FACTORS INFLUENCING CONSUMER WILLINGNESS TO PAY FOR BRANDED FISH IN NAIROBI

CATHERINE WANJIKU THUO

ADM. NO. 170499

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF MANAGEMENT IN AGRIBUSINESS AT STRATHMORE UNIVERSITY

APRIL, 2025

DECLARATION

I would like to declare that this dissertation has not been previously presented or approved for the conferment of a degree by this university or any other institution. To the best of my knowledge and belief, the content of the dissertation does not contain material that has been previously published or written by another individual, except where appropriate references are provided within the dissertation itself.

Catherine Wanjiku Thuo – 170499

Signature…… …….. Date ……22/04/2025……

Approval

This dissertation of Catherine Wanjiku Thuo will be reviewed and approved for examination by the university supervisor.

Dr. Everlyne Makhanu

Signature… ……. Date: 22/04/2025……

Strathmore University Business School

ABSTRACT

Branded food products are increasingly gaining popularity in urban markets, yet limited research has explored the factors influencing consumers' willingness to pay for branded fish in Kenya. This study examined the influence of consumer purchase behavior, purchase accessibility, and demographic characteristics on the willingness to pay for branded fish in Nairobi. A descriptive correlational research design was employed, utilizing a quantitative approach to assess the relationship between the independent variables and consumer willingness to pay. Stratified random sampling was used to select fish consumers from five sub-counties in Nairobi: Embakasi Central, Kasarani, Langata, Ruaraka, and Westlands, resulting in a total sample of 256 respondents. Data was collected using structured questionnaires and analyzed using descriptive statistics, correlation, and multiple linear regression. Findings revealed that all three independent variables: purchase behavior, purchase accessibility, and demographic characteristics had strong and statistically significant positive effects on willingness to pay for branded fish. Purchase behavior showed the strongest correlation with willingness to pay, followed closely by purchase accessibility and demographic characteristics. Regression analysis also confirmed that purchase accessibility had the greatest influence, followed by purchase behavior and demographic characteristics. The regression resulted to R^2 value of 0.728 which implied that 72.8% of the variation in willingness to pay was accounted for by the three predictor variables, confirming the model's strong explanatory power. The study concluded that while consumers demonstrated an overall willingness to pay for branded fish, strategies to promote branding should be grounded in improving access, reinforcing positive purchase experiences, and tailoring messaging based on demographic profiles. The study recommended targeted branding campaigns, infrastructure improvements for distribution, and demographic-sensitive marketing strategies to enhance consumer awareness and willingness to pay. These findings will contribute to the broader understanding of consumer behavior in Kenya's fish market and offer practical insights for marketers, policymakers, and value chain actors in advancing branding and food safety initiatives.

Keywords: *Willingness to pay, purchase behavior, purchase accessibility, demographic characteristics, branded fish, consumer preferences.*

LIST OF FIGURES

Figure 2: Conceptual Framework……30

LIST OF TABLES

Table 2. 1 Summary of Research Gaps 23
Table 2. 2 Operationalization of Variables 26

Table 3. 1 Sample Distribution Across Selected Sub-Counties 30

Table 4. 1 Respondents profile 36
Table 4. 2 Willingness to Pay 38
Table 4. 3 Demographic Characteristics 39
Table 4. 4 Purchase Behavior 40
Table 4. 5 Purchase Accessibility 42
Table 4. 6 Consumer purchase behavior Correlation Matrix 45
Table 4. 7 Consumer purchase behavior Regression Coefficients Summary 45
Table 4. 8 Purchase Accessibility Correlation Matrix 46
Table 4. 9 Purchase Accessibility Regression Coefficients Summary 46
Table 4. 10 Demographic characteristics Correlation Matrix 47
Table 4. 11 Demographic Characteristics Regression Coefficients Summary 48
Table 4. 12 Correlation Matrix 49
Table 4. 13 Regression Coefficients Summary 49
Table 4. 14 Regression Summary 50
Table 4. 15 ANOVA Summary 50

TABLE OF CONTENTS

Contents

DECLARATION ii
ABSTRACT iii
LIST OF FIGURES iv
LIST OF TABLES v
TABLE OF CONTENTS vi
ABBREVIATIONS ix
DEFINITION OF TERMS x
DEDICATION xi
ACKNOWLEDGEMENT xii
CHAPTER ONE 1
INTRODUCTION TO THE STUDY 1
1.1 Background Information 1
1.1.1 Consumer willingness to pay 4
1.1.2 Factors Influencing Consumer willingness to pay for Purchases 5
1.1.3 Fish Producing Companies in Nairobi County 8
1.2 Problem Statement 10
1.3 Research Objectives 11
1.4 Research Questions 12
1.5 Significance of the Study 12
1.6 Scope of the Study 13
1.7 Chapter Summary 14
CHAPTER TWO 15
LITERATURE REVIEW 15
2.1 Introduction 15
2.2 Theoretical Review 15
2.2.1 Utility Theory 15
2.2.2 Theory of Reasoned Action (TRA) 16
2.3 Empirical Review 17
2.3.1 Consumer Purchase Behavior on Willingness to Pay for Branded Fish 17
2.3.2 Product Accessibility on Willingness to Pay for Branded Fish 19
2.3.3 Demographic Characteristics on Willingness to Pay for Branded Fish 21
2.4 Summary of Knowledge Gaps 23

2.5 Conceptual Framework 25
2.6 Operationalization of Variables 26
2.7 Chapter Summary 26
CHAPTER THREE 28
RESEARCH METHODOLOGY 28
3.1 Introduction 28
3.2 Research Philosophy 28
3.3 Research Design 28
3.4 Population and Sampling 28
3.3.1 Sample size and Sampling Technique 29
3.5 Data Collection Methods 31
3.6 Research Quality 31
3.6.1 Internal and External Validity 31
3.6.2 Reliability 32
3.6.3 Piloting 32
3.7 Data Analysis 33
3.8 Ethical Issues 34
3.9 Chapter Summary 34
CHAPTER FOUR 35
PRESENTATION OF RESEARCH FINDINGS 35
4.1 Introduction 35
4.2 Background Information 35
4.2.1 Response Rate 35
4.2.2 Profile of the Respondents 35
4.3 Descriptive Statistics 38
4.3.1 Willingness to Pay (Dependent Variable) 38
4.3.2 Demographic Characteristics 39
4.3.3 Purchase Behavior 40
4.3.4 Purchase Accessibility 41
4.4 Establishing Relationships 43
4.4.1 Consumer purchase behavior and willingness to pay for branded fish 44
4.4.2 Product Accessibility and Consumer Willingness to pay 46
4.4.3 Demographic characteristics and Consumer Willingness to Pay 47
4.5 Overall Model 48
4.6 Chapter Summary 51
CHAPTER FIVE 53

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS 53
5.1 Introduction 53
5.2 Summary 53
5.3 Discussion of Findings 54
5.3.1 Influence of Consumer Purchase Behavior on Willingness to Pay for Branded Fish 54
5.3.2 Influence of Purchase Accessibility on Willingness to Pay for Branded Fish 56
5.3.3 Influence of Demographic Characteristics on Willingness to Pay for Branded Fish 57
5.4 Conclusions 58
5.5 Recommendations 60
5.6 Areas for Further Research 62
REFERENCES 64
APPENDICES 71
Appendix A: Introduction Letter to Respondents 71
Appendix B: The Strathmore Ethical Review Letter 73
Appendix C: NACOSTI Permit 74
Appendix D: Questionnaire 75

ABBREVIATIONS

BRP:	Brand Relationship Performance
CPV:	Customer Perceived Value
EPS:	Extended Problem Solving
FAO:	Food and Agriculture Organization
GDP:	Gross Domestic Product
NACOSTI:	National Commission for Science, Technology, and Innovation
SM:	Social media
SMM:	Social Media Marketing
SPSS:	Statistical Package for Social Sciences
TPB:	Theory of Planned Behavior
WTP:	Willingness to Pay

DEFINITION OF TERMS

Branded Fish: Fish products marketed under a specific brand name, often distinguished by consistent packaging, quality standards, traceability, and labeling that differentiate them from generic or non-branded alternatives (FAO, 2020).

