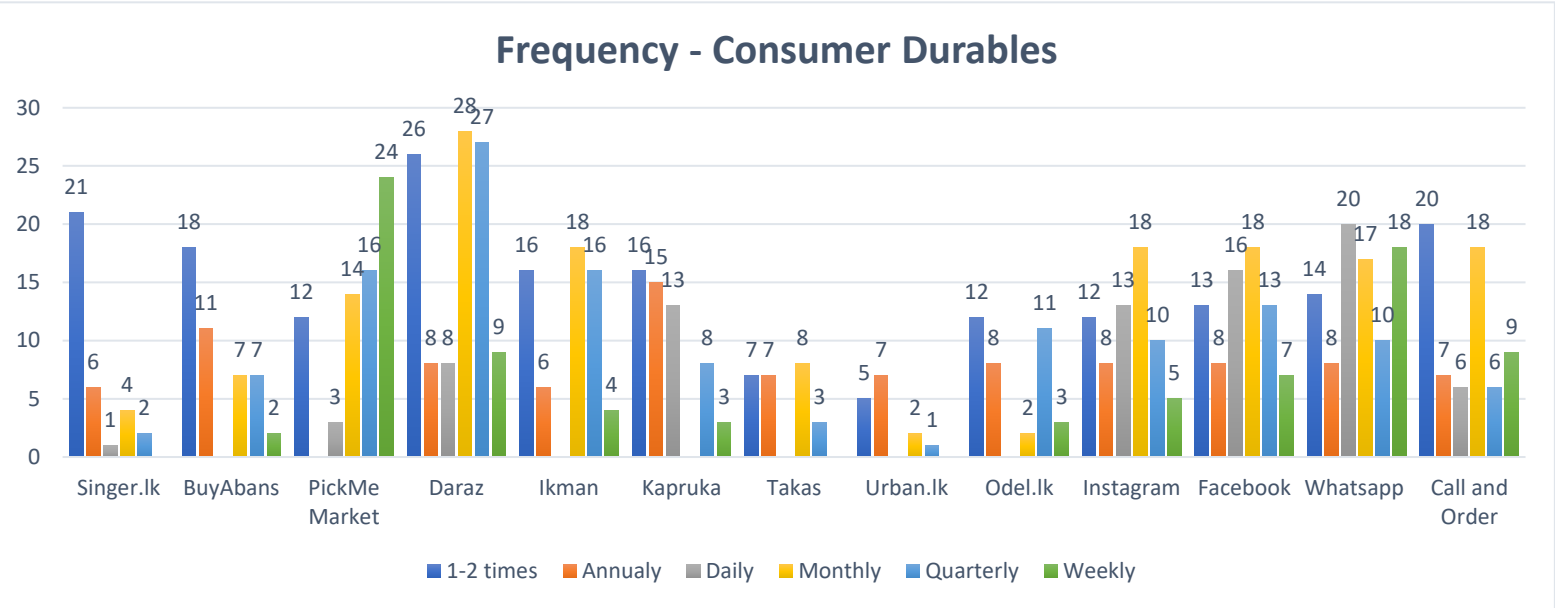


Figure 19- Consumer Durable Purchase Frequency

When analyzing Figure 19 the consumer durables market has been heavily dominated by the user base of Daraz a multinational organization who was recently acquired by Alibaba. Like the UberEats platform for food and grocery purchases, Daraz is trusted by Sri Lankans to handle the overall user experience from item selection, purchase, payment, and delivery. Daraz also is an E-Commerce platform that is used by many businesses to create their online segment to capture the many users active on the platform. Even though in the early days Daraz had concerns with certain vendors not giving quality products to customers its strong return policy and return management policy has enabled customers to appreciate the ease of use of the system.

