



The Effect of Customer Experience on the Share of Wallet across Pharmaceutical Wholesalers in Addis Ababa, Ethiopia.

A Thesis Submitted to Addis Ababa University, College of Business and Economics Graduate Studies in Partial Fulfillment of the Requirements for the Master of Business Administration.

by

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Declaration

I, Getahun Tigistie, hereby declare that the thesis entitled *The Effect of Customer Experience on the Share of Wallet across Pharmaceutical Wholesalers in Addis Ababa, Ethiopia* is my own original work and has not been submitted for any degree in any other University. It is offered for the award of Master of Business Administration from Addis Ababa University.

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This is to certify that the thesis prepared by Getahun Tigistie entitled: ***The Effect of Customer Experience on the Share of Wallet across Pharmaceutical Wholesalers in Addis Ababa, Ethiopia*** and submitted in partial fulfillment of the requirements for the Masters of Business Administration complies with the regulations of the university and meets the accepted standards with respect to originality and quality.

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iii. Acronyms

COVID	Corona Virus Disease
CX	Customer experience
EFY	Ethiopian fiscal year
EPSA	Ethiopian Pharmaceutical Supply Agency
FDRE	Federal Democratic Republic of Ethiopia
OCX	Omni channel customer experience
SOW	Share of Wallet
W.H.O	World Health Organization

iv. Abstract

The focus of businesses worldwide is to increase customer satisfaction and hence customer loyalty. But this traditional approach neglects the important role of Share of wallet. This study aims to identify factors that affect the share of wallets among pharmaceutical wholesalers in Addis Ababa, Ethiopia. There is a lack of study on the effect of customer experience on share of wallet in Ethiopia as well as globally which in turn result in a knowledge gap. Therefore, this study fills the gap in the literature. A quantitative approach using a convenience sampling technique, and a crosssectional study was conducted for this research. SPSS V20 was performed to analyze the data. Descriptive and binary logistic regression statistical tools were used to examine the relationship between Customer experience attributes and Share of Wallet. The self-administrated questionnaire was used to assess the customer experience of the pharmacies across Addis Ababa (Value, Customer Service, Delivery, and Demand Forecasting) while one item was used to measure the share of wallet (SOW); the outcome variable. The study result reveals that Delivery and Demand Forecasting was a positive significant predictor of share wallet across pharmaceutical wholesalers across Addis Ababa. On the contrary, the hypotheses testing revealed that Value and Customer service were nonsignificant predictors of share of wallet across pharmaceutical wholesalers across Addis Ababa. Lastly, practical recommendations were raised.

Key Terms: *Share of wallet, Customer service, Delivery, Value, Pharmacies, Demand Forecasting, and Pharmaceutical wholesalers*

CHAPTER ONE-INTRODUCTION

1.1. Background of the study

The world pharmaceutical market was forecasted to propagate from 1,075.97 billion dollars to 1136.23 billion US dollars in 2022. This sector is predicted to reach 1635.128 billion dollars in 2026. Due to the progression of science and technology, the pharmaceutical sector is going through changes. The sole aim of the pharmaceutical industry is medical progress. It aims to turn fundamental research into innovative treatment and make it widely accessible to all (Gebretekle & Serbessa, 2016).

Before the pandemic, a promising drift was seen in terms of longer life expectancy, and healthy life expectancy. This was due to heavy work done on maternal and child health and communicable disease (HIV, Tuberculosis, and Malaria). But increase in fatality from tuberculosis and malaria was seen due to service disruption caused by the corona virus pandemic (*World Health Statistics*, 2021). According to the World health organization (WHO), 2 million death per year is due to being sedentary lifestyle. A sedentary lifestyle has amplified the patient pool globally and increased the pharmaceutical demand. Two-thirds of children all over the world are inadequately active which would also have serious implications for their forthcoming (Prakash, 2002).

Ethiopia's healthcare system comprises public, non-governmental, and private healthcare sectors. The public health care system is organized into a three-level delivery system. The health post, health center, and primary hospital comprised the primary health care unit. The general hospital which gives provision to about 1-1.5 million people is Secondary health care. The 3rd tier is the specialized hospital which provides service to 3.5-5 million people (*Pharmaceutical Sector Assessment in Ethiopia*, 2017). The yearly pharmaceutical market in Ethiopia was between 400 million dollars to 500 million dollars and was anticipated to reach 1 billion dollars by 2018. In a study done in 2017, the number of pharmaceutical importers and wholesalers was 329 and 287, respectively and there are 780 pharmacies, 1030 drug stores, and 3266 rural medicine sellers in Ethiopia. Most pharmaceutical industries are working below capability and could only cover 20% of the local demand (*Pharmaceutical Sector Assessment in Ethiopia*, 2017).

Medicine is pivotal in making a change in the health outcome of a patient. Ethiopia's pharmaceutical sector is overseen by the Ethiopia Food and Drug Authorities (EFDA) under the provision of the Ministry of health. EFDA major duties comprise marketing authorization, regulatory inspection, licensing of the premise, marketing surveillance, and control, and pharmacovigilance clinical trial oversight. It confirms

that medicines sold in Ethiopia are efficacious and safe(*Ethiopian Food and Drug Authority Website*, n.d.).

The pharmaceutical wholesaling business began in America as an early apothecary shop. In addition to retail pharmacies, it was into drug manufacturing and importation of plant-based drugs and chemicals wholesale. After a while the distinction between medicine retailing, medicine wholesaling, and medicine manufacturing became obvious. The wholesalers sold mainly plant-based drugs, chemicals, essential oils, toothpaste, and soaps all bought in wholesale packages were divided by a wholesaler, reboxed, and sold in lesser units to retail pharmacies (Newcomb, 1949).

Customer experience is becoming a talking point lately. Giant companies for instance Amazon and Google have now chief customer experience officers for managing the customer journey of their clients. This has led companies to incorporate information technology, marketing and sale departments, HR, and others in forming the best customer experience(Lemon & Verhoef, 2016). The belief of focusing to design experience for the customer has been an important issue, especially in service operational strategy. We cannot define customer experience by using single-outcome encounters on a few dimensions(Voss et al., 2008). The story of Buffalo wild wings and how customer experience is essential in creating revenue is a good example of how focusing on customer experience is key to creating long-lasting customers. Customer experience is considered one of the marketing impact measures to predict future performance resulting from enhanced customer relationships (Kotler & Armstrong, 2018).

Customer experience planning, provision, and managing can be seen from two standpoints:-from the company's perspective:-designing an experience for the client, and the company's perspective in which the customer experience considers customer interaction and recognize the customer's role(Stuart & Tax, 2004).

A simple shift of words could help develop the customer experience. A study done on linguistic concreteness including text analysis of over 1000 real customer-employee interactions proposed that customers are more satisfied and buy more when personnel concretely speak to them. For this to happen the employee should be a good listener and understand the customer's needs(Packard & Berger, 2021). Customer satisfaction can be abstracted by a contrast of the actual delivered performance with customer expectations (Lemon & Verhoef, 2016). Word of recommendation from close ones is often the most important basis for a client to purchase a product or service(Bjornland D.F et al., 2015). As stated by

Hamilton et al., 2014 Word-of-mouth communication is essentially a social effort. Even a meek of words to soften negative assessments can suggest a positive response from others. (Hamilton et al., 2014).

One study shows how political identity shapes customer satisfaction. When dealing with conservatives, stressing on availability of many choices and freedom of choice is vital, on the other hand finding ways to upturn trust is important for liberals. The corona virus vaccination obligation and the reaction it has gotten from the conservatives could show why this statement might be true (Fernandes et al., 2022).

When a customer is satisfied, they give a larger portion of their company. For some customer value is having an average product with affordable price and other times it is having a quality product with a big price tag. The most difficult task for any business is acquiring customers. Customer value and satisfaction are the pillars of building a long customer relationship (Kotler & Armstrong, 2018). When the customer expectation and company's performance align, the customer will be satisfied (Grewal et al., 2009). Thus business should undertake on things they can perform and exceed the promise. But this doesn't mean giving away company's profit. The goal should be to increase client satisfaction profitably.

Building the right relationship is mandatory for a business to be profitable. Business could have these types of customers; Strangers, Butterflies, True Friends, Barnacles. Butterflies are not loyal but the company could be profitable from them for a while. True friends are loyal and gainful. The company should try to build a relationship to keep them and possibly change them to true believers, whom come back regularly. Barnacles are loyal but not gainful. They are mostly the most difficult to handle, terminating the relationship is sometimes the best option (Kotler & Armstrong, 2018).

Research has indicated that customer satisfaction is positively associated with the actual repurchase, market share, and word of mouth. There is a growing interest within managers in the significance of measuring the share of wallet instead of measuring repurchase. Keiningham et al. found the association between customer satisfaction and share of wallet to be positive. In addition, the relationship was nonlinear with a larger positive impact happening at the upper extreme of the satisfaction level. Thus linear analysis of customer satisfaction and share of the wallet has the chance to significantly misrepresent the actual relationship (Keiningham et al., 2003). Papers have long started representing customer loyalty as share of a wallet for quite some time (Kong & Maute, 2010).

A longitudinal analysis of customer satisfaction and share of wallet found that there is a positive relationship between change in satisfaction and share of wallet. Especially initial satisfaction level as the conditional

percentile of change in satisfaction greatly relates to a change in share of wallet. The length of the relationship and income were negative moderators of this relationship. Demographic characteristics such as customer age education and expertise had no impact(Cooil et al., 2007).

1.2. Statement of the Problem

Major of the research attempted to conceptualize the consequence of satisfaction to profits by associating satisfaction with retention and retention to profit. Customer retention was the primary focus as a driver of firm profitability. Researchers carried out by McKinsey and Company concluded that an increase in customer share of wallet and customer retention can increase as much as 10 times the aggregate value for business than just aiming for retaining(Cheng, 2011).

Customers assess their experience through the customer trip, elaborated as customer sequences of contact points with the company in obtaining the service(Majra et al., 2016; Voss et al., 2008). The goal of a business should be finding a unique, noteworthy, and sustainable experience for its customers, and in the long run, strive to replicate and add on and endorse via word of mouth(Pullman & Gross, 2004).

This study aims to identify factors affecting customers' share of wallet across pharmaceutical wholesalers in Addis Ababa, Ethiopia. In a 2014 estimate, Ethiopia's pharmaceutical sector market size was projected to be 1 billion by 2020.85% percent is imported from the outside. The Ethiopian pharmaceutical market has been growing at 15% per year (Ethiopian Investment Commission, 2014).

Being an emerging issue, there is limited work regarding customer experience in Ethiopia, let alone in the pharmaceutical sector. Because pharmaceutical wholesaling is commoditized, these types of businesses should transform into a new era of crafting value for their customer(Kotler & Armstrong, 2018).

Businesses usually emphasize improving customer loyalty by measuring metrics like satisfaction. But they often overlook share of wallet, the most important aspect. Even though other aspects are important they wouldn't inform the company on how customers are dividing their spending among the competitors and companies of interest. Thus managers should be more of a share of wallet drivers than customer satisfaction (Keiningham & Aksoy, 2011).

To understand the customer buying behaviors one should understand how, when, and what affects the customer behaviors and why it is affected. Elaborate understanding of a customer is mandatory. Thus businesses should allocate a time and resources on understanding the customer buying behaviors. The buying Decision Process mainly has five stages. The first stage is “Need Recognition”, the customer identifies a necessity. Then the customer goes to information search and evaluates the choices. After the customer evaluates the different alternative, they make a purchase decision. Lastly the post purchase behavior must be monitored to know whether the customer is pleased or not (Kotler & Armstrong, 2018).

Business buyer behavior is defined as buying pattern of business that buy goods or services to resale, rent or resupply to others. This is somewhat more complex than a consumer one. Need Recognition, General need Description, Product Specification, Supplier Search, Proposal solicitation, Supplier selection, Order-routine specification and Performance review (Kotler & Armstrong, 2018).

The pharmaceutical marketing mix has four types: -Price, Detailing, Directing to consumers, and other marketing efforts such as panel discussions and meetings. A proper marketing mix could lead greater return on investment (Narayanan et al., 2004).