Non-Branded Fish: Fish products sold without a recognizable brand name or standard labeling, typically sourced from informal vendors, small-scale fishers, or artisanal producers without formal quality assurance systems (Njiru et al., 2021).

Haplochromines: A diverse sub-group within the Cichlidae family, primarily found in African freshwater systems, notably Lake Victoria. They are known for their ecological diversity and vibrant coloration and play an important role in the lake's ecosystem and local fisheries (Seehausen, 2006).

Lake Victoria Sardine (Rastrineobola argentea) – Omena: A small, nutrient-rich pelagic fish endemic to Lake Victoria and commonly consumed in East Africa. It forms a critical component of regional diets and is typically harvested using light attraction methods (Aura et al., 2020).

Market Ladies: Informal female vendors who operate within local fish markets. They often serve as intermediaries between fishers and consumers and play a vital role in the last-mile distribution and accessibility of fish products in many African settings (Achieng et al., 2018).

Purchase Channels: The various outlets or platforms through which consumers acquire fish, including traditional open-air markets, supermarkets, street vendors (market ladies), and digital platforms such as e-commerce or mobile delivery apps (FAO, 2022).

Triggers for Buying Fish: The primary motivating factors influencing consumer fish purchases, which include health considerations, flavor, product origin, cultural or religious preferences, price sensitivity, and perceived freshness (Birch & Lawley, 2014).

Purchase Behavior: Consumer patterns and decisions related to the frequency, type, and form of fish purchased. This includes preferences regarding fish species, product forms (e.g., fresh, dried), and preparation methods, influenced by individual needs and past experiences (Kotler & Keller, 2016).

Purchase Accessibility: The degree to which fish products are available and reachable to consumers, influenced by physical proximity to markets, vendor reliability, affordability, product hygiene, and convenience of purchase methods (Adebo et al., 2021).

Willingness to Pay (WTP): The maximum amount a consumer is prepared to spend to obtain a product, used as an indicator of perceived value, quality, or preference. In food marketing, WTP reflects consumer valuation of attributes such as branding, safety, and origin (Lusk & Hudson, 2004).

DEDICATION

I dedicate this work to Yahweh the true God, the nation of Kenya and to the Fish Industry.

ACKNOWLEDGEMENT

I want to genuinely convey my profound gratitude to Dr. Everlyne Makhanu, the lecturer for Research Methods units and my supervisor, for her invaluable assistance, unwavering support, and inspirational guidance throughout the process of drafting this dissertation. I also extend my appreciation to Dr. Castro Gichuki, for his helpful advice and consistent responsiveness to my inquiries.

Recognition is due to the administration of Strathmore University for making my participation in this program a tangible achievement. Special thanks go to my dear parents, siblings, and my friend John, who have served as significant sources of motivation during challenging times. I extend my heartfelt thanks to all.

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1 Background Information

The main theme of this research centers on understanding the factors influencing consumer willingness to pay for branded agribusiness products, specifically focusing on branded fish in Nairobi County. As the aquaculture and fisheries transitions from traditional subsistence practices to more modern, market-driven systems, branding has emerged as a critical differentiator in food markets. It not only helps create consumer loyalty but also signals quality, safety, and traceability as the key attributes valued in urban food markets (Wang & Jiang, 2022). With the rising concerns about food safety, consumers increasingly associate branded products with higher standards of production and hygiene. This is particularly important in the fish industry, where the perishability and health sensitivity of the product demand reliable sourcing and handling (Fonner & Sylvia, 2015). Understanding what drives consumers to pay a premium for branded fish is essential for agribusiness stakeholders, including fish producers, retailers, and government regulators as it informs market entry strategies, pricing models, and targeted communication campaigns designed to influence purchasing behavior and increase market share.

Globally, the fisheries and aquaculture sectors play an essential role in addressing food security and malnutrition, especially in developing countries. According to the Food and Agriculture Organization (FAO, 2022), fish accounts for approximately 17% of global animal protein intake and provides essential micronutrients such as omega-3 fatty acids, calcium, and iron. In several coastal and island nations, fish contributes over 50% of animal protein consumed. The global seafood industry is expected to generate revenues exceeding US$12.48 trillion by 2029, supported by technological advancements in aquaculture and growing demand for protein-rich foods (Statista, 2024). However, per capita fish consumption in Africa is projected to decline due to limited local production, rising prices, and rapid population growth, which undermines food security (Carey et al., 2007; FAO, 2022). Michele (2021) further notes that despite an increase in total fish production, unequal distribution and affordability issues have widened the nutrition gap in Sub-Saharan Africa, highlighting the need for value-added products that offer reliability, safety, and convenience attributes typically associated with branded items.

In Africa, fish continues to be a central source of protein and livelihood for millions of people. It is estimated that over 12 million people are directly employed in fisheries and aquaculture, with many more involved in post-harvest processing and marketing (Asiedu et al., 2023). Countries such as Ghana, Nigeria, Angola, and the Democratic Republic of Congo rely heavily on fish for protein up to 62% of animal protein in some cases (University of Cape Coast et al., 2022). However, consumption patterns in Africa remain dominated by low-value, small pelagic species that are affordable to low-income populations. Challenges such as poor infrastructure, lack of cold storage, and weak enforcement of quality standards contribute to limited availability of branded or value-added fish products (Bi et al., 2022). Moreover, most fish sold in local African markets is unbranded, often making consumers skeptical about freshness and safety. These dynamics point to a gap in market segmentation and a growing need for quality-assured branded fish, particularly in urban centers where consumers are increasingly health-conscious and quality-driven.

In East Africa, the fisheries sector is a major source of employment and food for millions, particularly around Lake Victoria, one of the world's largest freshwater bodies. Lake Victoria supports over 4 million livelihoods directly and indirectly across Kenya, Uganda, and Tanzania (Njiru et al., 2019). The lake's primary commercial species include Nile perch, tilapia, and dagaa (omena), with a growing demand for processed and value-added fish products in regional markets. Nonetheless, the industry faces serious sustainability challenges, including overfishing, environmental degradation, and poor enforcement of fishing regulations (Yongo et al., 2017). Aura et al. (2020) highlights that while Nile perch remains a lucrative export commodity, the domestic market is increasingly leaning toward value-added options like smoked, filleted, and branded fish to meet the needs of urban consumers. Nairobi, as the regional economic hub, has become a focal point for fish distribution, value addition, and retail, making it a critical site for understanding consumer behavior toward branded fish products. However, disparities in distribution channels, accessibility, and price sensitivity continue to affect consumers' willingness to pay for these higher-value options.

In Kenya, the fisheries and aquaculture sector are vital to the country's economic and nutritional landscape. Inland water bodies such as Lake Victoria, Lake Turkana, and Lake Naivasha account for most fish landings, with freshwater sources contributing over 95% of total fish production (Schubert et al., 2021). Key species include Nile perch (Lates niloticus),

Nile tilapia (Oreochromis niloticus), and omena (Rastrineobola argentea). The sector contributes approximately 0.5% to Kenya's Gross Domestic Product (GDP), generating Ksh 7 billion annually for fishers and an additional Ksh 5 billion from fish exports (Aura et al., 2020). The industry supports more than 80,000 fishers and farmers directly, and over 2.3 million individuals through fish trading, transportation, processing, and other value chain activities (Obiero et al., 2015; Munguti et al., 2023). Nairobi, though not a primary fish production zone, plays a central role in fish distribution and marketing due to its large consumer base and advanced infrastructure. The emergence of fish brands and aquaculture firms catering to the Nairobi market reflects a shift in consumer expectations, with increasing demand for traceable, hygienic, and well-packaged fish products. This trend presents an opportunity to explore what factors influence consumers' willingness to pay more for branded fish and how these insights can inform agribusiness strategies and public policy.