Further the social commerce sites such as Facebook, Instagram and WhatsApp have emerged as great marketing tools to enable the online sales process, even though functions such as Facebook marketplace has not yet been exposed to the Sri Lankan market, many vendors use this as a cost-free strategy in entering the online space and exploring the possibilities of acquiring new customers. The simple process of opening a corporate page and securing “likes” creates a set of followers for each business who can communicate all new products and services in an instance completely replacing newspaper adverts, flyers and billboards as this method gives real time statistics for each adverts performance so the executives can decide on what strategies work, and do not and take informed decision from this data that is available. As the figure below illustrates, Facebook gives insights into total page view, page likes, post engagement, page followers and Recommendations to paint a clear picture of the performance.

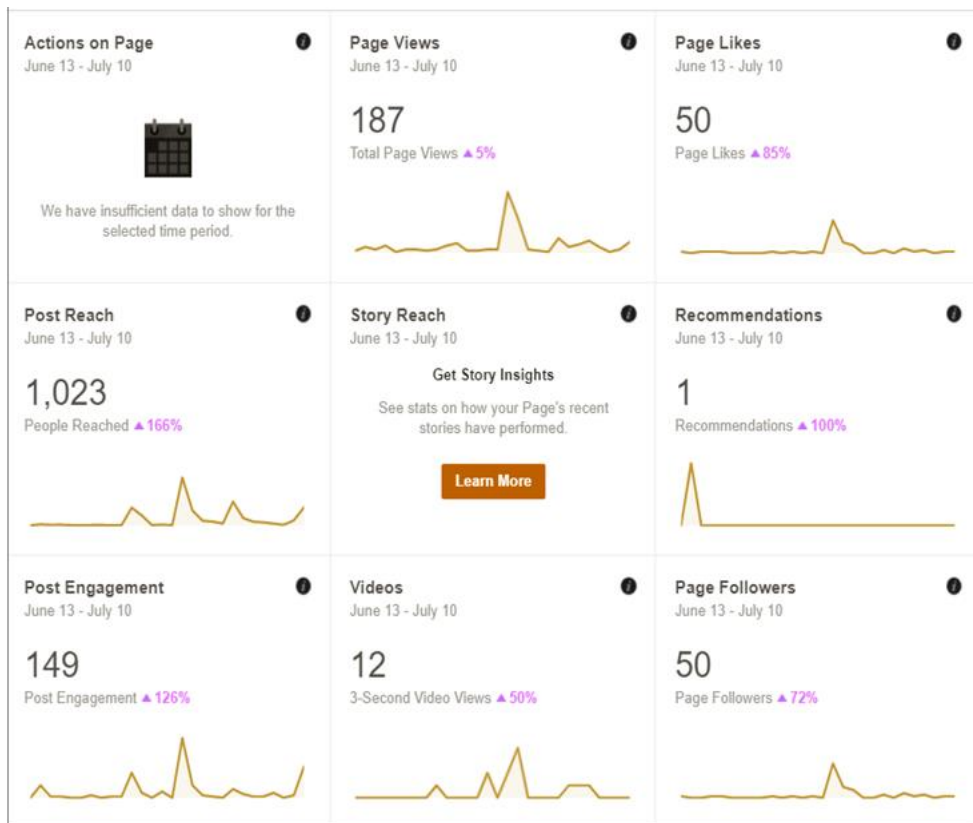


Figure 20- Facebook Insight Sample (Researcher owned data)

Data analytics is a key component within the e-commerce market and one of the main reasons why this segment has been thriving in the last couple of years. Businessmen such as Jeff Bezos, the founder and recently retired CEO of Amazon thrives on the information flow and Key Performance Indicators (KPI's) that not only push him but the overall organization to achieve higher metrics and keeps the stakeholders in check when it comes to performance. It is a known fact that working for Amazon can be a challenging job simply because the demands from the company are high regardless of the rewards given in return. However, we must respect the journey and the process that Amazon, or any other successful e-commerce business has taken to get to this position. Different organizations look at different levels of numbers and analyze the method in which they measure their success, one such metric for an organization in Sri Lanka is the monthly active users and what they define as stickiness which represents the conversion rate for those customers.