1.3. Research Questions

For the research, these points were raised from the statement of the problem:-

1. Which attributes of customer experience are significant for SOW in the pharmaceutical wholesaling business?

1.4. Statement of the research objective

1.4.1. General Objective

The overall aim of this study is to identify factors that affect the SOW throughout pharmaceutical wholesalers in Addis Ababa, Ethiopia.

1.4.2. Specific Objective

1. To determine if there is a significant relationship between value, customer service, delivery, and demand forecasting on the Share of wallet throughout pharmaceutical wholesalers.
2. To determine the direction of the relationship between value, customer service, delivery, and demand planning on the Share of wallet throughout pharmaceutical wholesalers.
3. To determine the magnitude of the relationship between value, customer service, delivery, and demand planning on the Share of wallet throughout pharmaceutical wholesalers.

1.5. Significance of the Research

This study aims to discuss the impact of customer experience on share of wallet of pharmacists in Addis Ababa. Customer experience has been known to be a very important issue and generating a substantial amount of interest among managers. Highlighting customer experience has been one of the effective ways in generating income for the business. In the business community, Customer Defection is easier to spot but this does not represent share of the total expenditure of that customers (Keiningham et al., 2003).

The result of the study will identify key attributes of customer experience to enable managers to understand which attributes to focus on. It also gives a better understanding for readers of customers' experience and its effect on share of wallet of pharmacies' in Addis Ababa. This study will contribute to the customer experience literature to fill the gap regarding the evidence on the effect of customer experience on share of wallet in the pharmaceutical market. Finally, this research will assist those who want to do research in this area. Thus it will benefit both academicians and pharmaceutical wholesalers.

Customer experience is the key to any company. Studies have suggested that customer retention is five times more cost-effective than customer acquisition claiming that it can boost 35% to 95% by retaining just 5 percent more of their current customers (Hart & Christopher, 1990). And the most important tool for customer retention is customer experience.

1.6. Scope of the Study

The concept of customer experience and share of wallet is very wide and requests detailed investigation into the practice and implementation of customer experience. More specifically this study identifies 4 customer experience attributes regarding pharmaceutical wholesalers which are Customer service, Demand forecasting, Value, and Delivery, and their effect on share of wallet.

CHAPTER TWO-REVIEW OF RELATED LITERATURE

2.1 Customer experience

2.1.1. What is Customer Experience?

Research papers in the 1950s started discussing the idea that customers desire the experience and not the product. The 1998's marketing practice literature started to develop the idea of customer experience noting that customer buys experience. They suggest that every transaction has a customer experience irrespective of its nature. A firm should be able to understand consumer behavior(Holbrook & Hirschman, 1982).

In addition to this recent business practice literature suggest that customer experience withholds every dimension of a company's offering which include advertising, packaging, product, and service feature ease of use, and reliability. It is the personal response customer has to contact points it has with the company(Schwager & Meyer, 2007).

Various definitions exist in Customer experience literature. Schmitt's 1999 publication took a multidimensional look and differentiated five types of experience:-sense, feel, think, act, and related experience(Schmitt, 1999). Verhoef et al., 2009 define customer experience as a multidimensional view, just like the previous one, and states it is holistic and includes the customer's cognitive affective, emotional, social, and physical response to the retailer(Verhoef et al., 2009).

Brand experience literature also suggests that subjective internal customer responses (sensation feelings& cognition) and behaviors response evoked by brand-related stimuli are part of a brand design. It encompasses four separate attributes:-sensory, affective, intellectual, and behavioral. Grewal et al conceptualized that customer experience can be explained along the line of a retail mix (i.e.-price, experience promotional experience)(Grewal et al., 2009). Keyser et al define customer experience as the inclusion of cognitive, emotional, physical, sensorial, spiritual, and social elements that spot the customer's direct and indirect interaction with the marketer(De Keyser, 2015). Mccharty et al pointed out the thread of customer experience and the idea that sees technology as experience, the sensual emotional, compositional, and spatiotemporal aspects(McCarthy & Wright, 2004).

Thus one can conclude that customer experience is a multifaceted concept that includes cognitive, emotional, behavioral, sensory, and social components. It also may be associated with a particular aspect

of offering, or technology and it includes contacts between the firm and the customer at distinct points in the experience, which are called touch points (Verhoef et al., 2015). The experience is based on the collection of these touchpoints, multiples phases of customers' decisions. To give a simple definition of customer experience, it's a multifaceted concept, focusing on the customer's cognitive, emotional, behavioral, sensorial, and social response to a firm's proposition during the customer's entire purchase pathway (Lemon & Verhoef, 2016).

Understanding customer experience and the customer journey over time is critical for any business. Creating a robust customer experience is now a top significance of management (Verhoef et al., 2015). The focus has shifted to customer experience because now more than ever customers interacting with businesses through multiple touchpoints in numerous channels and media have resulted in a multifarious customer journey. Customer experience can be defined as "...a multi-dimensional construct focusing on a customer's cognitive, emotional, behavioral, sensorial, and social responses to a firm's offerings during the customer's entire purchase journey." (Lemon & Verhoef, 2016).

2.1.2. Origin and Evolution of Customer Experience

To be able to apprehend the customer experience, we should be able to integrate multiple 'old' concepts within marketing literature but also disregard them. This includes customer satisfaction, service quality, relationship marketing, and customer equity (Lemon & Verhoef, 2016).

The 1960 - the 1970s	Customer Purchasing Journey Process Models
The 1970s	Customer Satisfaction and Loyalty
The 1980s	Service Quality
The 1990s	Relationship Marketing
The 2000s	Client Relationship Management
2000s-2010s	Customer Focus
The 2010s	Customer's Role in the Experience

Table 1. Origin and Evolution of Customer Experience

2.1.3. Attributes of Customer Experience

2.1.3.1. Delivery

An important issue in the supply chain is how one moves its item from the store to the customer by keeping the prices down per trip and as efficiently as possible. The association of operations management terms logistics as “the art and science of obtaining, producing, and, distributing material and products in the proper place and the proper quantities”(Doherty & Stalk, 2022).

A wholesaler should carefully manage and efficiently operate the store through the fast flow of goods, services, and correlated information from the warehouse to the customer. Warehouse location has also an impact on delivery. (Jacobs & Chase, 2018).

Fast changes in the world business environment have placed attention on making decisions associated with how products will be acquired and delivered. These judgments are usually done quickly and must be made based on the cost(Doherty & Stalk, 2022; Jacobs & Chase, 2018).

2.1.4.2. Demand Forecasting

Data has three main roles in Demand management:-Examining trends, managing inventory, and understanding customers. Forecasting is essential for every business organization(Jacobs & Chase, 2018). In today's data era, the retailer can use data for forecasting an optimal inventory(Ren et al., 2020).

The Ethiopian pharmaceutical sector supply demand projection is not based on the end customer (patient) demand but on the retail pharmacists. Thus a tiny rise in demand projection leads to the “bullwhip effect”, which leads to an exaggerated reaction of retail pharmacies and pharmaceutical wholesalers due to a small increase in demand for a certain pharmaceutical product(Doherty & Stalk, 2022).

For projecting demand, four techniques such as Projective, causal, Judgmental and Morbidity are used.Demand for a product can be divided into six components such as Average Demand ,Trend, Seasonal element, Cyclical element and Random Variation.(Jacobs & Chase, 2018; *Managing Medicines Selection.*, 2012).

The aim of inventory management for a pharmaceutical wholesaler is a balance between holding cost, purchasing cost, and shortage cost. Stock records are the primary source of data used to forecast the inventory level, they either could be manual or computerized(*Managing Medicines Selection.*, 2012).

There are performance indicators used on how efficiently inventory is being handled (Jacobs & Chase, 2018):-

1. Net sales to the inventory:-medicine distributed, minus right offs, over by the value of the inventory.
2. Inventory shrinkage:-start inventory value plus purchases, plus last inventory, minus the sum of the cost of goods sold.
3. Expense ratio:-operating expense over net sales.
4. Service level:-percentage of medicine ordered that is filled from the stock of the supplier.
5. Incremental ordering cost:-The average incremental cost of placing each order.

Importers and pharmaceutical wholesalers use a product bundle pricing strategy (Kotler & Armstrong, 2018) to sell their slow-moving products with their fast-moving products. This is one of the reasons why products are expiring in pharmacies in Addis Ababa.

2.1.4.3. Customer Service

It has now become more obvious that customer service is not just fulfilling our contractual duties but giving real added value to the customer. In today's competitive business world, selling a great product is not enough. Companies need to deliver customer service at fulfilling customer expectations, which is fast personalized, and effortless (Grewal et al., 2009).

The idea that businesses must go above and beyond in their service activities is not needed. All consumers want is a simple, quick response to their wants. The customer service core should be to make it easy for customers not to delight them. "Making it easy" means removing obstacles. Companies should monitor whether customers are expending undue energy and minimize it. It gives a chance for managers to concentrate on self-service and put reducing customer effort at heart (Dixon & Freeman, 2010).

Customer service has become a marker of corporate revenue marker and a high-quality brand, which has taken B2B customer service to strategic value. Businesses should also realize that customer service helps in gathering information from customers and service-related data that is relevant and valuable to the company. Customer service can be monetized if seen in strategic ways ("Strategically Aligning Customer Service with B2B Business Goals," 2022).

2.1.4.4. Value

Customer value proposition (CVP) is a subject of interest and has attracted many scholars (Rintamaki & Saarijarvi, 2021). Customer-centric is a must to succeed in today's competitive marketplace. By delivering great value companies must win customers from competitors. What customer value could be a

Functional one (time-saving, cost reduction) or Emotional one (anxiety reduction, entertainment)(Almquist & Senior, 2016).

Companies that were able to provide value to customers in multiple ways were associated with higher revenue growth. (Almquist & Senior, 2016). A manager should be able to understand how value creation has taken place as the customer goes through the buying process (Rintamaki & Saarijarvi, 2021). This requires a thoughtful customer analysis to understand the need and wants of the customers. Companies should have people thinking about the customer value elements in a holistic manner(Almquist & Senior, 2016).

Businesses cannot serve all customers. They need to position themselves to serve certain customers. This segmentation could be done based on demographic or behavioral groups(Kotler & Armstrong, 2018). Then this will give the chance to go through what each segment values and then develop products and services that deliver those values (Almquist & Senior, 2016).

Any business should know which segment offers the best opportunities. Thus one should segment the market into distinct groups which have different needs, characteristics, and behaviors. This process is called marketing segmentation. After evaluating each market segment's opportunities one or two segments will be selected to enter (market targeting). After the decision is made on which market to enter, the business should know how to differentiate its market deal and what position it wants to take (market positioning)(Kotler & Armstrong, 2018).

2.2. Share of Wallet

Business should understand that measuring customer loyalty via satisfaction doesn't associates with share of wallet. SOW is defined as the section of a client's spending. Even though your client is satisfied and recommend the company to peer ,the company of interest drop sales(Keiningham & Aksoy, 2011).

In 2008 Walmart launched "Project Impact" to alter initiatives designed to improve customer experience. They found that even if most customers were still pleased and shopping in their store they observed that they started doing the shopping elsewhere. Thus the share of wallet fell. Giving focus to share of wallet and considering it as a separate entity from other attributes is a must(Keiningham et al., 2003; Keiningham & Aksoy, 2011).

Thus customer's share of wallet across a wide series of business segments is calculated by share of purchase the customer provides to a particular company in the category over a fixed period. It is rational to expect that customer satisfaction and share of wallet are positively related (Cooil et al., 2007). Literature shown from different sectors suggests that customer satisfaction affects share of wallet (Cooil et al., 2007; Keiningham et al., 2005; Perkins-Munn et al., 2005).

2.3. Customer Experience and Share of Wallet (Empirical Evidence)

Previous research focused on customer retention even though share of wallet is key to profitability. Major of the research attempted to conceptualize the significance of satisfaction the wrong way. Researchers conducted by McKinsey and Company concluded that increasing customer share of wallet and customer retention can add as much as ten times aggregate value to a company than just focusing on retention (Cheng, 2011).

One should be able to understand whether a client is solely purchasing from you or polygamous in terms of the number of companies with which that particular customer does business. This concept considers share of wallet into the equation. SOW is defined as the purchase a customer does from a company.

Thus consumer share of wallet across a broad range of business sectors is calculated by share of purchase the customer provides to a particular company in the category over a fixed period. It is rational to expect that customer satisfaction and share of wallet are positively associated (Cooil et al., 2007). Literature indicated from different sectors suggests that customer satisfaction affects share of wallet (Cooil et al., 2007; Keiningham et al., 2005; Perkins-Munn et al., 2005).