The theoretical foundation of this study is anchored in the Theory of Reasoned Action (TRA) and Utility Theory. TRA posits that individual behavior is determined by behavioral intentions, which are influenced by attitudes and subjective norms (Ajzen & Fishbein, 2005). In the context of fish purchasing, consumers' attitudes toward branded products such as perceived quality, safety, or status can shape their willingness to pay, particularly when reinforced by societal or peer expectations. Utility Theory, on the other hand, focuses on consumers' efforts to maximize satisfaction or utility from consumption (Lancaster, 1990). Consumers evaluate the utility of branded fish based on factors like convenience, freshness, trust in quality, and emotional satisfaction. These theoretical lenses offer a dual perspective sociopsychological and economic for understanding consumer behavior. By combining these perspectives, this study aims to provide a holistic understanding of how cognitive, emotional, and environmental factors converge to influence willingness to pay in Nairobi's fish market. This blend of theory and empirical focus lays the groundwork for a practical, evidence-based approach to enhancing branding strategies in Kenya's agribusiness landscape.

This study focuses on three key factors believed to influence willingness to pay: consumer purchase behavior, purchase accessibility, and demographic characteristics. The research aims to assess how these variables interact in shaping consumer preferences and pricing decisions in the context of Nairobi's urban fish market. The findings are expected to contribute to

evidence-based strategies for promoting branded fish, improving market efficiency, and addressing consumer concerns around quality, safety, and availability.

1.1.1 Consumer willingness to pay

Consumer willingness to pay (WTP) is a fundamental concept in understanding consumer behavior, particularly in pricing and marketing strategies. WTP refers to the maximum price a consumer is willing to pay for a product or service, reflecting the perceived value they attribute to it. This concept is widely studied across multiple disciplines, including economics, psychology, and marketing, each offering a unique perspective on the determinants of WTP and its implications for consumer decision-making.

From an economic standpoint, WTP measures the monetary value consumers assign to a product, which directly influences their purchasing decisions and price sensitivity (Hanemann, 1991; Korach, 2024). According to economic theory, consumers make rational decisions based on factors such as income levels, market competition, and product rarity. Higher-income consumers tend to exhibit greater WTP for premium products, while market competition and product differentiation shape price elasticity (Blomquist et al., 2015). In the case of branded fish, economic considerations such as income constraints, market availability, and price competition significantly influence how much consumers are willing to pay.

From a psychological viewpoint, WTP is shaped by consumer attitudes, trust, emotional connections to a brand, and perceptions of product quality. Consumers with strong brand loyalty and emotional attachment to a product tend to exhibit a higher WTP (Ajzen, 2020; Han & Sun, 2024). A closely related concept is "brand love," where consumers develop a deep emotional connection with a brand, further enhancing their willingness to pay premium prices (Hibban & Wahyudi, 2022). Perceived quality, such as freshness and sustainability of fish, also plays a crucial role in shaping WTP, as consumers are more inclined to pay higher prices for products they trust and associate with superior attributes.

From a marketing standpoint, WTP is influenced by product differentiation, brand reputation, and communication strategies. Branding plays a critical role in enhancing perceived value, as consumers often associate higher prices with better quality and trustworthiness (Fonner & Sylvia, 2015; Hwang & Kandampully, 2012). Marketing strategies such as advertising, product

packaging, and endorsements influence consumer perception and, consequently, WTP. For branded fish, firms leveraging effective branding and highlighting attributes such as sustainability, health benefits, and freshness can justify premium pricing in the market.

To effectively measure WTP, researchers utilize both direct and indirect methods. Direct WTP is assessed through consumer surveys where respondents state the maximum price they are willing to pay for a product. Indirect WTP, on the other hand, is inferred from actual purchasing behavior and consumer response to price fluctuations. Additionally, marginal WTP examines how much more consumers are willing to pay for incremental improvements in product quality or features (Korach, 2024). These measurement approaches allow businesses to segment their market and develop pricing strategies that align with consumer preferences (Han & Sun, 2024). In this study the socio-demographic characteristics of consumers will play a crucial role in operationalizing WTP. Variables such as age, education, and occupation are known to influence purchasing power and preferences for premium-priced products (Can et al., 2015).

Furthermore, the study will assess consumers' past purchasing behavior and the frequency with which they purchase fish. This indirect measure provides insight into how often consumers engage with the product category, which can be a predictor of their WTP (Zhao et al., 2022).

Finally, the operationalization of WTP in this study will also be informed by theoretical frameworks, such as the Theory of Reasoned Action (TRA) and Utility Theory, which suggest that consumers make purchasing decisions based on both rational evaluations of utility and social influences (Ajzen & Fishbein, 2005; Lancaster, 1990). By integrating these frameworks, the study aims to provide a comprehensive understanding of the psychological and social factors driving WTP for branded fish.

1.1.2 Factors Influencing Consumer willingness to pay for Purchases

Demographic factors, such as age, income, education level, and family structure, significantly influence consumers' willingness to pay for products. Consumers with higher income levels tend to be less sensitive to price and more willing to pay for premium products, especially those that align with their preferences for quality, innovation, and sustainability (Keller & Kotler, 2021). For example, higher-income consumers in urban areas often prioritize the perceived value and reliability of branded products, thus increasing their willingness to pay for products

they trust (Muthui, 2020). Furthermore, education plays a critical role, as consumers with higher education levels are more likely to make informed decisions about the quality and safety of products, making them more willing to pay for items that align with their values (Lichtenstein et al., 2020).

Age is also an important factor; younger consumers, particularly Millennials and Generation Z, are often willing to pay more for eco-friendly or socially responsible products, driven by their growing concern for environmental sustainability and ethical practices (Johnson et al., 2021). In contrast, older consumers may prioritize product durability and functional benefits, affecting their willingness to pay for certain types of goods (Schiffman & Kanuk, 2020). Understanding these demographic trends is essential for businesses seeking to identify target markets and set pricing strategies that resonate with different consumer segments.

Product availability and accessibility are fundamental to determining consumers' willingness to pay, as scarcity or limited access to products often increases their perceived value. Research indicates that when products are perceived as scarce or exclusive, consumers are more likely to assign a higher price to them (Munguti et al., 2020). This principle is particularly important in industries like food, where products that are not readily available or accessible can drive consumers to value them more highly, especially if they are perceived as unique or of superior quality (McKinsey & Company, 2021).

In addition, the ease with which consumers can access a product plays a crucial role in shaping their WTP. For instance, products available in convenient locations or through multiple distribution channels (online, retail stores, etc.) are more likely to be purchased, and consumers may be willing to pay a premium for the convenience of obtaining them (Kotler & Keller, 2021). In the case of Kenya's fish industry, branded fish products that are available in supermarkets, hotels, and restaurants are more likely to command higher prices compared to those sold in informal markets or direct farm-to-consumer channels (Kenya Marine and Fisheries Research Institute, 2021).

Consumer purchase behavior encompasses a wide range of factors, including psychological, social, and emotional influences, that impact consumers' willingness to pay for products. Consumers often make purchase decisions based on perceived product quality, brand

reputation, and personal preferences (Zeithaml, 2021). The influence of health-conscious behavior has also become more prominent in recent years, particularly in the food industry. Consumers are increasingly willing to pay more for products they perceive as healthier, safer, or more sustainable, reflecting growing concerns about food quality and its impact on well-being (Lichtenstein et al., 2020). In the Kenyan market, for example, consumers are increasingly prioritizing the health benefits of fish, with many willing to pay a premium for fish that is branded as safe, fresh, and sustainably sourced (Munguti et al., 2020).

Social and cultural factors also affect purchase behavior. Consumers often rely on social norms, peer recommendations, and online reviews when making decisions, which can significantly influence their WTP (Schiffman & Kanuk, 2020). When a product is endorsed by a trusted individual or group, its perceived value increases, and consumers may be willing to pay more for it. This is particularly relevant for branded products, which can benefit from positive word-of-mouth and endorsements in social networks (Richter & Klöckner, 2017). Additionally, the growing influence of social media platforms has further intensified this trend, with consumers increasingly willing to pay more for products that are trending or have strong online visibility (McKinsey & Company, 2021).