Further the successful organizations continuously monitor fill rate, order to delivery time, inventory turnover and many other metrics that have only been made possible due to the implementation of some kind of digital solution that enables data gathering at certain points. These data points are critical in analyzing the overall health of an operation and can act as critical decision points when planning the overall supply chain strategy. The overall operation has to be monitored within these KPI's and will be a critical component when managing the transition process and identify what tactics are working and how they need to adjust to achieve the planned objectives. With web portals giving access to customer behavior data from tools such as google analytics, not

only would businesses be able to plan the operational aspects but also, better market their products to the customer base as well.

With this knowledge the research has given a clear understanding on both how Sri Lankan customer is utilizing e-commerce platform as a consistent purchasing tool for consumer purchasing. Further, to explain the manner in which multiple data points are made available giving insights as to how demand for certain products and services are spread giving information how to plan the backend operation to support the customers' needs. This information can be critical when planning the overall supply chain and help align resources based on the need of the hour. Similarly, websites can use tools such as Google analytics to make similar informed decisions as illustrated below. The dashboard below first explains the overall users versus new uses entering the website, later it exposes the conversion rates for the website, the overall sessions explaining the number of times a webpage is accessed, as well as the number of users, bounce rate explains the percentage users left after visiting a single webpage. All these metrics are vital data points that would never be exposed when a customer comes into a store, looks at a product such as a watch showcase and walks away, there is no knowledge of which particular watch interested him, how long he looked at it and what features of the watch he hovered over. All these data points are now accessible and actionable.



Figure 21- Google Analytics Sample Metrics

Finally, how all these components bridge itself and creates a smooth user experience plus a user interface for the customer will dictate how well the business will function. Continuous improvement is the secret for most ecommerce channels as it is continuously evolving and adjusting to the customers' needs and expectations. Many different sectors would utilize different levels of KPI's and data analytics to understand how the transition towards ecommerce has benefited them.

4.4.5 Phase 5 –Transition to E-Commerce Business Model

An objective within the research was to understand the process in which a strictly traditional retail business adds an E-tail channel to its arsenal. From both the professional interviews as well as the literature review the researcher found significant evidence that there are multiple stages in which an organization should approach the transition into an online sales channel. From the learnings gained from the many different sources such as literature, expert interviews and data gathered from survey, the researcher has designed:

The Four Stage – E-Commerce Adoption Model



The **Four Staged E Commerce adoption model** was developed to help brick and mortar only, traditional companies and SMEs to understand the various options available in order for them to integrate into an e-commerce channel.

The **1st Stage** is dubbed the **Brand Awareness** stage that is the entry level tactic in entering the ecommerce playing field where you use free and low-cost models to create a brand presence in the market, this is similar to adding your business in the “yellow pages” in the 1960’s – early 2000’s where all reputed business must be listed within this publication. Now with the rise of the internet, having a social media page with a google maps location and contact information is a basic requirement for a business. This first stage is simply to let customers know what kind of business you do and where you function from, there is little specific product detail and resources required for this level of implementation.

The **2nd Stage- DOPS (Decide Online Purchase in-Store)**. This model is created to build limited information to the web portal, some industry that have intellectual property they do not want to publicize along with early-stage maturity within the supply chain integration to handle online orders choose this stage. The majority of orders are verified by a customer care agent at a call center or chat bot to understand the requirement of the customer to later be followed up by a salesperson. No direct integration into the sales process is implemented. A certain degree of detail is specified on the ecommerce platform (web or social media). Order fulfillment and payment mainly handled through manual process; bank transfers are verified manually no API (Application Programming Interface) activated to automatically capture payments within a system. Little to no dashboards on order management, just basic insights from social media and web-based analytics. Still considered a low-cost option with minimal resource utilization and can be considered an early-stage E-Commerce entrant. More frequent social media posts and content-based marketing giving insights into customer requirements usually over five hundred likes with a minimum of 100 post engagement. Little to no supply chain integration and overall value chain has little to no traceability due to lack of integration.