More evidence supports the positive relationship between customer satisfaction and share of wallet. Buoye et al. 2016 indicated that when the satisfaction rating of a company is used the explanatory power of satisfaction is less than when the satisfaction metrics are relative to other competing brands. Thus satisfaction is a strong predictor when compared to competing brands (Buoye et al., 2016).

Ways to create valued customer experience should be the main goal for every company to prosper. A key operating strategy is giving an outstanding customer experience (Kotler & Armstrong, 2018). For some companies, this process starts with product design. It is recommended that when developing a new

product engaging the customer in the early and later stages of the new product development stage can quicken the project and improve the product-market fit (Chang & Taylor, 2016).

To the researcher's knowledge, no research has been done regarding customer experience in the pharmaceutical sector. Two research papers were done regarding customer satisfaction in the case of a private pharmaceutical importer in Ethiopia. Both pieces of research have indicated that most wholesalers and retail pharmacies are unsatisfied with the customer service of the importers (Worku, 2020; Yelbeneh, 2020).

2.4. Pharmaceutical Sector in Ethiopia

Ethiopia is the second most populated country in Africa behind Nigeria. It is the fastest-increasing economy in the world for the past 10 years. It plans to be a middle-income country by 2020-2025 and abolish poverty (National Strategy and Plan of Action for Pharmaceutical Manufacturing Development in Ethiopia (2015–2025), 2015). In its Growth Transformation plan besides the agricultural, infrastructure, social, and human development, GTP-I has the following key marks for the pharmaceutical sector (National Strategy and Plan of Action for Pharmaceutical Manufacturing Development in Ethiopia (2015–2025), 2015):-

- ✓ Full operation of local pharmaceutical manufacturer
- ✓ Increase the small share of the domestic pharmaceutical market by local manufacturer
- ✓ Increase export sales from local pharmaceutical manufacturing

Ethiopia's pharmaceutical marketing is worth 400-500 million USD in 2015 and increasing by 25% every year. It is a market of more than 1 billion USD in 2018 (Invest in Ethiopia-Pharmaceuticals.Html, 2023). The Federal Government of Ethiopia developed the first growth and transformation plan that focus on the pharmaceutical sector to enhance domestic manufacturing, thus Ethiopia is the first nation to create a National plan of action for pharmaceutical Manufacturing Development (National Strategy and Plan of Action for Pharmaceutical Manufacturing Development in Ethiopia (2015–2025), 2015).

The pharmaceutical sector of Ethiopia is dependent on imports. The local pharmaceutical manufacturers supply less than 10% to half a billion dollar market, with limited medicines (National Strategy and Plan of Action for Pharmaceutical Manufacturing Development in Ethiopia (2015–2025), 2015).

Pharmacy Degree programs are set by 12 universities focusing on therapeutics and industrial development. In addition to this, master-level training is given on industrial pharmacy, regulatory and or research and development are given in Addis Ababa University, Jimma University, Adama Science and Technology, and Mekele University (*Ethiopian Pharmaceuticals Supply Service - EPSS.Html*, n.d.; *National Strategy and Plan of Action for Pharmaceutical Manufacturing Development in Ethiopia (2015–2025)*, 2015).

Ethiopian Pharmaceutical Supply Agency (EPSA) previously known as the Pharmaceutical Fund and Supply Agency (PFSA) is a government body, formed by Proclamation number 553/2007 to supply pharmaceutical and other medical products to government and non-governmental health facilities. Its objective is to provide quality affordable medicine in a sustained manner (Ethiopian Pharmaceuticals Supply Service - EPSS.Html, n.d.; Pharmaceuticals Supply Transformation Plan II, 2020). The monetary value of products which included pharmaceuticals medical devices and medical reagents is 17 billion birrs in 2011 E.C. This is a 2.9 percent increase from when it started. EPSA has put out a renewed strategic plan (PSTP II) in line with the FDRE plan and development commission's ten-year plan to address the ever-changing demand of its citizens. Its renew vision is to be a reactive and efficient pharmaceutical supply chain institution in the continent by the year 2030 G.C (Pharmaceuticals Supply Transformation Plan II, 2020). EPSA encourages local manufacturers by giving early payment for 30 % of the order and a 25 % price advantage (*National Strategy and Plan of Action for Pharmaceutical Manufacturing Development in Ethiopia (2015–2025)*, 2015).

Wholesaling is defined as selling goods and services to those buying them for resale. Most wholesalers buy from manufacturers and sell to a retailer (Kotler & Armstrong, 2018). But in some cases, there are two wholesalers before the retailers. This is the case in the pharmaceutical supply chain in Ethiopia.

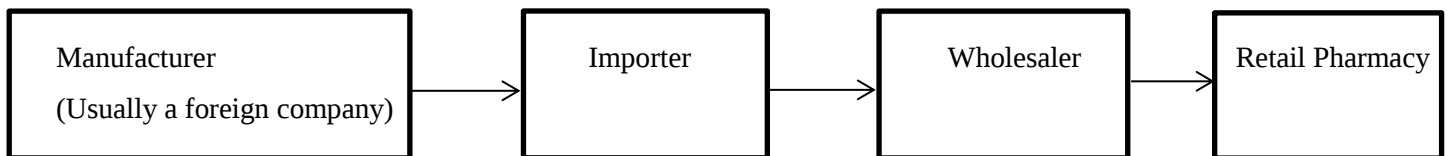


Figure 1 Diagram of the pharmaceutical supply chain

The importer in this case could be considered a manufacturer's agent, where they represent two or more manufacturers (Kotler & Armstrong, 2018). The wholesalers are expected to buy the pharmaceutical goods from the importers at a 'high price' and are expected to sell the product to a retail pharmacy with a minimum profit margin. The bargaining power of the importer and retailer is high, and in some cases, the importer sells directly to the retail pharmacy. For these wholesalers to thrive in this highly competitive market, enhancing customer experience service could be pivotal. "Customer experience" is an ever-changing and multidisciplinary topic worth understanding (Lemon & Verhoef, 2016).

2.5. Conceptual framework

Rahman et al., 2022 define customer experience as customer evaluations of their seamless experiences across all the retailer's channels as they move through the various customer touch points and according to several relevant dimensions. To seek higher profitability, managers need to optimize certain dimensions. It provides a tool to assess Omni-channel retail experience with means-end chain theory to elaborate perceived Omni-channel customer experience as a construct (Rahman et al., 2022). Based on a pretest, certain variables were dropped down from the Rahman model. An additional variable, Demand planning, was included in the model.

Because satisfaction is linked to retention, retention to profitability, and satisfaction to profits, researchers have proposed models created to conceptualize the chain effect of business outcomes. The return on quality (ROQ) framework, tried to relate attributes of performance to customer retention, market share, and profit. ROQ model tested in different industries found that companies focusing on revenue expansion perform better than those either focus on lower cost or do both revenue expansion and cost reduction at the same time (Rust & Keiningham, 1999).

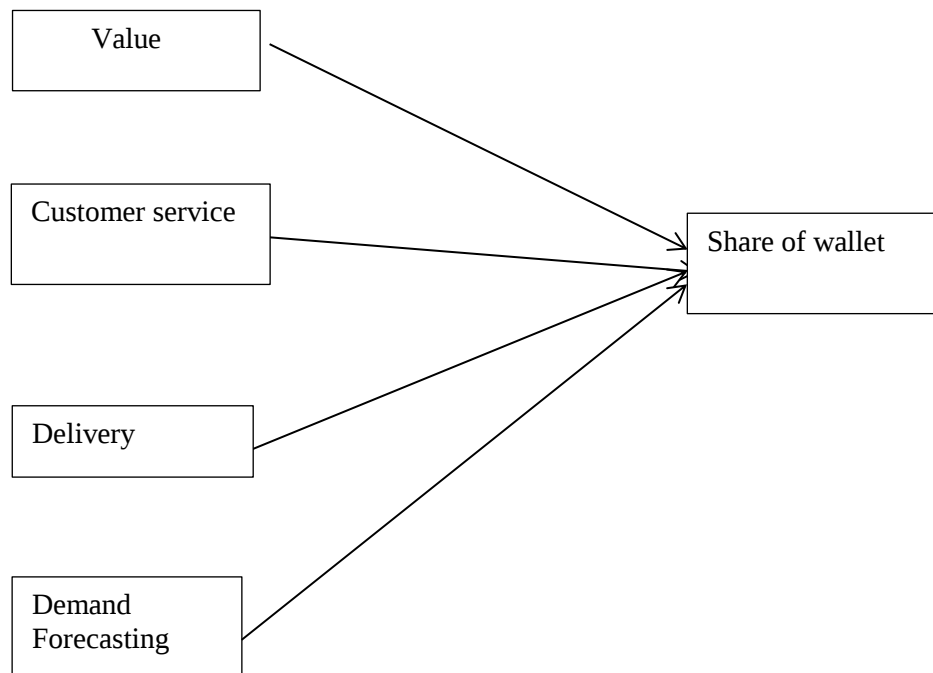


Figure 2 Conceptual framework of this paper

Demand Forecasting was added to the Customer experience model as a first-order model. Demand Forecasting is defined in this research as customer evaluation judgment as the practice of using past data trends and known upcoming events to predict needed inventory levels for the future period (*Managing Medicines Selection.*, 2012).

Thus this research proposes a second-order formative construct that comprises 4 dimensions: Demand Forecasting, Delivery, Customer Service, and Value. We have identified attributes that are most critical from the pharmacy's perspective, for delivering a seamless, satisfying experience.

This conceptual framework has 4 objectives. First, from a customer perspective, this model clarifies how pharmacies assess the overall experience while purchasing the goods. Secondly, it gives an idea of elements that matter in the pharmaceutical wholesaling business. Thirdly this model reveals which factors are really important so that wholesaler managers. Fourthly it promotes similar efforts in various sectors, especially in the health care service (Rahman et al., 2022).

2.6. The Hypothesis of the Study

To investigate how customer experience affects the share of wallet. The following 4 alternative hypotheses are proposed:-

- ✓ Ha1. There is a positive and significant relationship between the share of wallet and value
- ✓ Ha2. There is a positive and significant relationship between the share of wallet and delivery.
- ✓ Ha3. There is a positive and significant relationship between the share of wallet and customer service.
- ✓ Ha4. There is a positive and significant relationship between the share of wallet and Demand Forecasting.

CHAPTER THREE-RESEARCH DESIGN AND METHODOLOGY

3.1 The Research Method

This research has taken place by using a quantitative approach with the main goal of investigating the effect of certain aspects of customer experience on share of wallet. For researchers that want to test hypotheses and look for cause and effect (Descriptive study), the quantitative method is the best one. By collecting numerical data and going through them based on mathematical methods numerical data explains these phenomena. The objective of this research paper is the study of a causal relationship between customer experiences on share of wallet. Because this research is used to quantify cause and effect relationships, this method is chosen.

3.2 Source of Data and Instruments of Data Collection

Primary and secondary are the two kinds of data collection methods. Primary data are the ones that are retrieved through observation or questionnaire while secondary data refer to data that has been already collected. This research used primary data collection through the survey method by a close-ended questionnaire. To study the effect of customer experience on share of wallet, the research took 4 factors related to customer experience. Based on tested previous empirical literature and preliminary pretest, a closed-ended questionnaire was developed. To simplify the questions Likert scale was used on a 7-point Likert scale.

3.3. Sampling Methods

A convenience sampling technique was used in this study. Pharmacies across Addis Ababa are the target population of the study. Addis Ababa has a total of 308 pharmacies 249 drug stores, 1 rural drug vendor, 759 clinics, 140 importers, and 93 wholesalers of human medicine. There are 11 pharmaceutical

manufacturers of which 6 are found in Addis Ababa. Half of the pharmacies in Ethiopia are found in Addis Ababa (Gebretekla & Serbessa, 2016).

The sample size was calculated using the Raosoft sample size calculator software. With a margin of error of 5% and confidence interval of 95% and a response distribution of 50% the recommended sample size was 172. Based on the recommended sample size of the study and considering no respondents the sample size of the study is 189.