Product quality is a major determinant of consumer willingness to pay, as consumers often perceive higher-quality products as more valuable. Research has consistently shown that consumers are willing to pay a premium for products that meet their expectations in terms of quality, durability, and performance (Kotler & Keller, 2021). In particular, branded products that are associated with consistent quality and reliability are able to command higher prices in the market. The perception of a brand also plays a significant role in influencing WTP. Consumers often equate established brands with trust and reliability, which justifies their willingness to pay higher prices for branded goods (Schiffman & Kanuk, 2020).

In the Kenyan fish market, branded fish products that offer consistent quality, traceability, and certification are more likely to attract higher WTP from consumers. As consumers become more aware of food safety standards and sustainability issues, the reputation of a brand becomes increasingly important in shaping their purchasing decisions (Munguti et al., 2020). Consumers are often willing to pay more for fish that is guaranteed to be fresh, safely handled, and sustainably sourced, as these attributes are associated with greater trust and safety.

Psychological and emotional factors, including consumer perceptions, brand loyalty, and emotional attachment to a product, also influence WTP. Consumers may be willing to pay more for products that evoke positive emotions, such as feelings of trust, nostalgia, or pride (Richter & Klöckner, 2017). Brand loyalty, in particular, is a key psychological factor that can drive consumers to consistently choose a particular brand, even if it comes at a premium price (Zeithaml, 2021). In the context of the fish industry, for instance, consumers who have had positive experiences with a specific branded fish product may be more inclined to pay higher prices for it, due to their emotional connection with the brand.

1.1.3 Fish Producing Companies in Nairobi County

The fish industry in Nairobi County plays a crucial role in the food supply chain, providing a steady source of protein to the city's growing population. Although Nairobi is not located near a natural water body, it serves as a major hub for fish distribution, processing, and retail due to its strategic position as Kenya’s economic and commercial capital. Fish supply to Nairobi mainly comes from Lake Victoria, Lake Naivasha, Lake Turkana, the Indian Ocean, and aquaculture farms located in various parts of the country (FAO, 2021). The industry has witnessed steady growth, driven by rising consumer awareness of the health benefits of fish, increased urbanization, and changing dietary preferences (Njiru et al., 2019).

The fish industry in Nairobi encompasses various activities across the supply chain. Fish farming, also known as aquaculture, is practiced on a small scale within the county using artificial ponds or Recirculating Aquaculture Systems (RAS) (Munguti et al., 2014). Due to high demand, Nairobi also imports significant volumes of fish from China and neighboring countries such as Uganda and Tanzania (KNBS, 2022). Fish processing and packaging companies fillet, smoke, freeze, and package fish products for distribution to supermarkets, hotels, and export markets. Wholesale and distribution activities involve receiving fish from producers and supplying it to retailers, institutions, and supermarkets. Informal market sales play a significant role, with roadside vendors, open-air markets, and eateries actively involved in the fish trade. Additionally, some companies add value by producing fish-based products such as fish sausages, fish fingers, and fish oil supplements (Mwangi, 2018).

The industry consists of various categories of players. Large-scale fish processors and distributors such as Victory Farms, WIFAG, and East African Sea Food Limited dominate the formal fish supply chain (Victory Farms, 2022). Small and medium-sized enterprises (SMEs) include fish traders, fishmongers, and small processing units that cater to local markets. Supermarkets such as Naivas, Carrefour, and Quickmart stock fresh and frozen fish, offering convenient purchasing options for consumers. Additionally, informal vendors and market sellers, particularly in Gikomba Market, play a vital role in fish distribution. Restaurants and hotels create demand for high-quality fish products, further driving the growth of the industry (Muthui, 2020).

The fish industry in Nairobi is regulated by multiple government bodies and policies to ensure quality, safety, and sustainable practices. The State Department for Fisheries, Aquaculture, and the Blue Economy oversees the overall development and regulation of the fisheries sector in Kenya (GoK, 2021). The Kenya Fisheries Service (KeFS) implements fisheries management policies, licensing, and enforcement of regulations. The Kenya Bureau of Standards (KEBS) ensures that fish products meet national and international safety and quality standards. The National Environment Management Authority (NEMA) regulates environmental impacts related to fish farming and processing. The Kenya Revenue Authority (KRA) oversees taxation and import duties on fish imports, while the Nairobi County Government regulates fish markets, licenses vendors, and ensures food safety compliance (KNBS, 2022).

The fish industry in Nairobi is extensive, with thousands of individuals and businesses participating. Industry estimates indicate that approximately ten major large-scale fish processors and distributors dominate the market. More than 1,000 licensed businesses operate in the sector, including fish traders and small-scale processors. Over 3,000 vendors sell fish in open markets such as Gikomba, City Market, and Burma Market. Additionally, hundreds of supermarkets and hotels serve as key buyers of fish products (FAO, 2021). Overall, the fish industry in Nairobi County is dynamic and growing, with a diverse range of players contributing to the supply, processing, and retail of fish products. Understanding this ecosystem provides valuable insights into consumer behavior, pricing, and market potential for branded fish products.

1.2 Problem Statement

Branded fish products are increasingly recognized for their role in enhancing food safety, quality assurance, traceability, and consumer trust, particularly in urban markets where health-conscious consumption is rising (FAO, 2021). Globally, the demand for value-added food products, including branded fish, has surged due to growing concerns about foodborne illnesses, unsustainable fishing practices, and consumer preferences for convenient, high-quality foods (Hwang & Kandampully, 2012). Branding not only enables differentiation in competitive markets but also signals superior product attributes such as freshness, hygiene, and ethical sourcing. However, despite global momentum toward branded food products, fish branding remains underdeveloped in many low- and middle-income countries, particularly in Africa.

At the continental level, African fisheries primarily operate through informal or small-scale systems where branding and product standardization are minimal. Studies show that most fish is sold unbranded in traditional markets, limiting consumer confidence and reducing the perceived value of fish products (Asiedu et al., 2023; University of Cape Coast et al., 2022). This situation hinders the development of robust value chains and discourages consumer willingness to pay (WTP) for premium-quality, sustainably sourced products. In the East African context, including Kenya, while branded fish has the potential to improve traceability and market competitiveness, its uptake remains low. This is due to various challenges such as inadequate cold chain infrastructure, weak policy frameworks on fish branding, and limited consumer education on product differentiation (Njiru et al., 2019; Aura et al., 2020).

In Nairobi County, the problem is particularly pronounced. Despite being a major consumption hub, the market for branded fish remains relatively underdeveloped. Consumers frequently encounter fish products that lack clear labeling, traceability, and quality guarantees issues that compromise trust and reduce WTP (Kenya Marine and Fisheries Research Institute, 2021). At the same time, branded fish products face stiff competition from cheaper, non-branded imports and informally sold local fish, making it difficult for producers to justify premium pricing. Moreover, urban consumers in Nairobi are increasingly health-conscious and sensitive to product quality, yet there is little empirical evidence on how their purchasing behavior, accessibility to products, and socio-demographic attributes influence their willingness to pay for branded fish (Yu, 2024; Munguti et al., 2020).

Several existing studies have focused on challenges within fish production systems, co-management of fisheries, and post-harvest value addition (Obiero, 2015; Munguti et al., 2020; Aura, 2020). However, these studies largely overlook the consumer perspective, especially in urban retail environments. This represents a conceptual gap, as the current body of literature lacks integrated models that explore WTP as a function of consumer behavior, product accessibility, and demographic characteristics in the context of fish branding. Additionally, while some studies explore online and offline marketing channels (Zhao et al., 2022), their applicability and effectiveness in promoting branded fish in Kenya have not been sufficiently investigated highlighting a methodological gap.

Moreover, much of the existing literature is centered on rural production zones, lake fisheries, and inland aquaculture systems, with limited attention to urban consumer markets like Nairobi. This constitutes a clear contextual gap, as insights derived from production-side studies may not reflect the purchasing behaviors, preferences, and constraints of urban consumers. Therefore, the lack of localized, demand-side data constrains policy and business decisions aimed at enhancing the uptake of branded fish in urban centers. To address these gaps, this study investigated the factors influencing consumer willingness to pay for branded fish in Nairobi County, with specific focus on consumer purchase behavior, product accessibility, and demographic characteristics. By examining these relationships within an urban Kenyan context, the study aimed to generate insights that would inform marketing strategies, policy formulation, and branding innovations in the fish value chain.