The **3rd Stage- FOCE (Fully Online Customer Experience)**. This stage focuses on creating a fully immersive experience for the customer within the online portal. This can be achieved by a dedicated website using quite a bit of resources or simple templates from E-Commerce platforms such as Shopify or BigCommerce. Requiring extensive alignment between supply chain operation and E-Commerce platforms, same results can be achieved by signing up with a 3rd party e-commerce marketplace such as Daraz, UberEats, Amazon, etc. depending on the item, industry, and geographic location. The customer is able to complete a total order within the system does not have to depend on any human contact to complete the order. Item selection to Order Completion post payment with IPG is enabled. The last mile logistics is usually handled by an outsourced party. The business is required to pick, pack (labelled and safely packed up to standard) and have the item ready for the 3PL to pick and deliver to the customer. Usually, inventory details are managed manually and updated on the E-Commerce platform manually, no API between ERP and sales platform. The backend supply chain must be aligned in order for the order to be dispatched within the

stipulated time. Customer promise must be kept as customer expects a seamless delivery process within agreed timelines.

The **4th Stage- FIBS (Fully Integrated Business System)**. The final stage of value chain integration according to the technology available in the market as of now. Customer has full visibility of item movement from order placement to order delivery and even the return path if a return is to occur. Little to no human intervention and little to no requirement for the customer to require interacting with human touch as the systems and processes are extremely mature and all process automations have been accomplished. Full integration between warehouse inventory through WMS (Warehouse Management System) and OMS (Order Management System) where the stock is automatically reduced as live orders take place. The CRM (Customer Relationship Management) portal is updated for all order information and OMNI channel algorithms in place to understand customer movements within website, and necessary sales strategies in place for the customer to be converted with different levels of prompts and engagement.

Machine learning and other artificial intelligence tools active to increase customer conversion rates. The full value chain is built to serve the customers' needs to the fullest and to be able to convert the interest into a sale, can be considered a lean, mean, selling machine. Warehouses such as Amazon have levels of automated picking and autonomous delivery methods which require very little human intervention, such systems require large sums of capital investment and can be justified with a significant level of order generated through the system. This is the closest to having a total harmony between the front-end sales and back-end operation, which is not always within the same organization, so it can be across many different vendors and suppliers fully integrated for the purpose of transparency and ultimately customer satisfaction. Due to the level of integration certain customers are able to Buy Online and Pick-up in-Store for items where touch and feel is required before taking the product home, as discussed earlier this is where the decision and the commitment has been made online but final signoff is made in person at the store or pickup location with convenience to the customer.

4.5 Online Sales Channel Technology

4.5.1 Social Media Based E-Commerce Solutions

As explained before social media-based solutions are the cheapest and most elementary method of entering into the online segment of sales channels. Social media can be considered a viable solution due to a few main reasons, firstly majority of your immediate friends and family is already available on this network enabling you to benefit from network marketing by sharing and recommending your service to friends of friends, groups, and public posts. Once the initial page is set up the different posts can be sponsored via the social media platforms to expand to targeted audiences segmented through age, gender, location, interests, demographics, and behavior. Tools provided within popular social media websites such as Facebook, Instagram and YouTube can vary but all give ability to target different market segments and give insights of how successful each campaign was with metrics as explained within the previous section. Social media creates a new spin on the traditional "word of mouth" promotion

mechanism, allowing people to proactively promote products that they have used, passionate about or can recommend due to particular reasons. The beauty of social media can be really captured when it connects the customer communication within the same platform and can see which posts or items that are shared more within friend networks to gauge success in a particular market. Businesses must be cautious to understand that a product that may not have worked on social media can still be successful instore and vice-versa. However, the knowledge and insight that social media market gives are unmatched with traditional sales methods such as newspaper adverts and brochures, also more sustainable as it does not require printed paper or, distribution related carbon costs.

4.5.2 Online Marketplaces and Shared Economy Model

The topic of online sales channels gaining traction cannot be discussed without understanding the shared economy model. The research talks about Online Marketplaces in many different instances to address how it has been developed as a great method of venturing into the online sales channel, however there are many aspects within the E-Commerce sector that are enabled only due to the success of the shared economy model making it cost effective, as it is an asset light model. Being process oriented to create reliability and maturity within the technology developed especially for the customer.