3.4. Measurement of Variables

Rahman et al., 2022 provide a theoretical basis for the explanation of customer experience. It contains 36 items. The researcher has modified the OCX model to test it in the pharmaceutical wholesaling setting in Addis Ababa, Ethiopia.

	Variable	Measure	Source
Dependent Variable	Share of Wallet	SOW 5.1	(Rahman et al., 2022)
Independent Variable	Value	Value 1.1-1.4.	(Rahman et al., 2022)
	Demand Planning	DP 2.1-2.5	(<i>Managing Medicines Selection.</i> , 2012)
	Customer Service	CSER 3.1-3.4	(Rahman et al., 2022)
	Delivery	DELV 4.1-4.4.	(Rahman et al., 2022)

Table 2 Measurement of variable

3.5. Specification of the research model

To analyze, the effect of the independent variable on the dependent variable the following binary regression model is developed. Binary logistic regression (BLR) is used when the researcher wants to assess the relationship between one or more predictor variables (Chris Brooks, 2014).

The logistic function F , which is a function of any random variable Z , would be

$$F(z_i) = \frac{e^{z_i}}{1 + e^{z_i}} = \frac{1}{1 + e^{-z_i}}$$

Equation 1 logistic function

Thus the logistic estimate would be

$$P_i = \frac{1}{1 + e^{-(\beta_1 + \beta_2 x_{2i} + \dots + \beta_k x_{ki} + u_i)}}$$

Equation 2 Logistic estimate

Where again P_i is the probability that $Y_i=1$.

In the logistic model, 0 and 1 are asymptotes of the function and thus the probabilities essentially be zero or above one, although they come unmeasurably close. Since this model is nonlinear, it is not estimable using OLS.

3.6. Techniques of Data Analysis

After the data was collected, they were analyzed and summarized in an easy-to-understand format. The statistical software SPSS was used to confirm important issues are examined comprehensively and cost-effectively. The usage of statistical techniques is according to commonly accepted research rules and practices.

Binary logistic regression analysis was used to analyze the data. In this type of regression analysis, the response variable has two values and the predictor variable is of any type. In binary logistic regression, the individual outcome variable ($i=1, 2, \dots, n$) follows a Bernoulli probability distribution that takes on the value 1 with probability π and 0 with probability $1-\pi$ (Chris Brooks, 2014).

Thus we can conclude the following analysis based on the result of the Beta coefficient (Chris Brooks, 2014):-

1. When the beta coefficient is positive (positive slope), as scores on the independent variable increase, so does the probability of falling into the target group ($Y=1$).
2. When the beta coefficient is negative (negative slope), as scores on the predictor increase, so does the probability of falling into the target group ($Y=1$) decrease.
3. When the beta coefficient is zero (no slope), as scores on the predictor increase or decrease, no systemic increase or decrease in the probability of falling into the target group ($Y=1$).

3.6.1. Odds ratio

Logistic regression uses an odds ratio. The probability of success is the ratio of the probability of success π (the probability that a wholesaler is on the 51-100 percentile) to the probability of failure $1-\pi$ (the probability that the wholesale is on the 0-51 percentile or $y=0$). The odds are non-negative with a value of greater than one when success is more likely than failure. The odds ratio, denoted by OR, is defined as the ratio of the odds for $y=1$ to the odds for $y=0$ and is given by:-

$$OR = \frac{\pi(1)/1 - \pi}{1 - \pi(0)/\pi(0)}$$

Equation 3 Odds ratio

An odd ratio greater than 1 implies a positive relationship and an odds ratio=1 indicates difference between the “0” group and the “1” group. Logistic regression assumes that the independent variable is the response through a suitable transformation of the probability of success. This transformation is a suitable link function of π and is called the logit-link denoted y logit π which is defined as:-

$$\text{logit}(\pi) = \log\left(\frac{\pi}{1 - \pi}\right) = X'\beta$$

Equation 4 Logistic regression

Thus we can interpret the odds ratio as follows:-

- An unstandardized regression slope of 0 will be with an odds ratio of 1. We can interpret it as the probability of a case falling into the target group doesn't change as the independent variable change.
- An unstandardized regression slope > 0 will be with an odds ratio > 1 . We can interpret this as the probability of a case falling into the target group is greater at higher levels of the independent variable.
- An unstandardized regression slope < 0 will be with an odds ratio < 1 . The odds ratios indicate the multiplicative change in the odds (of a case falling into the target group or $Y=1$) per unit increment on the predictors will decrease, while all variables are constant.

Predicted Probabilities and Group Membership

Predicted Probabilities (PRE 1) is the probability of falling into the target group. It predicts the probability of the wholesaler being in the 50th -100th percentile. Then based on the predicted probability wholesaler were assigned predicted group membership with pharmaceutical wholesalers with a probability greater than 50 percent predicted to be in the $Y=0$ and wholesalers with a probability of greater than 50% being predicted to be in the $Y=1$ group.

3.6.2. Estimation of model parameters**3.3.1.2. Assessment of the Fitted Model**

There are tests commonly employed to measure the goodness of fit for categorical data.

3.3.1.2.1 Hosmer –Lemeshow Test

It is used to test the overall fit of a model. It test by comparing the observed number and the expected number and assessing using a chi-square test(Lemeshow & Moeschberger, 2005).

The Hosmer –Lemeshow goodness of fit statistic is given as:-

$$\hat{C} = \sum_j^g \frac{(O_j - E_j)^2}{v_j}$$

Equation 5 Hosmer Lemeshow Test

O_j is the observed number of events in the j th group, E_j is the expected number of events in the j th group, and V_j is a variance correction factor for the j th group. Unlike other tests, the model is considered to be fit when the test is insignificant.

3.3.1.3. Model Diagnostic

Due to an observation, outliers, or influential values, a fitted model may be not adequate. They may distort the conclusion determined from analyzing the data (Cook 1998).

Influential Observations

The two ways to measure the influence of observation are **Cook's distance** and **DFBBETAS**(Lemeshow & Moeschberger, 2005).

1. **Cook's Distance**:-it measure the change in $\hat{\beta}$ when a particular observation is omitted. It measures the impact of that observation on all regression coefficients.

Cook's distance statistic, D_i is defined as:-

$$D_i = \frac{(\hat{\beta}_i - \hat{\beta}_{(i)})'(X'VX)(\hat{\beta}_i - \hat{\beta}_{(i)})}{ps^2}$$

Equation 6 Cook's distance statistic

2. **DFEBETAS**:-determine the effect of an observation on the estimated coefficient of the model.(Lemeshow & Moeschberger, 2005):-

OUTLIERS DETECTION:- Detecting outliers is common practice and it is important because outliers can affect the regression model in two ways:

1. outliers may wrongly alter regression coefficients;
2. make it seem like the standard errors of regression they may also cause the standard errors of regression coefficients to be much smaller.

Thus there are two types of outliers:-

1. Outliers in the response variable represent model failure. Such observations are called outliers.

2. Outliers concerning the predictors are called leverage points (Lemeshow & Moeschberger, 2005).

Identifying Outliers and Influential Cases

- ✓ Unstandardized residuals (Res_1) computed as $Y - \hat{p}$ where:-
 - Y =actual group membership
 - $\hat{p}$ =probability of the case falling into the target group.
- ✓ Pearson's residual (ZRE_1) is useful for identifying potential outliers. The reason this is used is because the variance of the residuals in binary logistic regression is heteroscedastic. The formula is as follows:-

$$ZRE = \frac{Y - \hat{p}}{\sqrt{\hat{p} * (1 - \hat{p})}}$$

Equation 7 Pearson's residual

$|ZRE_1| > 2.5$ identifies cases that may be outliers.

Identifying collinearity among Independent variables

In the SPSS the logistics regression analysis doesn't have the option to carry out a multicollinearity test. Thus repeating the analysis by linear regression is essential (Debbie L.Hahs-Vaughn & Richard G.Lomax, 2020).

3.7. Validity and Reliability

Criteria that indicate the degree to which an instrument measure what is supposed to measure is called validity. Content validity is referred to as checking whether the content of the questionnaires' right to measure the independent and dependent variable. In this research, the authors tried to develop a content-valid contrast. Pretesting of the questionnaire was done on 15 pharmacists, modifications were done accordingly. In addition to this, my advisor has ensured that the statement included in the questionnaire did represent the variables.

Measurement of consistency was also carried out (reliability). Internal reliability which is specifically important in connection with multiple items scale was considered. This refers to each scale measuring a variable so that the items that make up the scale are internally consistent.

3.8. Ethical Considerations

The confidentiality of all information collected was considered. No identity or other information was written on the questionnaire instead codes were given. Information gathered during the research was used only for academic purposes.

CHAPTER FOUR:-DATA ANALYSIS AND INTERPRETATION

4.1. Composition of Respondents' Demographic

Regarding the sex composition majority of the respondent is female (83%) while the remaining are 16% male. When we see the age composition of the respondent the sample respondent age group fall between the ages below 25,36-50 and above 50 is 40.5 %,53%, and 5% respectively. Concerning the educational level of the sample respondents indicated that 13% of the respondents are Diploma holders while BA/BSc Degree and MA /MSc holders are 66.6% and 26.1% respectively.

		Frequency	Percent
Sex	Male	29	16
	Female	151	83
Age	25-35	73	40.5
	36-50	97	53
	Above 50	10	5
Educational level	Diploma	13	7
	BA/BSc Degree	120	66.6
	MA/MSc Degree	47	26.1

Table 3 Composition of Respondents' Demographic

4.2. Results of the Logistic regression analysis

4.2.1. Chi-square Test

The Chi square Test table as shown below. This table indicates that our model is fitter than the interpret-only model.

	Chi-square	df	Sig.
Step	18.003	4	.001
Block	18.003	4	.001
Model	18.003	4	.001

Source:- Own Survey, SPSS V20, 2023

Table 4 Omnibus Test of Model Coefficients

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
170.154 ^a	.095	.147

Source:- Own Survey, SPSS V20, 2023

Table 5 Model Summary

The -2 log-likelihood (or -2LL) indicates how much the model deviates. When -2LL is 0, it means the model is a perfect fit. Cox & Snell R square and Nagelkerke R square can be considered pseudo-R-square indicating the model is a fit.

The Hosmer & Lemeshow test provides whether the model is fit. Since the result is not significant, the model is fit.

Chi-square	df	Sig.
6.730	8	.566

Source:- Own Survey, SPSS V20, 2023

Table 6 Hosmer and Lemeshow Test

The Hosmer & Lemeshow test includes comparing observed and expected values at every of ten equal groups of risk. The test can misguide leading to a conclusion that there is a fit model, hence one's sample size is smaller. The table shows there is no evidence of model misspecification.

	Share of wallet = 0%-50%		Share of wallet = 50%-100%		Total
	Observed	Expected	Observed	Expected	
1	17	17.123	1	.877	18
2	18	16.469	0	1.531	18
3	14	15.817	4	2.183	18
4	15	15.218	3	2.782	18
5	13	14.724	5	3.276	18
6	14	14.105	4	3.895	18
7	16	13.520	2	4.480	18
8	14	13.131	4	4.869	18
9	12	12.093	6	5.907	18
10	8	8.799	10	9.201	18

Source:- Own Survey, SPSS V20, 2023

Table 7 Contingency Table for Hosmer and Lemeshow Test

Table 8 below is useful for providing additional information on how well your model fits. It gives information on the percentage to which observed outcomes can be successfully predicted. The overall percentage presents the percentage of case with observed outcomes that were correctly stated i.e. 79.4 percent.

Observed		Predicted		
		Share of wallet		Percentage Correct
		0%-50%	50%-100%	
Share of wallet	0%-50%	138	3	97.9
	50%-100%	34	5	12.8
Overall Percentage				79.4

Source:- Own Survey, SPSS V20, 2023

Table 8 Classification Table

As seen in the table below the first value of the table is the unstandardized coefficient. Predicting the probability of a case falling into the target groups as a function of the predictor in the model is a logistic binary regression. Since the outcome is 0 and 1, this would create a numerical problem if using OLS regression (Chris Brooks, 2014).

	B	S.E.	Wald	df	Sig.	Exp(B)
DemandPlanning	1.613	.552	8.544	1	.003	5.019
CustomerService	-1.152	.624	3.411	1	.065	.316
Delivery	1.378	.516	7.117	1	.008	3.966
Value	.534	.654	.665	1	.415	1.705
Constant	-12.895	5.160	6.245	1	.012	.000
a. Variable(s) entered on step 1: DemandPlanning, CustomerService, Delivery, Value.						