1.3 Research Objectives

1.3.1 General Objective

The general objective of this study was to determine the factors influencing consumer willingness to pay for branded fish in Nairobi.

1.3.2 Specific Objectives

To achieve this objective, the following specific objectives were studied.

i. To determine the influence of consumer purchase behavior on their willingness to pay for branded fish in Nairobi.
ii. To establish the influence of product accessibility on consumer willingness to pay for branded fish in Nairobi.

iii. To assess the influence of demographic characteristics on consumer willingness to pay for branded fish in Nairobi.

1.4 Research Questions

The following research questions were answered by the study.

i. What is the influence of consumer purchase behavior on willingness to pay for branded fish in Nairobi.
ii. What is the influence of product accessibility on consumer willingness to pay for branded fish in Nairobi.
iii. What is the influence of demographic characteristics on consumer willingness to pay for branded fish in Nairobi.

1.5 Significance of the Study

This study focused on the factors influencing consumer willingness to pay (WTP) for branded fish products in Nairobi County offered meaningful contributions to policy formulation, industry practices, and academic research. By examining how consumer purchase behavior, demographic characteristics, and product accessibility influenced WTP, the research provided a comprehensive understanding of the demand-side dynamics within the urban fish market. The findings presented practical recommendations for improving branding strategies, increasing consumer trust, and enhancing market performance. The study's significance is therefore discussed across three dimensions: policy, industry, and scholarly contributions.

From a policy perspective, the findings provided evidence-based insights to guide the development of regulatory frameworks aimed at strengthening quality assurance, consumer protection, and fair market practices within Kenya's fish sector. The study highlighted the importance of branding in promoting food safety, traceability, and equitable access to nutritious food, thereby supporting national goals on food security and sustainable consumption. Policymakers could use these insights to promote policies that incentivize branding among small-scale producers, support public education on fish safety, and enhanced infrastructure for cold chain distribution in urban markets. Furthermore, the study underscored the need for inclusive policies that accounted for demographic variations in consumer preferences, particularly in terms of age, income, and education factors that significantly influenced WTP in Nairobi.

For industry stakeholders, including fish producers, processors, retailers, and marketers, the study offered actionable insights into how consumer behavior could be leveraged to enhance product positioning and competitiveness. The research demonstrated that consumers were willing to pay a premium for branded fish when products aligned with their expectations of convenience, freshness, and health benefits. Firms could use these insights to improve branding strategies, refine pricing models, and expand into formal distribution channels such as supermarkets and online platforms. Additionally, the findings provided direction for targeted marketing efforts based on demographic profiling and consumer preferences. Businesses were encouraged to invest in awareness campaigns and loyalty programs to improve brand recognition and differentiate their products in a saturated marketplace.

From a scholarly perspective, this study filled notable gaps in literature by focusing on the underexplored topic of branded fish consumption in urban Africa. While previous research focused on supply-side issues such as production constraints and post-harvest losses, this study shifted the lens to urban consumers and their purchasing decisions. It enriched existing knowledge on consumer behavior and WTP in emerging markets, providing empirical evidence that could inform future studies on branding, food systems, and agribusiness marketing. Moreover, the application of the Theory of Reasoned Action and Utility Theory provided a robust theoretical framework that could be used in subsequent studies examining the intersection of economic rationality and psychological motivations in consumer choices. The findings also opened new avenues for research into digital marketing, traceability systems, and product labelling in the fisheries value chain.

1.6 Scope of the Study

This study focused on the factors influencing consumer willingness to pay for branded fish products in Nairobi County. The conceptual scope covered three independent variables: consumer purchase behavior, product accessibility, and demographic characteristics which were examined in relation to willingness to pay as the dependent variable. The contextual scope was limited to five sub counties Nairobi namely: Embakasi Central, Langata, Westlands, Kasarani and Ruaraka, which served as an ideal urban setting due to their role as a major consumption and distribution hubs for fish products in Kenya. The methodological scope employed quantitative research design, using structured questionnaires administered to a cross-

section of fish consumers across Nairobi's sub-counties. This facilitated a statistical analysis of the relationships among the study variables using descriptive statistics, correlation, and regression analysis. The time scope of the study was cross-sectional, with data collection and analysis conducted within a defined period in 2025, capturing contemporary trends in consumer preferences and fish purchasing behavior in the post-pandemic urban market.

1.7 Chapter Summary

This chapter introduced the study by exploring the global, regional, and local contexts of fish consumption and branding, particularly as they relate to urban consumers in Nairobi. It provided a detailed background outlining the relevance of branded fish in enhancing quality assurance, consumer trust, and sustainable food systems. The chapter also clearly articulated the problem statement by identifying existing gaps in literature, policy, and practice, leading to the formulation of the study's specific objectives and research questions. It further outlined the significance of the study across three key beneficiary groups policymakers, industry stakeholders, and scholars and defined the scope in terms of concept, context, methodology, and time. Collectively, these elements laid the foundation for a structured investigation into consumer willingness to pay for branded fish products in Nairobi County.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provided a comprehensive review of relevant literature, including the theoretical foundation and empirical studies related to the topic. It explored the theories underpinning the study and examined previous research conducted in this area. Additionally, the chapter presented a conceptual framework and outlined the operationalization of the study's variables.

2.2 Theoretical Review

This study was guided by two primary theories: Utility Theory and the Theory of Reasoned Action (TRA). These theories were selected because they provided a balanced lens to understand both the economic rationale and the social-psychological motivations behind consumers' willingness to pay (WTP) for branded fish in Nairobi County. Utility Theory explains how individuals make choices to maximize satisfaction based on product value and price, while TRA addresses how attitudes and social pressures influence consumer intentions and actions. Together, they offered a comprehensive framework for examining the economic and behavioral dimensions of consumer purchasing decisions in this context.

2.2.1 Utility Theory

Utility Theory was first proposed by Jeremy Bentham and later expanded by John Stuart Mill, positing that individuals make choices to maximize their satisfaction, or "utility," from consuming goods and services (Bentham, 1789; Mill, 1848). The theory assumed that consumers are rational decision-makers who rank preferences and select the option that yields the highest utility within given constraints, such as income or product availability (Varian, 2010). This foundational assumption guided many economic models related to demand, price sensitivity, and consumer surplus. In this study, Utility Theory supported the idea that Nairobi consumers would be more willing to pay for branded fish if they perceived it as offering more benefits such as higher nutritional value, better taste, or food safety assurance compared to non-branded alternatives.

The theory further argued that WTP increases with perceived utility, which includes tangible and intangible benefits (Lancaster, 1990). In the case of branded fish, utility may be derived

from trust in quality, traceability, and hygienic handling factors that urban consumers are increasingly prioritizing due to heightened awareness of food safety and health risks. Consumers with higher education levels and disposable income were expected to be more responsive to these perceived benefits and, therefore, more willing to pay a premium. This theoretical lens helped explain the study's empirical focus on how demographic characteristics and purchase behavior influenced WTP in Nairobi's competitive fish market, where branding serves as a proxy for product differentiation and assurance.

Despite its strengths, Utility Theory has been criticized for assuming that consumers are always rational and capable of making consistent, utility-maximizing decisions (Kahneman & Tversky, 1979). Real-world purchasing behavior is often affected by emotions, social cues, habits, and limited information, which the theory does not adequately capture (Thaler, 1980). However, in this study, Utility Theory remained relevant because it provided a useful framework for understanding how consumers assess the cost-benefit trade-off of paying more for branded fish. Its application was especially meaningful in explaining the purchasing rationale of urban consumers who are exposed to multiple choices and consider price, quality, and convenience when deciding whether to buy branded products.