As a business looking to create a customer base online, signing up with an e-commerce marketplace is a good option due to a few reasons, firstly the initial web development and customer base is already active, as they have invested a lot on marketing and building a consistent customer base, for example Amazon.com or Alibaba.com, having a global outreach, listing a product would give an international customer servicing capacity.

Secondly, the backend infrastructure such as warehousing, sorting centers, packaging guidelines, last mile delivery and return management are usually always handled within the marketplace ecosystem which is usually a trusted location for the customer base and no duplication of resources is required for smaller operations. In exchange the marketplace would charge a margin or a rate for the product listing and have full visibility of movement and other data points which they will share selected metrics to enable the business to better enable their customer segments as well as invest in promotions during seasons and special events. For a small and medium enterprise that cannot validate an investment into a dedicated website and full value chain infrastructure from warehousing to last mile delivery, this is the most viable option.

Thirdly, the payment gateways and overall finance aspects especially with warranty claims and return management can be extremely tough to build into a new organization which has no understanding of the market dynamics, so the online marketplace is a great steppingstone for a new business to get their bearings within the new channel. Many markets including Sri Lanka struggle with return management and reverse logistics, having a 3rd party delivery company or an online marketplace that handles the logistics aspects will take that burden away and help the business focus on the core purpose.

There maybe a few drawbacks from the marketplace solution as explained before, it exposes data, and a margin would be added which some customers may find the item a more expensive price point. In addition, certain items that have complex dimensions such as built furniture and extremely fragile items that if not handled properly may be damaged may not be ideal for third party handling due to lack of experience or attention to detail, forgetting they represent another brand. They have however solved this by allowing to sell on the marketplace but deliver direct.

4.5.3 E-commerce Platforms

An E-Commerce platform is essentially a software application service that is built to enable businesses manage their online business such as the marketing, sales, webpage, and operations. The benefit of using a platform is that it has the web-store setup fundamentals built into the software where the specific white label theme or package that fits your business can be chosen and built on top to create the final output the business desires. The platforms have developed to the extent where quick set up wizards can be used to choose themes and enables you to drag and drop content and products to your site, the evolution is so advanced there is zero need for coding and a beginner can easily set up the business using the tools available. The readers maybe questioning what the difference between an E-Commerce platform vs. Online Marketplace is, to explain this I will use a traditional concept to break it down simply, it is like listing your product in a supermarket shelf in a mall vs. going and setting up a fixed stall in the shopping mall. In this case, the mall would be the internet and an online marketplace has a brand and consistent footfall if you have a small portfolio of products and not much capacity to build a full staff operation to handle a stall and your product fits the requirement of the supermarket, then listing in a supermarket (E-Commerce Platform) is advisable. However, if you are generating significant volume and/or your brand is unique and requires specific clientele that can validate having your own store given the ability to pay a lease (Hosting fees) and staff for the stall (Maintenance and Content Creators) an individual stall (E-Commerce Platform) is the best solution as it's easy to set up and has all the basic requirement setup to start the business.

4.6 Decision support model framework

How can a small and medium enterprise afford such sophisticated systems and have the capital to invest in the digital infrastructure? The answer to this is in two parts, firstly a new entrant should not be investing in such infrastructure without understanding the capacity of the business. Secondly, as explained in the previous section, the maturity of the supply chain has to be accounted for to decide the level of integration a business plans on implementing. Investing in different systems, by moving away from the traditional methods. As a business takes on these new systems, some maybe already implemented such as Enterprise Resource Planning (ERP) or a fully integrated E-Commerce platform depending on the level of revenue the organization brings in. Majority of the E Commerce platforms focus on the front-end aspects mostly to do with the sales and marketing; however, a business should always focus on what the customer expects the business to solve and be able to answer it to the best extent at the lowest possible cost. If this strategy is used, the decision on investment can be validated.