Source:- Own Survey, SPSS V20, 2023

Table 9 Variables in the Equation

4.1.3. Logistic regression diagnostics results

The maximum DFBETAs are less than one implying no influence of an observation on the coefficient of a particular predictor variable. Thus, based on the above goodness of fit tests and diagnostic checking, we conclude that the model is adequate.

Pearson's residual is useful for identifying potential outliers ($|ZRE_1| > 3.0$). Since the ZRE_1 is below 3 there are no potential outliers.

As indicated below there is no multicollinearity among the dependent variable is seen, since the tolerance values are not closer to 0.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-1.657	.789		-2.101	.037		
	Value	.101	.102	.076	.997	.320	.900	1.111
	Demand forecasting	.230	.076	.238	3.028	.003	.836	1.196
	Customer Service	-.156	.091	-.132	-1.715	.088	.872	1.147
	Delivery	.212	.077	.203	2.742	.007	.942	1.062
a. Dependent Variable: Shareofwallet								

Source:- Own Survey, SPSS V20, 2023

Table 10 Multicollinearity Table

4.1.4. Result Interpretation

Although the slope for Value is positive, it was not a statistically significant predictor of the probability of a pharmaceutical wholesaler getting into the 50-100% share of the wallet group or falling into the target group ($Y=1$). ($B=.534$, $SE=.654$, $p=.415$).

The slope of Demand Planning is a positive and significant predictor of the probability of a pharmaceutical wholesaler getting into the 50-100% share of wallet group or falling into the target group ($Y=1$). ($B=1.613$, $S.E=.552$, $p=.003$). Thus as this variable increases, so does the probability of falling into the target group ($Y=1$).

The slope of customer service is negative, and not a significant predictor of the probability of a pharmaceutical wholesaler getting into 50-100% share of the wallet group or falling into the target group (Y=1) ($B=-1.152$, $S.E=.624$, $P=.065$).

The slope of Delivery is a positive and significant predictor of the probability of a pharmaceutical wholesaler getting into the 50-100% share of wallet group or falling into the target group (Y=1). ($B=1.378$, $SE=.516$, $P=.008$). Thus as this variable increases, so does the probability of falling into the target group (Y=1).

While holding all variables constant, there is a negative chance of 12.895 of a wholesaler being in the 50-100th percentile wholesalers. ($B=-12.895$; $S.E=5.160$; $P<0.05$).

Odds ratio

The odd ratio for Value is 1.705, thus the odds of a wholesaler being in the 50-100 percentile increased by a factor of 1.705 with every unit increase in value.

The odds ratio of Demand forecasting is 5.019, Thus the odds of a wholesaler being in the 50-100 percentile increase by a factor of 5.019 with every unit increase in Demand planning.

The odd ratio for Customer service is .316, thus for each increase in customer service, the predicted odds of not entering in the 50-100 percentile is the change of a factor of .316.

The odd ratio for Delivery is 3.966, thus for the odds of a wholesaler being in the 50-100 percentile increase by a factor of 3.966 with every unit increase in Delivery.

Predicted Probabilities and Group Membership

Predicted Probabilities (PRE 1) is the probability of falling into the target group. It predicts the probability of the wholesaler being in the 50th -100th percentile. Then based on the predicted probability wholesaler were assigned predicted group membership with the wholesaler with a probability of less than 50 percent predicted to be in the Y=0 and wholesalers with a probability of greater than 50% being predicted to be in the Y=1 group.

4.1.5. Hypothesis Testing

To test the hypothesis of this research, a binary regression technique is performed.

Binary Regression Analysis

Binary logistic regression analysis was used to analyze the data. In this type of regression analysis, the response variable has two outcomes and the predictor variable is of any type. In binary logistic regression,

each outcome variable ($i=1, 2, \dots, n$) follows a Bernoulli probability distribution that takes on the value 1 with probability π and 0 with probability $1-\pi$. (Chris Brooks, 2014)

In order to investigate how customer experience affects share of wallet. The following 4 alternative hypotheses are proposed:-

Ha1. There is a positive and significant relationship between share of wallet and value

- Even though there is a positive relationship between share of wallet and value, there is no significant relationship ($P>0.05$). Thus we don't reject the null hypothesis that there is a positive and significant relationship between share of wallet and value.

Ha2. There is a positive and significant relationship between share of wallet and delivery.

- This null hypothesis was rejected since there is a significant relationship ($P<0.01$) and a positive relationship (Beta coefficient of 1.570).

Ha3. There is a positive and significant relationship between share of wallet and customer service.

- This null hypothesis is not rejected since there is no significant relationship ($p>0.05$).

Ha4. There is a positive and significant relationship between share of wallet and Demand planning.

- This null hypothesis is rejected since there is a significant relationship ($P>0.05$). There is a positive relationship with a beta coefficient of 1.2.

Coefficients			
Model	Unstandardized Coefficients		Sig
	B	Std. Error	
Constant	-12.895	6.245	0.012
Value	.534	.654	0.415
Delivery	1.378	.516	0.008
Customer Service	-1.152	3.411	0.065
Demand Forecasting	1.613	.544	0.003

Source:- Own Survey, SPSS V20, 2023

Table 11 The Coefficient Statistics

Based on Table 8 above, we compare the contribution of each dependent variable to the dependent variable Share wallet using beta value under standardized coefficients. We need to observe the standardized beta coefficient so that the variable all measured changes to the scale.

We can see from the above table that the independent variables Delivery ($B=1.378$, $P=.008$, and Demand Planning ($B=1.613$, $P=0.003$) have a positive and significant relationship. Customer service ($B=-1.152$

.P=0.065) and Value (B=0.534 and P=0.415) have a positive but non-significant relationship with the independent variable.

Summary of Binary regression results and Hypothesis Testing

	Model 1 (Effect CX on SOW)
Significance and Beta Coefficients	Delivery (B=1.378 and P=0.008) Delivery (B=1.378,P=.008) Demand planning (B=1.613,P=0.003)
Best Predictor	Delivery

Table 12 Summary of Binary Regression Result and Hypothesis Testing

CHAPTER 5-SUMMARY, CONCLUSION, AND RECOMMENDATION

5.1. Summary of Findings

Customer experience has been known to be a very important issue and generating a substantial amount of interest among managers. Highlighting customer experience has been one of the effective ways in generating income for a business. This study aims to examine the effect of customer experience on share of wallet of pharmacists in Addis Ababa. Customer experience attributes were selected from previous research and also identified in the pretest. Based on the results of the descriptive statistics and binary regression the following summary was drawn.

The result of **Table 5** depicts that only Demand planning ($P < 0.05$) and Delivery ($P < 0.008$) are significant predictors of share of wallet across pharmaceutical wholesalers across Addis Ababa. On the contrary, the hypotheses testing revealed that Value and Customer service were nonsignificant predictors of share of wallet across pharmaceutical wholesalers across Addis Ababa.

When we see the result of the Hosmer Lemeshow test, the test is not significant, indicating an adequately fit model. Diagnostic tests, Cook's D and DFBETAs, both are thin the cut-off limit, indicating no individual result affects the model or individual predictors. No Multicollinearity of the independent variable is seen because the tolerance value is closer to 0 and the Variance inflation factor (VIF) is below

5.2. Conclusion

Keiningham et al found the association between customer satisfaction and share of wallet to be positive. This research has a more or less similar outcome, attributes of Customer experience, Demand planning, and Delivery affect the share of wallet(Keiningham et al., 2003).

Unlike Rahman et al., this research didn't find value and customer service as a significant predictor of share of wallet. It is similar to this research because delivery is a strong predictor in both research papers. This difference may have come because Rahman et al. are done on online shopping and this paper is done on pharmaceutical wholesaling(Rahman et al., 2022).

The study gives a firsthand understanding of how to design a customer experience. Managers of pharmaceutical wholesalers can get input on which metrics to support the growth of the company. By measuring their performance on the four first-order dimensions manager can identify ways that result in improved customer experience (De Keyser et al., 2020). This research finding suggests that Demand forecasting and Delivery significantly predict SOW in pharmaceutical wholesaler setting across Addis Ababa, Ethiopia. Customer service was negatively associated with share wallet and is not a significant predictor of share wallet.

One research sought to identify whether repurchase intention, overall satisfaction, and overall efficacy were predictors of share of wallet and concluded that these variables indeed had a positive effect on Share of wallet. This research has found a similar result with this research because almost all attributes associated with customer experience had a positive impact on share of wallet (Perkins-Munn et al., 2005).

The result of the study has pointed out the key attribute of customer experience to enable managers to understand which attributes to focus on. It will give an understanding for readers on customers' experience and its effect on the share of wallet of pharmacies' in Addis Ababa. This study will add to the customer experience literature to fill the gap regarding the evidence on the effect of customer experience on share of wallet in the pharmaceutical market. Finally, this study will serve as a ground for those who want to conduct further studies in this area. Thus the paper will benefit both academicians and pharmaceutical wholesalers.

Overall this thesis has 4 objectives it wanted to clarify. First, from a customer perspective, this model clarifies how pharmacies assess the overall experience while purchasing the goods. Secondly, it gives an idea of elements that matter in the pharmaceutical wholesaling business. Thirdly this model reveals which factors are really important to wholesaler managers. Fourthly it promotes similar efforts in various sectors, especially in the health care service (Rahman et al., 2022).

Customer service negatively affects share of wallet in this paper. This could be because sale persons are focused on delighting the customer even though what they should be doing is giving quick simple solutions to their problem. Often sale representative are not good listeners, only concentrating on what they have to say and bombarding customers with regular phone calls (Dixon & Freeman, 2010).

5.3. Recommendations

This paper implies having good products is nothing if the products are not delivered at the right time. Thus an excellent distribution system one should accomplish the following task(*Managing Medicines Selection.*, 2012)-

1. Ensure a continual supply of medicine
2. Medicines stored in good condition
3. Careful with medicine loss caused by spoilage and expiry
4. Rationalize pharmaceutical storage points
5. Effective usage of transportation
6. theft and fraud minimization
7. Improved information for predicting drugs
8. Procedures of quality assurance

Top managers should ensure the cost and performance of the distribution system as an important indicator. Selecting a method of transportation carefully and scheduling deliveries realistically and methodically are needed to provide punctual and economic service(*Jacobs & Chase, 2018*).

By using inventory forecasting techniques (projective, causal, judgmental, morbidity) one can predict more or less accurate forecasts on which items to stock. In a country where most of the medicines are imported and with a foreign currency problem(Ethiopian Investment Commission, 2014), it would be a reasonable explanation why demand planning is important to pharmacies.

Delivery was found to be a significant predictor in this model. Wholesalers should give focus on how they move their items from store to store by keeping their prices down. Wholesalers should emphasize the location of their stores. They should be located preferably in high patient flow pharmacies while keeping their store rent low.

Wholesalers should also measure the Share of wallet in their settings. Because it is an easy-to-use tool they can easily understand the status of the customer. Customer service is most critical for customer satisfaction and loyalty(Rahman et al., 2022). Wholesalers should focus on improving this dimension if they seek growth. Periodic customer surveys should be done to monitor the response and changing preferences(De Keyser et al., 2020).

This research could be a part of alleviating Ethiopia's healthcare problem. Researchers could dynamically use these dimensions to improve customer experience in hospitals and retail pharmacies. In addition,

similar research papers regarding customer experience should be done outside of Addis Ababa, to understand which aspects of customer experience are important to a particular region of the country.

Therefore managers should be well aware of their approach to examine the relationship between satisfaction and share of wallet before committing resources aimed at improved customer satisfaction.

5.4. Limitations of the Study

The major setback faced while carrying out this research were:-

1. It required maximum effort to collect the filled questionnaire from the pharmacies.
2. This research only included pharmacies in Addis Ababa.

5.5. Future Research

The study population of this research is only Addis Ababa. This study should be done in another region of the country to understand and entertain the difference to help improve customer experience in other regions.

This research is carried out based on a self-administered questionnaire measure. This could result in participants giving information that improves the company's image. Future study needs to incorporate pharmaceutical wholesalers to obtain customer experience from their point of view.