2.2.2 Theory of Reasoned Action (TRA)

The Theory of Reasoned Action (TRA), developed by Martin Fishbein and Icek Ajzen, provided a psychological framework for understanding how attitudes and perceived social expectations drive behavioral intentions (Fishbein & Ajzen, 1980). According to TRA, an individual's intention to engage in a particular behavior such as purchasing branded fish is the most immediate predictor of that behavior. These intentions are influenced by two main factors: the individual's attitude toward the behavior and the subjective norms surrounding it (Ajzen, 1991). In this study, TRA was applied to explain how consumers' personal evaluations of branded fish alongside perceived expectations from peers, family, or cultural groups shaped their willingness to pay a higher price for it.

The relevance of TRA to this study was evident in its ability to capture the behavioral influences that go beyond economic rationality. Consumers may form favorable attitudes toward branded fish due to perceived health benefits, environmental sustainability, or social prestige associated with buying higher-quality products (Ajzen & Fishbein, 2005). Subjective

norms, such as family preferences or peer influence, may also play a role especially in Nairobi's social context, where food choices can reflect lifestyle, social class, and awareness of health trends. The theory thus helped clarify how both personal beliefs and social pressures influenced consumer decisions, aligning with the study's interest in purchase behavior and demographic characteristics as key predictors of WTP.

Despite its strengths, TRA has been criticized for its limited scope, particularly its omission of perceived behavioral control (PBC), the extent to which individuals feel capable of performing a behavior (Ajzen, 1991). This limitation was addressed in the extended Theory of Planned Behavior, which includes PBC as a third predictor of intention. Even so, TRA remained appropriate for this study because the focus was primarily on attitudinal and normative influences, rather than barriers to action. For example, if a consumer had a positive view of branded fish and felt social pressure to buy it, TRA would predict high WTP regardless of income or access constraints. This theory remained valuable in explaining how consumer attitudes and social influences interacted with perceived product benefits to shape purchasing decisions in Nairobi's fish markets.

2.3 Empirical Review

The empirical review involved an examination of available and relevant literature on branding strategies and their effectiveness in promoting agribusiness products. This review specifically focused on identifying approaches that enhanced product visibility, consumer trust, and willingness to pay. The sections were organized systematically, aligned with the research objectives to provide a structured analysis of branding's impact on consumer behavior and market positioning within the fish industry.

2.3.1 Consumer Purchase Behavior on Willingness to Pay for Branded Fish

Consumer purchase behavior, including consumption frequency, brand familiarity, and value perceptions, has been found to significantly influence willingness to pay (WTP) for branded food products, including fish. A study by Rahman and Islam (2020) in urban Bangladesh employed a multiple regression model using cross-sectional survey data from 300 households and revealed that consumers who purchased fish more frequently were more likely to pay a premium for branded fish, particularly when they associated branding with hygiene, freshness, and traceability. Similarly, Ofori and Baah (2023), in a study involving 410 fish consumers in

Ghana, utilized Structural Equation Modeling (SEM) to demonstrate that consumer familiarity with fish brands and their past positive purchase experiences significantly influenced their WTP. Both studies indicated that behavioral drivers such as knowledge and brand recognition mattered more than income alone. However, these findings contrast with earlier results by Aydin and Bashimov (2020), who found that in Turkey, income had a more dominant effect on purchase behavior than consumer familiarity or branding—suggesting a stronger role of economic rather than behavioral factors in WTP decisions.

Further, purchase behavior linked to product type and consumer preferences has also emerged as a determinant of price sensitivity in branded food choices. Using a linear regression approach, Andoh and Owusu (2022) examined 356 urban consumers in Accra and found that individuals who preferred processed or value-added fish forms (e.g., filleted, smoked, or frozen fish) were significantly more likely to pay extra for branded products. This supported earlier evidence from Aydin and Bashimov (2020), who found higher-income and urban populations favored convenience and were thus more willing to pay for branded, pre-packaged fish. However, in contrast, a study by Ochieng and Mutua (2021) conducted in low-income areas of Nairobi found that purchasing behavior leaned heavily toward unbranded, fresh fish sold in open-air markets due to affordability and cultural familiarity. These differences underscore how local market conditions and consumer expectations regarding product format influence behavioral patterns and WTP differently across socio-economic contexts.

Psychological factors, such as trust, perceived health benefits, and previous satisfaction, also appeared to mediate the relationship between consumer purchase behavior and WTP. For instance, in a recent study in Vietnam by Nguyen et al. (2023), researchers applied an ordinary least squares (OLS) regression model to data from 520 respondents and found that consumers' trust in brands and belief in health-related benefits of fish were significant predictors of WTP for branded seafood. This aligned with the findings of Ofori and Baah (2023), who emphasized that consumer confidence in the safety and sustainability of fish products was critical in shaping behavioral intention and willingness to pay more. However, unlike the Ghanaian study, which found a strong positive relationship between brand perception and price willingness, Nguyen et al. (2023) reported moderate influence, attributing it to the country's less-developed branding ecosystem for fish products. This suggests that cultural and institutional contexts can modulate how behavioral constructs translate into actual financial decisions by consumers.

In terms of behavioral economics, a study by Zhao and Lin (2022) in China revealed that emotional and impulsive behaviors also shaped WTP for branded food. Their study utilized experimental methods and regression analysis and found that consumer willingness to pay was not always rational or stable but could fluctuate based on sensory appeal, branding cues, and packaging design. These findings contrast with more traditional economic theories used in Rahman and Islam (2020) and Ochieng and Mutua (2021), which assumed consumers acted rationally and consistently. Zhao and Lin's (2022) results suggest that while consistent purchase patterns are valuable indicators, branding strategies that engage consumer emotions can enhance WTP, especially in competitive markets. This also ties into the broader understanding of how branding as a behavioral trigger can go beyond function and incorporate lifestyle, emotion, and even status.

In synthesis, consumer purchase behavior was found to be a multidimensional predictor of WTP across diverse contexts. Studies consistently indicated that frequency of purchase, brand familiarity, and behavioral confidence in product quality increased the likelihood of paying more for branded fish (Rahman & Islam, 2020; Ofori & Baah, 2023; Nguyen et al., 2023). However, contrasting evidence from Aydin and Bashimov (2020) and Ochieng and Mutua (2021) highlighted that this relationship was contingent on economic background and accessibility. While wealthier and more informed consumers displayed behavior consistent with higher WTP, low-income populations remained constrained by affordability regardless of brand appeal. Overall, behavioral variables such as health consciousness, brand trust, and product convenience strongly influenced WTP, but only within enabling economic and cultural environments. These insights reinforce the need for tailored branding strategies that consider both rational and emotional drivers of purchase behavior.

2.3.2 Product Accessibility on Willingness to Pay for Branded Fish

Although Product accessibility both in terms of physical availability and digital reach has emerged as a pivotal determinant in shaping consumer willingness to pay (WTP) for branded food products. A study by Zhao et al. (2022) employed a mixed-methods design in China to investigate how omnichannel retail (offline and online) influenced consumer value perception and payment behavior. They found that offline accessibility provided tangible product interaction, personalized assistance, and convenience, which enhanced consumer trust and increased WTP. Conversely, online platforms offered convenience, information richness, and

social validation (e.g., customer reviews), which also led to a rise in WTP. The study emphasized that an integrated model combining both digital and physical retail channels yielded the highest perceived consumer value. However, while the findings were robust for urban China, the study acknowledged contextual limitations in applying the results to developing economies like Kenya, where digital infrastructure may not be as widespread.

A related study by Nguyen et al. (2024) conducted in urban Indonesia focused on informal retail structures particularly traditional market sellers and their influence on consumer loyalty and payment behavior. Using a cross-sectional survey with 420 respondents, the authors demonstrated that interpersonal trust and seller familiarity were critical for building customer loyalty and increasing WTP. Consumers preferred buying from vendors they knew personally, even when unbranded alternatives existed. This contrasted with Zhao et al. (2022), who highlighted structured retail environments and branding as primary WTP drivers. Nguyen et al.'s findings pointed to the importance of cultural norms and relational trust in consumer decisions, especially in urban contexts where formal and informal sectors coexist. Their research suggested that branding in such environments must be accompanied by community-level engagement to foster trust and retention.