5 Chapter – Conclusions and Future Research Directions

5.1. Introduction

This chapter begins the end of this thesis, the purpose of the thesis was to examine how developing online sales channels for emerging small and medium enterprises and the best methods of adoption. There were four main research questions that were defined by the scope of the research which brought attention to, concerns a traditional business wanting to expand into an online e-commerce channel and the overall benefits it would add to the business model. This conclusive chapter draws parallels comparing results from previous research finding and research learnings discovered within this study using the models created and category-wise frequency analysis used in the thesis. The research finally closes with an understanding of the limitations encountered within this study and expose the many potentials within this topic for future research with the market potential and innovations.

5.2. Summary of research findings and Conclusions

This study has found that the Sri Lankan market has matured a lot in terms of E-commerce strategy especially with the pandemic acting as a catalyst for customers to adopt the segment as a viable solution for retail needs. While the performance between multinational corporations and large Sri Lankan enterprises has an evident gap, with the customer adoption, many local brands are starting to invest their resources to close this gap fast. The multinational corporations have matured systems that are tried and tested globally with young dynamic teams spearheading these projects in developing countries such as Sri Lanka, while some of the more successful traditional businesses headed by mature cooperate giants are rather slow to adopt this cutting-edge technology. E-commerce platforms have been the fastest in helping traditional businesses transform some of the business channels to online methods at minimal infrastructure changes. However, it comes at the cost of exposing sales potential and your product portfolio to another company.

This research goes on to find the many benefits an ecommerce channel would allow a business to gain such as new markets, added sales, better data capturing all this growth at lesser capital cost than infrastructure development. The main benefits of the online sales channel such as mass communication to target markets, cheaper advertising and customer behavior tracking are good side-effects that allow reduced spending on advertising and a push for the organization to align its overall supply chain to keep up with the time critical demands of the ecommerce channel.

Moreover, the research progresses to discuss the barriers that an organization is exposed to in terms of implementation. Firstly, in order for an organization to reach the complete 4th Stage FIBS system with seamless integration it requires to generate significant number in sales to validate such capital expenditure as well as a lot of operational coordination in order for the organization to reach that level. The 4th Stage of e-commerce transformation also requires expertise for integrations as well as a very KPI oriented employee structure who is committed to achieve the planned numbers in order for the overall value chain to succeed. In addition, e-commerce solutions to be successful totally inhouse requires a significant level of coordination as every customer's order is time bound and must be delivered within the expected quality as the wonders of the internet can be as brutal as its blessings with negative customer reviews and ratings powerful

enough to shut down a business as fast as it succeeded. Specifically, within the Sri Lankan context many businesses would not be able to reach the expected levels for a few reasons, firstly the customer maturity is still developing, and people still value the touch and feel of a product and do not trust all organizations enough to blindly order from a company without a review or some form of guarantee (mainly why physical stores are preferred). The lack of knowledge on the opportunities and transition process is also a significant barrier for traditional businesses, especially if it is solely managed by legacy employee and management, the new methods of business are not employed within the organization.

Lastly, the thesis expands on the methods of data analytics and how the opening of an e-commerce channel enables data points that were not available under a traditional business model. The researcher looks at examples of dashboards and KPI's to draw the reader's attention on how critically successful businesses look at the key performance indicators to continuously improve their processes to exceed expectations of the customer to continuously receive good reviews which eventually act as the best form of marketing for any e-commerce business as the customer's main expectation is to have his product or service delivered within the agreed timeline to the quality communicated at the time of purchase. The communication and expectation of service or product must be clearly communicated by the portal and that is the unique beauty of the e-commerce platform that builds trust through complete transparency of operation to help the customer know exactly what to expect at any given time with continuous updates.

5.3. Research Limitations

The research was restricted by a few limitations when conducting the study, the first being the number of responses received for the questionnaire was limited to 151 after data screening even though initially it was targeted to generate more than two hundred participants. In addition, some of the conclusions drawn and models developed can be further expanded through in-depth analysis into the data gathered with more complex statistical analysis would generate more insights into the research. Further the study mainly focused on Sri Lankan markets as well as certain industries within the market to enable a tight scope due to time constraints and conciseness, given further resources and larger data set a more comprehensive analysis could be accomplished.