Reference

- Almquist, & Senior. (2016). The Elements of Value. *Harvard Business Review*., 46–53.
- Bjornland D.F, Ditzel C, & Visser J, Knox S, Sanchez-Rodriguez V. (2015). *What Really Shapes the Customer Experience.html*. Boston Consulting Group.
- Buoye, A., Komarova Loureiro, Y., Kabadayi, S., Nejad, M. G., Keiningham, T. L., Aksoy, L., & Allsopp, J. (2016). Is share of wallet exclusively about making customers happy or having more customers? Exploring the relationship between satisfaction and double jeopardy. *Journal of Service Management*, 27(4), 434–459. <https://doi.org/10.1108/JOSM-05-2015-0157>
- Chang, W., & Taylor, S. A. (2016). The Effectiveness of Customer Participation in New Product Development: A Meta-Analysis. *Journal of Marketing*, 80(1), 47–64. <https://doi.org/10.1509/jm.14.0057>
- Cheng, A. (2011). The Empirical Research of Factors Influencing Share of Wallet in the B2B Market. *Journal of Service Science and Management*, 4.
- Chris Brooks. (2014). *Introductory econometrics for finance.pdf*. Cambridge University Press.
- Cooil, B., Keiningham, T. L., Aksoy, L., & Hsu, M. (2007). A Longitudinal Analysis of Customer Satisfaction and Share of Wallet: Investigating the Moderating Effect of Customer Characteristics. *Journal of Marketing*, 71(1), 67–83. <https://doi.org/10.1509/jmkg.71.1.067>
- De Keyser, A. (2015). Understanding and managing the customer experience. *Ghent University*.
- De Keyser, A., Verleye, K., Lemon, K. N., Keiningham, T. L., & Klaus, P. (2020). Moving the Customer Experience Field Forward: Introducing the Touchpoints, Context, Qualities (TCQ) Nomenclature. *Journal of Service Research*, 23(4), 433–455. <https://doi.org/10.1177/1094670520928390>

- Debbie L. Hahs-Vaughn & Richard G. Lomax. (2020). *Statistical Concepts-A Second Course* (5th Edition).
- Dixon, & Freeman. (2010). *Stop Trying to Delight Your Customers.html*. Harvard Business Review.
- Doherty, & Stalk. (2022). *A Better Way to Match Supply and Demand in the Retail Supply Chain*. Harvard Business Publishing.
- Ethiopian Food and Drug Authority website. (n.d.). Retrieved December 11, 2021, from <https://www.eris.efda.gov.et/>
- Ethiopian Investment Commission. (2014). *Investment Opportunity in the Pharmaceutical Sector in Ethiopia*. <http://www.ethiopianembassy.org.in/investment/new/Opportunity%20in%20Pharmaceutical%20Sector%202015.pdf>
- Ethiopian Pharmaceuticals Supply Service—EPSS.html. (n.d.).
- Fernandes, D., Ordabayeva, N., Han, K., Jung, J., & Mittal, V. (2022). How Political Identity Shapes Customer Satisfaction. *Journal of Marketing*, 002224292110575. <https://doi.org/10.1177/00222429211057508>
- Gebretekle, G. B., & Serbessa, M. K. (2016). Exploration of over the counter sales of antibiotics in community pharmacies of Addis Ababa, Ethiopia: Pharmacy professionals' perspective. *Antimicrobial Resistance & Infection Control*, 5(1), 2. <https://doi.org/10.1186/s13756-016-0101-z>
- Grewal, D., Levy, M., & Kumar, V. (2009). Customer Experience Management in Retailing: An Organizing Framework. *Journal of Retailing*, 85(1), 1–14. <https://doi.org/10.1016/j.jretai.2009.01.001>
- Hamilton, R., Vohs, K. D., & McGill, A. L. (2014). We'll Be Honest, This Won't Be the Best Article You'll Ever Read: The Use of Dispreferred Markers in Word-of-Mouth Communication. *Journal of Consumer Research*, 41(1), 197–212. <https://doi.org/10.1086/675926>
- Hart, & Christopher, W. L. (1990). The Profitable Art of Service Recovery. *Harvard Business Review*.

- Holbrook, M. B., & Hirschman, E. C. (1982). The Experiential Aspects of Consumption: Consumer Fantasies, Feelings, and Fun. *Journal of Consumer Research*, 9(2), 132–140.
- Invest in Ethiopia-Pharmaceuticals.html*. (2023). Invest in Ethiopia.
<https://www.investethiopia.gov.et/index.php/investment-opportunities/strategic-sectors/pharmaceuticals.html>
- Jacobs, F. R., & Chase, R. B. (2018). *Operations and supply chain management* (Fifteenth edition). McGraw-Hill Education.
- Keiningham, Perkins-Munn, Aksoy, & Estrin. (2005). Does customer satisfaction lead to profitability?: The mediating role of share-of-wallet. *Managing Service Quality: An International Journal*, 15(2), 172–181. <https://doi.org/10.1108/09604520510585352>
- Keiningham, T. L., & Aksoy, L. (2011). *Customer Loyalty Isn't Enough. Grow Your Share of Wallet.html*. Harvard Business Review. <https://hbr.org/2011/10/customer-loyalty-isnt-enough-grow-your-share-of-wallet>
- Keiningham, T. L., Perkins-Munn, T., & Evans, H. (2003). The Impact of Customer Satisfaction on Share-of-Wallet in a Business-to-Business Environment. *Journal of Service Research*, 6(1), 37–50. <https://doi.org/10.1177/1094670503254275>
- Kong, R. T., & Maute, M. F. (2010). Modeling The Effects Of Socio-Demographic, Psychographic And Relationship Characteristics On Share Of Wallet For Financial Services. *Journal of Business & Economics Research (JBBER)*, 8(12). <https://doi.org/10.19030/jber.v8i12.780>
- Kotler, P., & Armstrong, G. (2018). *Principles of marketing* (Seventeenth edition). Pearson Higher Education.
- Lemeshow, & Moeschberger. (2005). Review of Regression Methods in Biostatistics: Linear, Logistic, Survival, and Repeated Measures Models by Vittinghoff, Glidden, Shiboski, and McCulloch. *The Stata Journal: Promoting Communications on Statistics and Stata*, 5(2), 274–278.
<https://doi.org/10.1177/1536867X0500500211>

- Lemon, K. N., & Verhoef, P. C. (2016). Understanding Customer Experience Throughout the Customer Journey. *Journal of Marketing*, 80(6), 69–96. <https://doi.org/10.1509/jm.15.0420>
- Majra, H., Saxena, R., Jha, S., & Jagannathan, S. (2016). Structuring Technology Applications for Enhanced Customer Experience: Evidence from Indian Air Travellers. *Global Business Review*, 17(2), 351–374. <https://doi.org/10.1177/0972150915619813>
- Managing Medicines Selection*. (2012). MSH.
- McCarthy, & Wright. (2004). Technology as experience. *Interactions*, 11(5), 42–43. <https://doi.org/10.1145/1015530.1015549>
- Narayanan, S., Desiraju, R., & Chintagunta, P. K. (2004). Return on Investment Implications for Pharmaceutical Promotional Expenditures: The Role of Marketing-Mix Interactions. *Journal of Marketing*, 68(4), 90–105. <https://doi.org/10.1509/jmkg.68.4.90.42734>
- National strategy and plan of action for pharmaceutical manufacturing development in Ethiopia (2015–2025)*. (2015). Federal Democratic Republic of Ethiopia; Ministry of Health and Ministry of Industry.
- Newcomb, E. L. (1949). The Wholesale Drug Business. *Journal of Marketing*, 14(2), 3.
- Packard, G., & Berger, J. (2021). How Concrete Language Shapes Customer Satisfaction. *Journal of Consumer Research*, 47(5), 787–806. <https://doi.org/10.1093/jcr/ucaa038>
- Perkins-Munn, T., Aksoy, L., Keiningham, T. L., & Estrin, D. (2005). Actual Purchase as a Proxy for Share of Wallet. *Journal of Service Research*, 7(3), 245–256. <https://doi.org/10.1177/1094670504271149>
- Pharmaceutical Sector Assessment in Ethiopia*. (2017).
- Pharmaceuticals Supply Transformation Plan II*. (2020). Ethiopian Pharmaceutical Supply Agency.
- Prakash, R. (2002). Physical inactivity a leading cause of disease and disability, warns WHO. *WHO*, 4.
- Pullman, M. E., & Gross, M. A. (2004). Ability of Experience Design Elements to Elicit Emotions and Loyalty Behaviors. *Decision Sciences*, 35(3), 551–578. <https://doi.org/10.1111/j.0011-7315.2004.02611.x>

- Rahman, S. M., Carlson, J., Gudergan, S. P., Wetzels, M., & Grewal, D. (2022). Perceived Omnichannel Customer Experience (OCX): Concept, measurement, and impact. *Journal of Retailing*, S0022435922000239. <https://doi.org/10.1016/j.jretai.2022.03.003>
- Ren, S., Chan, H.-L., & Siqin, T. (2020). Demand forecasting in retail operations for fashionable products: Methods, practices, and real case study. *Annals of Operations Research*, 291(1–2), 761–777. <https://doi.org/10.1007/s10479-019-03148-8>
- Rintamaki, & Saarijarvi. (2021). An integrative framework for managing customer value propositions .pdf. *Journal of Business Research*.
- Rust, & Keiningham. (1999). *Return on Quality at Chase Manhattan Bank*.
- Schmitt, B. (1999). Experiential Marketing. *Journal of Marketing Management*, 15(1–3), 53–67. <https://doi.org/10.1362/026725799784870496>
- Schwager, & Meyer. (2007). *Customer Experience |Understanding Customer Experience*. Harvard Business Review.
- Strategically Aligning Customer Service with B2B Business Goals. (2022). *Harvard Business Reveiw*.
- Stuart, F., & Tax, S. (2004). Toward an integrative approach to designing service experiences Lessons learned from the theatre. *Journal of Operations Management*, 22(6), 609–627. [https://doi.org/10.1016/S0272-6963\(04\)00081-6](https://doi.org/10.1016/S0272-6963(04)00081-6)
- Verhoef, Kannan, & Inman. (2015). *From Multi-Channel Retailing to Omni-Channel Retailing*. Journal of Retailing.
- Verhoef, P. C., Lemon, K. N., Parasuraman, A., Roggeveen, A., Tsiros, M., & Schlesinger, L. A. (2009). Customer Experience Creation: Determinants, Dynamics and Management Strategies. *Journal of Retailing*, 85(1), 31–41. <https://doi.org/10.1016/j.jretai.2008.11.001>
- Voss, C., Roth, A. V., & Chase, R. B. (2008). Experience, Service Operations Strategy, and Services as Destinations: Foundations and Exploratory Investigation. *Production and Operations Management*, 17(3), 247–266. <https://doi.org/10.3401/poms.1080.0030>

Worku, N. (2020). *Determinants of customer satisfaction on pharmaceutical import and distribution: The case of Addis Ababa, Ethiopia*. 133.

World health statistics. (2021). World Health Organization.

Yelbeneh, A. (2020). Effect of service quality dimensions on customer satisfaction: The case of private pharmaceutical importers in Ethiopia. *Doctoral Dissertation, ST. MARY'S UNIVERSITY*, 80.

Appendix1 Questionnaire

Circle the following

Gender

a. Male

b. Female

Age

a. 25-35

b. 36-50

c. Above 50

Educational Level

a. Diploma

b. BA/BSC Degree

c. MA/MSc Degree

			Strongly Disagree			Neither		Strongly Agree	
		Question	1	2	3	4	5	6	7
1.									
1.1.	VALU1	XYZ has a good selection of products across all channels.							
1.2.	VALU2	XYZ offers competitively priced products across all channels.							
1.3.	VALU3	XYZ offers a good deal across all channels.							
1.4.	VALU4	XYZ has a wide variety of products across all channels that interest me.							
2.									
2.1.	DF1	XYZ stocks products at the right time.							
2.2.	DF2	XYZ has a good prediction of seasonal cyclical trends of products.							
2.3.	DF3	XYZ has a good prediction of products that might stock out.							
2.4.	DF4	XYZ products usually don't expire.							