Digital credibility also played a growing role in enhancing perceived value, especially in markets transitioning toward e-commerce. Chen et al. (2022) used machine learning-based sentiment analysis and regression techniques on 10,000 consumer reviews from online platforms to evaluate the impact of digital feedback on WTP. Positive sentiments around product freshness, delivery reliability, and brand transparency led to higher WTP, showing that consumers treated online reviews as proxies for trust. While Chen et al.'s findings aligned with Zhao et al. (2022) regarding the effectiveness of online credibility, the study lacked an examination of how offline experiences might moderate these effects. Moreover, the reliance on digital data from highly connected urban areas made the findings less applicable to lower-income or digitally underserved populations, such as those commonly found in parts of Nairobi.

A local study by Kamau and Karimi (2023) employed a mixed-methods approach combining GIS mapping and consumer surveys to analyze accessibility factors affecting branded fish consumption in Nairobi. Their study found that proximity to retail points particularly within a 2-kilometer radius significantly influenced WTP, increasing it by as much as 45%. Unlike digital channels, which were only relevant to a minority of tech-savvy consumers, traditional

access via roadside vendors and market stalls was the dominant mode of purchase. Kamau and Karimi's findings contrasted with those of Chen et al. (2022) and Zhao et al. (2022), emphasizing that in Kenya's urban fish markets, physical accessibility and trust in vendor consistency remained the strongest predictors of WTP for branded fish. This points to the enduring relevance of traditional market structures in shaping consumer behavior, even amidst digital transformation.

Synthesizing across these studies, it became evident that product accessibility influences WTP through different mechanisms depending on the retail context. In developed digital environments like China, omnichannel strategies that merged online, and offline access were most effective (Zhao et al., 2022). In contrast, in emerging markets like Kenya and Indonesia, interpersonal trust, market proximity, and offline vendor relationships carried more weight in shaping purchasing decisions (Nguyen et al., 2024; Kamau & Karimi, 2023). Digital feedback and branding remain critical for high-income and digitally literate consumers (Chen et al., 2022), but traditional models still dominate broader market segments. Therefore, interventions aiming to increase WTP for branded fish in Nairobi should incorporate both modern retail strategies and community-based vendor engagement to bridge the accessibility gap.

2.3.3 Demographic Characteristics on Willingness to Pay for Branded Fish

Demographic characteristics such as age, income, gender, and education have consistently emerged as influential factors in shaping consumers' willingness to pay (WTP) for branded fish. Tadesse and Kassahun (2022), in their study conducted in urban Ethiopia using a multivariate regression model on 600 consumers, found that education level had the most significant impact on WTP. Educated consumers were more aware of food safety, environmental concerns, and nutritional benefits, and thus were more likely to choose branded fish products over unbranded ones. Household income and employment status also positively influenced WTP, as financial stability increased the likelihood of seeking higher-quality food options. However, the study focused primarily on urban dwellers, limiting its application to more diverse rural populations where brand awareness may differ. These findings aligned with global literature that links socio-economic empowerment with informed and quality-conscious consumption behavior (Can et al., 2020).

Similarly, a Nigerian study by Adeyemo and Oladipo (2021) applied a probit regression model to assess the effects of age and gender on branded fish consumption. The results showed that

middle-aged consumers (35–50 years) were most willing to pay a premium for branded fish, citing increased disposable income and heightened concern for family health and well-being. Gender differences were also observed, with male consumers associating branded fish with prestige and reliability, while female consumers emphasized affordability and meal-planning flexibility. Although the study provided useful demographic insights, it did not account for cultural or regional differences within Nigeria, which may limit the generalizability of the findings to contexts like Kenya. Compared to Tadesse and Kassahun (2022), who emphasized education, Adeyemo and Oladipo (2021) highlighted the intersection between life stage and social identity in shaping WTP behavior.

A more contextually relevant study by Mwangi and Mutua (2023) in Nairobi examined the role of socio-demographic factors in influencing WTP for branded fish among 500 urban households. Utilizing logistic regression, the authors found that higher levels of income and formal education were both strongly correlated with increased WTP. In addition, they identified household size as a significant moderator where larger households tended to prioritize volume over branding, reducing their WTP due to cost concerns. These findings reinforced those of Tadesse and Kassahun (2022) and Adeyemo and Oladipo (2021) but added a nuanced understanding of how household dynamics interact with economic status to shape consumer decision-making. Furthermore, the Nairobi study emphasized the influence of urbanization and exposure to formal retail structures in fostering brand awareness and perceived value.

However, contrasting evidence emerged in a study by Obiero and Kimani (2020), who focused on fish consumers in rural western Kenya. Despite relatively high levels of education among respondents, WTP for branded fish remained low unless the product included quality assurance indicators such as traceability labels or food safety certifications. Their findings suggested that demographic characteristics alone may not be sufficient to drive WTP in the absence of institutional trust and transparent value signaling. Unlike the urban-focused findings of Mwangi and Mutua (2023), the rural consumers in Obiero and Kimani's study were skeptical of branding without clear verification, highlighting the importance of complementary trust mechanisms in converting awareness into payment behavior.

Synthesizing across these studies, it became clear that while demographic factors such as age, income, and education positively influenced WTP for branded fish, their effect was

significantly moderated by contextual variables such as household size, regional location, and product credibility. In urban settings like Nairobi, higher income and educational attainment increased WTP, particularly when consumers were exposed to formal retail channels and brand marketing (Mwangi & Mutua, 2023; Tadesse & Kassahun, 2022). However, in rural areas, even educated consumers required additional quality assurance cues before translating awareness into purchasing action (Obiero & Kimani, 2020). This contrast underscores that demographic variables are necessary but not always sufficient drivers of WTP consumer trust, institutional signals, and socio-cultural norms must also be considered to fully understand branded fish purchasing behavior across diverse consumer segments.

2.4 Summary of Knowledge Gaps

The empirical review presented related studies, whose closer examination pointed at the presence of knowledge gaps encompassing methodological, conceptual and contextual gaps as summarized in Table 2.1.