5.4. Further Research Directions

The e-commerce segment is the fastest growing industry in the world as of 2021, as its growth has been boosted by the pandemic and its impacts across the world. With supply chain technology and online sales processes improve there is much room for improvement within this thesis. Furthermore, as technology improves the cost of adoption would further reduce, this would definitely add a whole new arsenal of business tools as the tools available now would be matured and saturate the market within a short period of time. The overall process and models for these industries are validated with the disruptions caused by the likes of Amazon, similarly new markets would open in other industries such as digital marketing which would enable similar approaches to those segments as well.

5.5. Conclusions

The study was created to answer four research questions in order to help the Sri Lankan traditional businessman understand a new avenue in which business could be expanded without spending large amount of capital on infrastructure. The ecommerce model was introduced as a lower cost alternative but through the study we learnt that the implementations have multiple stages of evolution, and the final stages require extensive amounts of coordination and resources to align a total value chain to achieve the planned goal. Further it was learned that the overall efficiency of an organization can only be gained with certain levels of volume passed through the system or else the evolution of the business would not be able to sustain itself, as it can be resource and technology dependent. The researcher used multiple models and validated these learnings using multiple literature sources as well as industry professional views. The questionnaire allowed for the thesis to gain a third perspective to validate findings with a multiple analysis such as frequency and cross tabulations to gain understanding of the demographics and the behavior patterns addressed within the research.

E-Commerce has now become a vital part of the global citizens retail habit, allowing customers to research, and purchase goods online by using different methods of content to understand the fit of a product or service to an individual need. The development in automation and robotics will only make the ecommerce segment more competitive and cost efficient, which will create new trends for future research to investigate. This thesis urges traditional businesses to use the steps identified within this thesis to understand and use the many benefits the offered by an adaptation into an ecommerce channel and learn the new possibilities created with the data analytics available as by product of the implementation.

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Annexure- I Questionnaire Form

E-Commerce Adaptation in Sri Lanka

Dear Sir/Madam,

You have been identified as an individual who can significantly contribute to a major study on "E-Commerce Adaptation in Sri Lanka"

Research submitted in partial fulfilment of the requirements for
Master of Business Administration in Supply Chain Management- Moratuwa University

If you have any questions or require additional information in this regard, please feel free to contact

Dakshitha 077 5 333 555

Email: md@sunterra.lk

Fill and get a chance to win a gift voucher worth 5,000 Rupees from Think Teak Furniture

<https://www.instagram.com/thinkteak/?hl=en>

Thank you for your co-operation

Yours sincerely,

Dakshitha Nawaratne
MBA in Supply Chain Management
Department of Transport and Logistics Management
Faculty of Engineering
University of Moratuwa

Research Supervisor
Dr. Niles Perera
Lecturer
Department of Transport and Logistics Management

* Required

Email *

Cannot pre-fill email

D1) Gender *

Female

Male

Other: _____

D2) Age *

- Below 18 years
- 18-24 years
- 25-34 years
- 35-44 years
- 45-55 years
- 56-65 years
- 65+
- Prefer not to say

D3) Relationship Status *

- Single
- In a Relationship
- Married
- Divorced
- Prefer not to say
- Other: _____

Online Purchasing Habits

Help us understand your online purchasing habits [4 min survey]

Q1) What do you purchase online? *

Please select all that applies

- Furniture
- Small Gadgets
- Electronics
- Fashion/ Clothing
- Shoes
- Cosmetics
- Food/ Beverages
- Books/ Media
- Medicine
- Other: _____

O2) How often do you use the following for Consumer Durables Purchase/
Ordering *

Examples of Consumer Durables: Electronics, Furniture, Gadgets, Home Improvement, Household, Sports Equipment, etc.