2.5.	DF5	XYZ have few attachments.							
			Very strongly disagree			Neither		Very strongly agree	
			1	2	3	4	5	6	7
3.	Customer Service (CSER):-Customer's evaluative judgment of the support services the pharmaceutical wholesaler provides at any stage of the customer journey across any channel.								
3.1.	CSER1	XYZ provides good customer service across all channels.							
3.2.	CSER2	XYZ provides helpful customer service across all channels.							
3.3.	CSER3	XYZ has knowledgeable customer service representatives across all channels to answer my questions.							
3.4.	CSER4	XYZ customer service across all channels is prompt.							
4.									
4.1.	DELV1	XYZ always sends out the items ordered.							
4.2.	DELV2	XYZ always delivers orders when promised.							
4.3.	DELV3	XYZ always delivers products in a good condition.							
4.4.	DELV4	XYZ quickly delivers my orders.							

		Question			
5.		Share of Wallet (SOW)			
5.1.	SOW	Based on your total expenditure with all pharmaceutical wholesalers in the past 3 months, what percentage of purchases			

		was made from XYZ Response scale:- a) 51-100 b)0-50	

Appendix 2 Model Diagnostics table

PRE_2	PGR_2	COO_2	LEV_2	RES_2	ZRE_2	DFB0 for constant	DFB1_2 for value	DFB2 for Demand F.	DFB3 for customer service	DFB4 for Delivery
0.04713	0	0.00094	0.01872	-0.04713	-0.2224	-0.14161	0.01291	0.01539	-0.00564	0.006
0.56846	1	0.0017632	0.11805	-0.56846	-1.14773	0.07547	-0.09897	-0.0424	0.21142	-0.2091
0.10288	0	0.01115	0.08865	-0.10288	-0.33863	0.029223	-0.03226	-0.02954	-0.03888	0.0346
0.17067	0	0.00506	0.024	-0.17067	-0.45365	0.1599	-0.03447	-0.01996	0.00021	0.0181
0.14798	0	0.0021	0.01196	-0.14798	-0.41675	-0.08962	0.01646	-0.00337	-0.01002	0.0119
0.1709	0	0.00904	0.04201	-0.1709	-0.45401	0.14069	0.0193	0.00612	-0.05413	-0.0044
0.16265	0	0.01495	0.07145	-0.16265	-0.44073	0.032769	-0.09036	-0.00004	0.01787	0.0066
0.19441	0	0.00611	0.02468	-0.19441	-0.49126	-	0.016922	-0.00399	-0.01392	0.03886
0.06191	0	0.0013	0.01934	-0.06191	-0.25689	-	0.010288	-0.00145	-0.00839	0.0188
0.01139	0	0.00014	0.01183	-0.01139	-0.10735	-0.01673	-0.00029	0.00555	-0.00549	0.0035
0.09939	0	0.00278	0.02461	-0.09939	-0.33221	-0.1038	0.02318	-0.00179	-0.02123	0.0172
0.10511	0	0.0014	0.01182	-0.10511	-0.34271	-0.07625	-0.00281	0.00053	-0.00029	0.0162
0.08216	0	0.00153	0.01678	-0.08216	-0.29919	-	0.016805	0.00606	0.01298	0.0098
0.08259	0	0.0034	0.03638	-0.08259	-0.30004	-0.12569	0.0301	0.02226	-0.02899	0.0008
0.05567	0	0.00082	0.01365	-0.05567	-0.24281	-0.09479	0.00282	0.01312	-0.00505	0.0081
0.1269	0	0.00449	0.02996	-0.1269	-0.38123	0.20637	-0.04028	-0.0047	-0.01435	0.0149
0.11804	0	0.00136	0.01004	-0.11804	-0.36584	-0.11787	0.01078	0.01411	-0.00662	0.0047
0.0291	0	0.00067	0.02177	-0.0291	-0.17311	-0.072	0.00988	0.01338	-0.01249	0.0035
0.02885	0	0.00044	0.01451	-0.02885	-0.17237	-0.03403	0.00278	0.00571	-0.0113	0.0088
0.05048	0	0.00086	0.01594	-0.05048	-0.23057	-0.06933	-0.00457	0.00914	-0.00148	0.0107
0.09964	0	0.00367	0.03213	-0.09964	-0.33267	-0.17488	0.01806	0.0333	-0.00832	-0.0064
0.05257	0	0.00134	0.0236	-0.05257	-0.23556	-0.07872	-0.00778	0.00223	0.00433	0.0164
0.12809	0	0.00193	0.01295	-0.12809	-0.38329	-0.06135	0.00762	-0.00553	-0.00978	0.0168
0.12024	0	0.00368	0.02625	-0.12024	-0.36969	-0.15687	-0.00784	-0.00244	0.02228	0.0188
0.1488	0	0.00563	0.03119	-0.1488	-0.41811	-0.12498	0.02046	0.03652	-0.01387	-0.0167
0.0438	0	0.00096	0.02051	-0.0438	-0.21403	0.02073	-0.0042	0.00947	-0.01857	0.008
0.1783	0	0.00228	0.01039	-0.1783	-0.46583	0.04735	-0.0018	-0.00755	-0.01069	0.0071
0.15166	0	0.0039	0.02134	-0.15166	-0.42282	0.101	-0.02247	-0.01709	-0.00513	0.0204

0.08989	0	0.00253	0.02496	-0.08989	-0.31428	-0.28586	0.02815	0.01372	0.00586	0.0098
0.13524	0	0.01273	0.07526	-0.13524	-0.39546	-0.24118	0.00514	-0.04098	0.03358	0.0459
0.10485	0	0.00112	0.00948	-0.10485	-0.34225	-0.0486	-0.00226	0.01108	-0.00791	0.008
0.16203	0	0.00421	0.02128	-0.16203	-0.43973	0.06381	-0.01494	-0.02163	-0.00244	0.0217
0.04171	0	0.00058	0.01307	-0.04171	-0.20863	-0.06842	-0.00025	0.00712	-0.00443	0.0108
0.17534	0	0.00237	0.011	-0.17534	-0.46111	-0.01724	0.01229	0.00772	-0.01554	-0.0031
0.06209	0	0.00089	0.01328	-0.06209	-0.2573	-0.07598	0.00588	0.00398	-0.01064	0.0145
0.1751	0	0.00734	0.03341	-0.1751	-0.46072	-0.20011	0.0451	0.02947	-0.01672	-0.0176
0.05613	0	0.00088	0.01464	-0.05613	-0.24387	-0.09264	0.00118	0.01368	-0.00398	0.0078
0.14432	0	0.00299	0.01743	-0.14432	-0.41068	-0.00055	-0.0026	0.02467	-0.01366	-0.0081
0.18609	0	0.00506	0.02164	-0.18609	-0.47816	0.15483	-0.04349	-0.00242	0.01131	0.0024
0.05937	0	0.00211	0.03228	-0.05937	-0.25124	0.05943	-0.01573	0.02018	-0.01818	0.0018
0.05325	0	0.0008	0.01396	-0.05325	-0.23716	-0.11042	0.01132	0.01165	-0.01006	0.0087
0.08599	0	0.00181	0.01888	-0.08599	-0.30672	-0.03638	-0.01575	0.00774	0.00236	0.0126
0.38809	0	0.07487	0.10559	-0.38809	-0.79639	1.13227	-0.19666	-0.09237	0.08886	-0.0312
0.018	0	0.00027	0.01434	-0.018	-0.13538	-0.00548	-0.00333	0.00512	-0.00734	0.0062
0.24173	0	0.0097	0.02954	-0.24173	-0.56462	-0.07244	0.02952	0.02618	-0.00404	-0.0364
0.21363	0	0.00872	0.03109	-0.21363	-0.52121	0.41499	-0.05332	0.00479	-0.02204	-0.015
0.26032	0	0.00106	0.02941	-0.26032	-0.59324	-0.27331	0.04066	0.00818	0.03402	-0.027
0.39128	0	0.02632	0.03933	-0.39128	-0.80174	0.20585	0.01449	-0.0653	0.04819	-0.0439
0.20548	0	0.00739	0.02777	-0.20548	-0.50855	-0.30601	0.05701	0.00269	0.00504	-0.0051
0.12156	0	0.00691	0.04758	-0.12156	-0.372	-0.30295	0.05453	-0.00909	-0.01078	0.0221
0.10242	0	0.0037	0.03139	-0.10242	-0.3378	-0.24146	0.03202	-0.00787	-0.00229	0.0235
0.22694	0	0.00997	0.03284	-0.22694	-0.54182	0.12324	0.02554	-0.0174	-0.03604	-0.0032
0.17849	0	0.01068	0.04685	-0.17849	-0.46612	-0.36832	0.06741	-0.01764	0.00221	0.0174
0.19733	0	0.00231	0.00929	-0.19733	-0.49582	0.05843	-0.00104	-0.00012	-0.00958	-0.0035
0.12324	0	0.00136	0.00959	-0.12324	-0.37492	-0.12431	0.01123	0.01268	-0.00489	0.0052
0.18327	0	0.00669	0.02896	-0.18327	-0.47371	-0.17362	0.0162	0.0332	0.00856	-0.0208
0.27957	0	0.00673	0.01705	-0.27957	-0.62294	-0.0088	0.01476	-0.01933	0.02108	-0.0174
0.19025	0	0.01415	0.05681	-0.19025	-0.48472	-0.45925	0.04711	-0.03152	0.04563	0.0277
0.13113	0	0.00396	0.0256	-0.13113	-0.38848	0.18095	-0.03971	0.00282	-0.01053	0.0092
0.12508	0	0.00262	0.01799	-0.12508	-0.3781	0.08282	-0.02817	0.00491	-0.00421	0.0096
0.10009	0	0.00588	0.05022	-0.10009	-0.33351	-0.43992	0.05121	0.0049	0.01426	0.0172
0.41662	0	0.04278	0.05652	-0.41662	-0.84507	0.79046	-0.09035	-0.09796	0.0636	-0.0408
0.15931	0	0.00249	0.01299	-0.15931	-0.43532	-0.14229	0.01632	-0.00813	0.00344	0.0141
0.15106	0	0.00307	0.01698	-0.15106	-0.42183	-0.01351	-0.00314	-0.01611	-0.00251	0.0205
0.07029	0	0.00101	0.01322	-0.07029	-0.27496	-0.03641	-0.00716	0.00703	-0.0061	0.0126
0.20951	0	0.00553	0.02043	-0.20951	-0.51482	0.19185	-0.04297	0.00297	0.0097	-0.0088
0.20767	0	0.01588	0.05714	-0.20767	-0.51196	-0.4262	0.03848	-0.0384	0.05442	0.0276
0.23382	0	0.0088	0.02802	-0.23382	-0.55243	0.08316	0.02847	0.0034	-0.03226	-0.02
0.17688	0	0.00388	0.01772	-0.17688	-0.46356	-0.23113	0.02745	0.01624	0.00964	-0.0066
0.19165	0	0.00449	0.01859	-0.19165	-0.48691	0.1593	-0.00929	0.01493	-0.025	-0.0143
0.04333	0	0.00074	0.01607	-0.04333	-0.21283	-0.01375	-0.00058	0.00586	-0.01476	0.0109