	Never	Daily	Weekly	Monthly	Quarterly	Annually	1-2 times
Singer.lk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
BuyAbans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PickMe Market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Daraz	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ikman	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kapruka	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Takas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Urban.lk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Odel.lk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instagram	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facebook	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whatsapp	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Call and Order	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

O3) How often do you use the following for Grocery, Food or Fresh Produce. *

Only Select the vendors that you have used for fresh, food and grocery purchases

	Never	Daily	Weekly	Monthly	Quarterly	Annually	1-2 times
Uber Eats	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PickMe Food/ Market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PickMe Market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Daraz	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kapruka	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Keells	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cargills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Glomark	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Call and Order	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instagram	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facebook	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whatsapp	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q4) Where do you order the most from online (Sri Lanka) *

Mostly for Groceries, Fruits and Vegetables through app or website

- Uber Eats
- PickMe Food/ Market
- Daraz
- Kapruka
- Keells
- Cargills
- Call and Order
- We only walk-in to a store to purchase groceries in my household
- Other: _____

Q5) Where do you order the most from online (Globally) *

- Amazon
- eBay
- AliExpress/ Alibaba
- Catch.au
- Chemist Warehouse
- My household doesn't shop online
- Other: _____

Q6) Why do you purchase online? *

Select any and all that contribute to your decision to purchase online

- Price
- Online Discounts
- Supports my busy lifestyle/convenience
- Easy to find items
- Due to Pandemic
- Home Delivery
- Find items usually unavailable in Sri Lankan Stores
- Convenient Gift Delivery
- Other: _____

Q7) How frequently do you purchase online *

- Daily
- Weekly
- Once a Month
- Once in a Few Months
- Rarely

Q8) Would you rather get it delivered home or pickup at store *

- Home Delivered
- Office Delivered
- Pickup from Logistics provider
- Pick up at store
- Drive Thru

O9) What should be the ideal Return Policy and Timeline

Policy- How long should be given to return or refund a products/ Timeline- How long it takes to receive a refund or to return the item

	1 Week	1 Month	3 Months
Refund Policy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Return Policy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Refund Timeline	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Return Timeline	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

O10) How can the Refund and Return policy be improved

Your answer _____

How can we Make Online Shopping Better?

Give us a little insight why you decide not to use it [5 min survey]

N1) What kind of items would you like to see online that might make you shop online more? *

- Food
- Groceries
- Electronics
- Household items
- Fashion/ Clothing
- Imported Products
- Other: _____

N2) If you were given an incentive to purchase online what would you like to see *

- Free Delivery
- Free Giveaway (Raffle)
- Credit Card offers
- Discount on Total Bill
- Other: _____

N3) Category-wise experience using following E-Commerce Solutions *

	Love it!	Bad Experience	Need to touch and feel before purchasing	Delivery Issues	I don't want to share Credit Card Details	Don't understand how	Quality of Goods	Don't like online
Food	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Groceries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Furniture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electronics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Household	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fashion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

N4) If there was one thing that would change your mind *

- Payment Method
- Quality of items
- Availability of Items
- Better Product Descriptions
- Better Return Process
- Delivery Cost
- Delay in Delivery
- Not have to setup online accounts (Type Passwords & OTP)
- Nothing to Change I only shop online
- Other: _____

N5) What kind of Phone do you use? *

- Android
- Apple
- Other: _____

N6) Any Comments, Concerns or Appreciations

Your answer _____

Annexure- II- Interview Questions

Interview Questions for CEO – EXY Pvt Limited

-Is it ok to directly quote answers within my research

-Is it ok that I record this conversation

1. As a pioneer in online super marketing in Sri Lanka what are the main reasons XYZ decided to adopt E-Commerce?
2. In the year 2021 how has your overall digital strategy changed to adopt to the needs during a pandemic?
3. How has E Commerce supported you as a marketing tool?
4. What are the main data points you gained by going online?
5. What are some of the barriers faced during the process of implementation?
6. What was the market size when you initially started?
7. What is the market size now?
 - a. post pandemic what percentage has dropped off?
8. With the acquisition of ABC and the rise in popularity for XYZ as an online platform do you see implementation of Omni Channel goods for other items within the group?
9. How important is an organizations Digital Strategy?
10. For a traditional business venturing into the online space what would be your words of wisdom?
Any processes/ books/ content one should follow?
11. What are the critical partnerships needed for a successful implementation? (IT, Logistics and Data Analytics)
12. How did your supply chain adjust to the demands of the online sales segment, what are the critical process changes?