0.24039	0	0.01135	0.03461	-0.24039	-0.56255	0.14409	-0.04512	0.01719	0.02963	-0.0282
0.09114	0	0.00655	0.06127	-0.09114	-0.31668	0.05624	-0.0146	0.04283	-0.02318	-0.0144
0.11313	0	0.00772	0.05707	-0.11313	-0.35715	0.10225	-0.02476	0.04269	-0.01992	-0.0164
0.15417	0	0.00315	0.01697	-0.15417	-0.42693	-0.22522	0.02844	-0.00494	0.00572	0.0136
0.0582	0	0.00125	0.01984	-0.0582	-0.24859	-0.07519	-0.00785	0.01073	0.0019	0.0105
0.16037	0	0.0093	0.04644	-0.16037	-0.43703	0.06247	-0.04681	0.02377	0.02146	-0.0084
0.26532	0	0.00597	0.01626	-0.26532	-0.60095	0.22267	-0.00899	-0.01633	-0.00656	-0.0167
0.12414	0	0.00352	0.02422	-0.12414	-0.37647	0.15745	-0.03327	0.01229	-0.01502	0.0033
0.25191	0	0.01256	0.03595	-0.25191	-0.58028	-0.10209	0.01667	-0.05148	0.03151	0.0178
0.1619	0	0.00217	0.01112	-0.1619	-0.43951	-0.0023	0.00276	0.01513	-0.01338	-0.0051
0.04241	0	0.00094	0.02082	-0.04241	-0.21044	-0.0597	-0.00789	0.00708	0.00127	0.0114
0.18557	0	0.02435	0.09656	-0.18557	-0.47733	-0.74916	0.05897	0.01591	0.08051	-0.0007
0.12024	0	0.00113	0.0082	-0.12024	-0.36969	-0.04224	-0.00082	0.0074	-0.00824	0.0087
0.10565	0	0.0016	0.01333	-0.10565	-0.3437	-0.10281	0.00331	0.01895	-0.00429	0.0029
0.2244	0	0.01791	0.05831	-0.2244	-0.53788	-0.05321	0.06706	-0.0161	-0.0442	-0.0033
0.22283	0	0.00279	0.00965	-0.22283	-0.53547	0.05041	-0.00752	-0.00556	0.00741	-0.0064
0.07221	0	0.0011	0.01399	-0.07221	-0.27899	-0.03921	0.00415	0.01293	-0.01788	0.0076
0.07586	0	0.00237	0.02801	-0.07586	-0.2865	-0.02346	-0.02027	0.01446	0.00289	0.0082
0.27858	0	0.02885	0.06952	-0.27858	-0.62141	0.49058	-0.01067	-0.07233	-0.04004	0.012
0.07725	0	0.00108	0.01274	-0.07725	-0.28935	-0.12532	0.00542	0.01355	-0.00259	0.0087
0.05344	0	0.00211	0.03609	-0.05344	-0.23761	0.08646	-0.01722	0.01793	-0.02114	0.0027
0.23842	0	0.00925	0.0287	-0.23842	-0.55951	-0.21108	0.03081	0.0224	0.02086	-0.0299
0.11703	0	0.00686	0.04921	-0.11703	-0.36407	-0.4386	0.03237	0.00975	0.0338	0.0132
0.19281	0	0.00366	0.0151	-0.19281	-0.48874	0.04315	-0.01659	-0.01882	0.0107	0.0127
0.35156	0	0.04895	0.08281	-0.35156	-0.73632	-0.24501	0.07954	0.04356	0.03194	-0.1005
0.07501	0	0.00117	0.01425	-0.07501	-0.28476	-0.04375	0.00528	0.00433	-0.01672	0.0138
0.06493	0	0.00123	0.01737	-0.06493	-0.26351	-0.00031	-0.01328	0.00599	-0.00671	0.0131
0.05129	0	0.00122	0.02214	-0.05129	-0.23251	-0.09327	0.01443	0.01666	-0.01726	0.0044
0.16477	0	0.00222	0.01112	-0.16477	-0.44416	0.00864	-0.01689	0.0014	0.00706	0.0055
0.07142	0	0.0012	0.01533	-0.07142	-0.27733	0.00027	-0.00768	0.01357	-0.01383	0.0072
0.22214	0	0.00685	0.02342	-0.22214	-0.53439	0.18538	0.00123	-0.02249	-0.02472	0.0027
0.14937	0	0.00816	0.04442	-0.14937	-0.41904	-0.10773	0.02743	-0.02955	-0.01322	0.0305
0.15454	0	0.00493	0.02625	-0.15454	-0.42754	0.00487	0.01462	-0.01664	-0.02307	0.0187
0.22764	0	0.00907	0.02986	-0.22764	-0.54289	-0.33088	0.02867	-0.01087	0.0478	0.0004
0.1105	0	0.00153	0.01217	-0.1105	-0.35245	-0.18078	0.01351	0.00699	0.0031	0.0118
0.06442	0	0.00107	0.01526	-0.06442	-0.26241	-0.00028	-0.00967	0.00594	-0.01026	0.0128
0.34456	0	0.03179	0.05703	-0.34456	-0.72505	0.29765	0.01443	0.0277	-0.01134	-0.0892
0.39766	0	0.03896	0.05573	-0.39766	-0.81253	0.59781	0.00806	-0.02535	-0.02214	-0.0854
0.55541	1	0.01312	0.09504	-0.55541	-1.1177	0.52454	0.04081	-0.04297	0.09702	-0.1966
0.21424	0	0.00514	0.0185	-0.21424	-0.52217	0.05551	0.01787	0.0059	-0.0236	-0.0142
0.06058	0	0.00075	0.01154	-0.06058	-0.25394	-0.09598	0.00667	0.00885	-0.00826	0.0112
0.14893	0	0.007	0.03845	-0.14893	-0.41832	0.3246	-0.05634	-0.00297	-0.01768	0.0089
0.04263	0	0.00102	0.02234	-0.04263	-0.21101	-0.17401	0.0151	0.00447	0.00082	0.0139

0.03653	0	0.00071	0.01837	-0.03653	-0.19473	-0.06097	0.00161	0.01502	-0.00822	0.0041
0.20373	0	0.0208	0.07518	-0.20373	-0.50582	0.02527	-0.06939	-0.02111	0.07064	0.0153
0.28919	0	0.00754	0.01819	-0.28919	-0.63784	0.02016	0.00652	-0.00947	0.02636	-0.0285
0.20659	0	0.00972	0.03599	-0.20659	-0.51027	0.23702	-0.04287	0.02853	-0.00425	-0.0275
0.15918	0	0.00368	0.01906	-0.15918	-0.43511	0.07447	0.00761	0.00788	-0.03253	-0.001
0.10355	0	0.00148	0.01269	-0.10355	-0.33986	0.0093	-0.00163	0.00401	-0.01874	0.0121
0.05298	0	0.00093	0.01627	-0.05298	-0.23653	-0.03491	-0.003	0.0013	-0.00866	0.0158
0.09652	0	0.00106	0.00981	-0.09652	-0.32684	-0.10042	0.0028	0.00714	-0.00296	0.0122
0.16701	0	0.00307	0.0151	-0.16701	-0.44776	-0.07835	0.01587	0.02056	-0.0115	-0.0096
0.10649	0	0.00114	0.0095	-0.10649	-0.34523	-0.0804	0.00879	0.00889	-0.01228	0.0092
0.07959	0	0.00173	0.0196	-0.07959	-0.29407	0.00926	0.00065	0.01648	-0.02446	0.0043
0.09383	0	0.00171	0.01628	-0.09383	-0.32178	-0.00943	0.00037	-0.0018	-0.01693	0.0173
0.11627	0	0.00161	0.01207	-0.11627	-0.36272	0.03312	-0.01089	0.01191	-0.01408	0.0052
0.13215	0	0.0072	0.04513	-0.13215	-0.39022	0.07303	0.01742	-0.00968	-0.04471	0.0163
0.20025	0	0.00645	0.02512	-0.20025	-0.50038	0.3211	-0.0393	0.00873	-0.02278	-0.0131
0.14832	0	0.00953	0.05188	-0.14832	-0.41731	-0.35143	0.00634	0.01849	0.04667	0.0021
0.11494	0	0.00323	0.02428	-0.11494	-0.36037	-0.25592	0.03566	-0.00074	-0.00289	0.017
0.05196	0	0.00234	0.04087	-0.05196	-0.23411	-0.02368	0.00228	-0.01019	-0.01456	0.0239
0.56692	1	0.11608	0.13191	0.43308	0.87403	-1.95455	0.14504	0.10103	0.02253	0.1332
0.27843	0	0.10679	0.03958	0.72157	1.60984	-1.03879	0.05609	0.14463	0.04029	-0.0093
0.4391	0	0.08471	0.00621	0.5609	1.13022	-0.39354	0.02951	0.14575	-0.13928	0.0508
0.13398	0	0.17158	0.02586	0.86602	2.54237	2.12571	-0.18657	-0.08921	-0.11825	-0.0367
0.11444	0	0.014086	0.01788	0.88556	2.78182	-0.319	-0.00412	0.00275	0.19598	-0.1042
0.17092	0	0.05909	0.01204	0.82908	2.20246	0.85662	-0.06695	-0.03425	-0.06196	-0.0067
0.13378	0	0.14651	0.02213	0.86622	2.54463	1.89101	-0.25827	-0.04875	-0.008	-0.0564
0.23594	0	0.14744	0.04355	0.76406	1.79953	1.45117	-0.16868	-0.05139	-0.14851	0.0695
0.24621	0	0.10538	0.03328	0.75379	1.74972	0.12324	-0.0863	0.13599	-0.01405	-0.039
0.25916	0	0.017414	0.05742	0.74084	1.69076	0.0005	0.14903	-0.0213	-0.21182	0.0721
0.05722	0	0.003096	0.01844	0.94278	4.0592	2.19168	-0.13561	-0.29228	0.06649	-0.0863
0.11661	0	0.002969	0.03772	0.88339	2.75235	-0.39157	-0.05802	-0.22256	0.29915	0.0671
0.19319	0	0.002391	0.00541	0.80681	2.04357	-0.56665	-0.14346	0.00094	0.2549	0.0271
0.32789	0	0.002106	0.0932	0.67211	1.4317	-1.62266	0.04818	-0.06754	0.15744	0.1918
0.419	0	0.00677	0.0466	0.581	1.17756	-0.96897	0.03727	0.08509	-0.01715	0.098
0.27029	0	0.0055	0.02007	0.72971	1.64309	0.05584	0.02439	0.05465	-0.11711	0.0302
0.1174	0	0.006941	0.08453	0.8826	2.74193	-1.98702	0.58123	0.11958	-0.0823	-0.2013
0.10831	0	0.02313	0.02733	0.89169	2.86933	0.06458	-0.05909	-0.22876	0.23043	0.0471
0.17359	0	0.01231	0.02521	0.82641	2.18193	-0.12694	0.10813	0.11656	-0.07486	-0.107
0.23171	0	0.00504	0.015	0.76829	1.82093	0.44811	-0.0557	0.04404	-0.0778	0.0064
0.60438	1	0.00854	0.11549	0.39562	0.80907	-0.99218	0.09112	0.1625	-0.1159	0.0695
0.17328	0	0.07153	0.01477	0.82672	2.18427	0.98196	-0.1496	0.00168	-0.01291	-0.0264
0.34322	0	0.011174	0.00551	0.65678	1.38334	0.35682	0.00291	0.02128	-0.19863	0.0949
0.19742	0	0.010899	0.02611	0.80258	2.01626	-1.01928	0.21667	0.05281	-0.03074	-0.0238
0.12864	0	0.007934	0.01158	0.87136	2.60264	0.44425	0.0375	-0.09578	-0.00676	-0.0236

0.23842	0	0.00925	0.0287	-0.23842	-0.55951	-0.21108	0.03081	0.0224	0.02086	-0.0299
0.11703	0	0.00686	0.04921	-0.11703	-0.36407	-0.4386	0.03237	0.00975	0.0338	0.0132
0.19281	0	0.00366	0.0151	-0.19281	-0.48874	0.04315	-0.01659	-0.01882	0.0107	0.0127
0.35156	0	0.04895	0.08281	-0.35156	-0.73632	-0.24501	0.07954	0.04356	0.03194	-0.1005
0.07501	0	0.00117	0.01425	-0.07501	-0.28476	-0.04375	0.00528	0.00433	-0.01672	0.0138
0.06493	0	0.00123	0.01737	-0.06493	-0.26351	-0.00031	-0.01328	0.00599	-0.00671	0.0131
0.05129	0	0.00122	0.02214	-0.05129	-0.23251	-0.09327	0.01443	0.01666	-0.01726	0.0044
0.16477	0	0.00222	0.01112	-0.16477	-0.44416	0.00864	-0.01689	0.0014	0.00706	0.0055
0.07142	0	0.0012	0.01533	-0.07142	-0.27733	0.00027	-0.00768	0.01357	-0.01383	0.0072
0.22214	0	0.00685	0.02342	-0.22214	-0.53439	0.18538	0.00123	-0.02249	-0.02472	0.0027
0.14937	0	0.00816	0.04442	-0.14937	-0.41904	-0.10773	0.02743	-0.02955	-0.01322	0.0305
0.15454	0	0.00493	0.02625	-0.15454	-0.42754	0.00487	0.01462	-0.01664	-0.02307	0.0187
0.22764	0	0.00907	0.02986	-0.22764	-0.54289	-0.33088	0.02867	-0.01087	0.0478	0.0004