Table 2. 1 Summary of Research Gaps

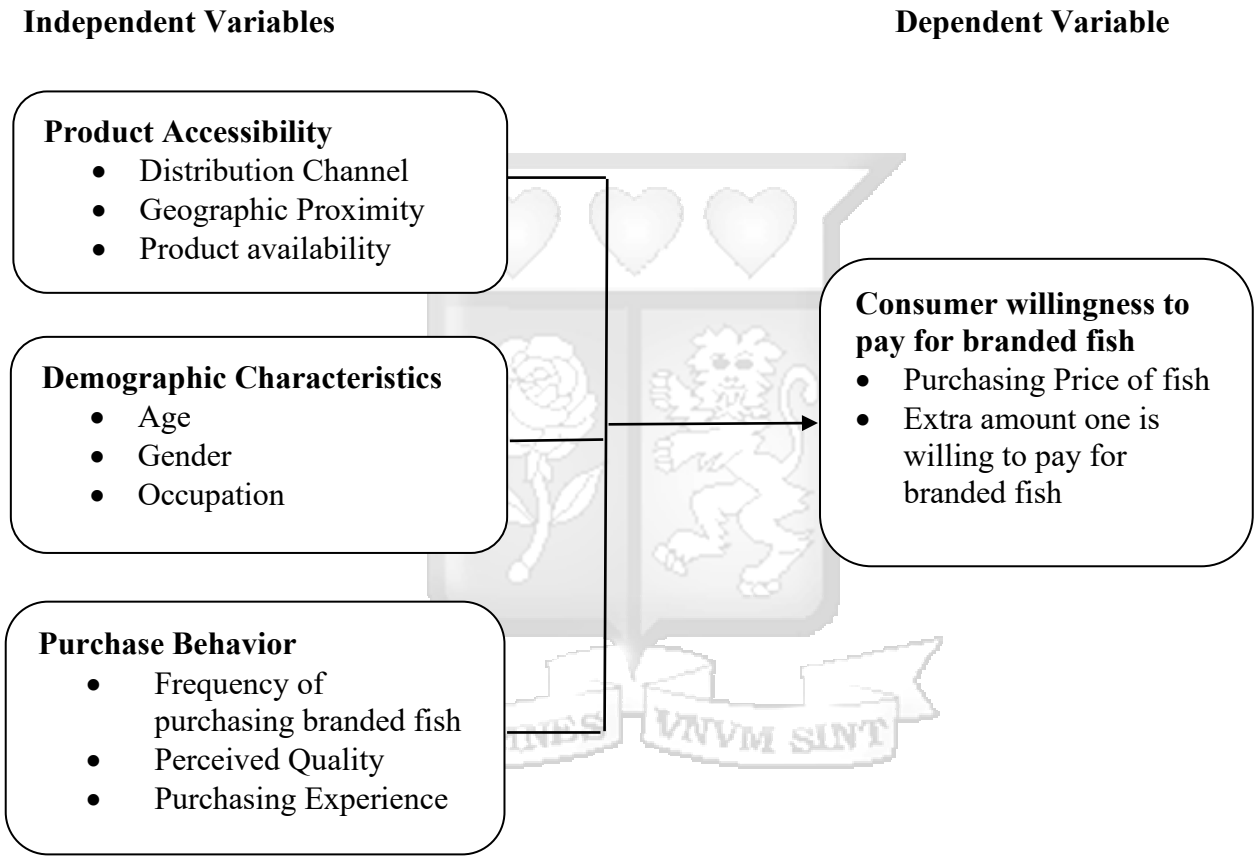
Author	Title	Findings	Research Gap
Rahman & Islam (2020)	Consumer Preferences for Fish in Urban Bangladesh	Health awareness, freshness, and source of fish significantly influenced WTP; branding was associated with trust in product quality and safety.	The study did not consider consumer behavior in African urban markets and relied on self-reported data which may not accurately reflect actual purchasing behavior.
Aydin & Bashimov (2020)	Income Effects on Fish Consumption in Turkey	Higher household income was positively associated with increased fish consumption and preference for branded products.	The study focused narrowly on income levels and did not incorporate psychological, cultural, or branding-related variables that influence willingness to pay.
Ofori & Baah (2023)	Consumer Awareness, Brand Trust, and Willingness to Pay in Ghana	Brand trust, product experience, and labeling significantly shaped consumer WTP for fish products.	The study focused on general food branding and did not specifically address fish branding or the impact of price levels on willingness to pay.
Ochieng & Mutua (2021)	Urban Fish Purchase Behavior in Nairobi	Consumers valued quality and freshness but made decisions based on price and availability.	The study highlighted stated preferences but did not link them to actual WTP using continuous pricing measures or test brand influence on purchasing decisions.

Chen et al. (2022)	Influence of Online Reviews on Willingness to Pay	Positive online reviews increased WTP by enhancing perceptions of freshness and reliability.	The study did not explore how these online interactions influence WTP in traditional or hybrid markets like those in Nairobi where digital access may be limited.
Nguyen et al. (2024)	Traditional Sellers and Consumer Trust in Indonesian Fish Markets	Informal sellers gained repeat customers through trust and personal interaction, positively affecting WTP.	The study did not assess how branding and product certification intersect with trust-based informal selling environments.
Kamau & Karimi (2023)	Fish Vendor Proximity and Purchasing Patterns in Nairobi	Closer proximity to fish markets increased the likelihood of paying for branded fish.	The study did not explore how digital accessibility and omnichannel strategies interact with physical access to influence consumer WTP.
Zhao et al. (2022)	The Role of Omnichannel Access in Food Purchasing	Digital and physical access increased perceived value and brand loyalty, enhancing WTP.	The study focused on China and did not analyze how these omnichannel dynamics operate in low-digital-access contexts like informal fish markets in Nairobi.
Tadesse & Kassahun (2022)	Socio-demographics and Branded Fish WTP in Ethiopia	Education and income were strongly associated with a greater WTP for branded fish.	The study did not account for the role of brand trust, certification, and consumer purchasing experience in influencing willingness to pay.
Adeyemo & Oladipo (2021)	Gender, Age, and Branded Fish Purchases in Nigeria	Middle-aged men were more likely to buy branded fish due to health and status considerations.	The study did not explore how social norms and branding perceptions influence WTP across diverse household structures and education levels.
Mwangi & Mutua (2023)	Demographics and Fish Buying Decisions in Nairobi	Higher income and education increased WTP, while larger households showed decreased interest in branded fish due to budget limitations.	The study used a binary measure of WTP and did not evaluate how consumers responded to actual price differentials or product branding details.
Obiero & Kimani (2020)	The Role of Certification in Consumer Fish Preferences in Rural Kenya	Consumers were reluctant to pay more for branded fish unless accompanied by traceability or certification labels.	The study focused on rural populations and did not explore how demographic and psychological drivers affect branded fish consumption in urban areas.

SOURCE: Researcher (2024)

2.5 Conceptual Framework

The conceptual framework visually represented the relationships between key study variables, illustrating how they interacted within the research context. In this study, the conceptual framework outlined the connection between consumer willingness to pay for branded fish and three primary determinants: purchase behavior, product accessibility, and demographic characteristics. The framework highlighted how these factors influenced premium payment decisions in Nairobi's fish market. This is represented in Figure 2.1 below.



Source: Searcher 2025

Figure 2.1 Conceptual Framework

2.6 Operationalization of Variables

Table 2. 2 Operationalization of Variables

Objective	Variable	Measurement	Data collection instrument	Data Analysis
• To determine the influence of consumer purchase behavior on their willingness to pay for branded fish in Nairobi	• Frequency of purchasing branded fish • Perceived Quality • Purchasing Experience	Likert Scale and Multiple Choice	Structured questionnaire	Descriptive correlation analysis & Regression Analysis
• To establish the influence of product accessibility on consumer willingness to pay for branded fish in Nairobi	• Distribution Channel • Geographic Proximity • Product availability	Likert Scale	Structured questionnaire	Descriptive correlation analysis & Regression Analysis
• To assess the influence of the demographic characteristics on consumer willingness to pay for branded fish in Nairobi	• Age • Gender • Occupation	Multiple Choice	Structured questionnaire	Descriptive correlation analysis & Regression Analysis
• Consumer willingness to pay for branded fish	• Purchasing Price of fish • Extra amount one is willing to pay for branded fish	Continuous	Structured questionnaire	Descriptive correlation analysis & Regression Analysis

Table 2.2 Operationalization of Variable 1

2.7 Chapter Summary

This chapter reviewed the theoretical foundations and empirical literature relevant to the study's focus on factors influencing consumer willingness to pay for branded fish in Nairobi.

The theoretical framework integrated Utility Theory and the Theory of Planned Behavior to analyze both economic and psychosocial dimensions of consumer decision-making. The empirical section examined studies on purchase behavior, product accessibility, and demographic characteristics, revealing key patterns in consumer preferences and market dynamics. The chapter concluded by identifying research gaps, particularly the need for more localized studies on Nairobi's urban fish market to understand how branding interacts with traditional purchasing habits and emerging retail channels. These insights informed the development of the study's conceptual framework and methodology.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlined the approaches employed for data collection and analysis in the research study. Specifically, it delved into the research design, the study population, the sampling design, and the determined sample size. Additionally, it discussed the data collection techniques and methods, along with the procedures for data analysis and considerations related to ethical issues.

3.2 Research Philosophy

This study adopted a positivist research philosophy, which was grounded in the assumption that reality is objective and could be measured systematically through empirical research (Saunders, Lewis, & Thornhill, 2019). The positivist approach aligned with the study's quantitative methodology, facilitating statistical analysis of structured data to establish relationships between product accessibility, demographic characteristics, purchasing behavior, and consumer willingness to pay for branded fish. This philosophy was widely used in consumer behavior studies as it allowed for hypothesis testing and generalization of findings (Bryman, 2021).

3.3 Research Design

Research design serves as a methodology that outlines how a researcher gathers and presents data (C.R. Kothari, 2004). In this study, a cross-sectional descriptive research design survey was employed. According to Creswell (2022) the descriptive survey design encompasses objective formulation, the development of data collection tools, design, data collection, data processing, analysis, and reporting of finding (John W. Creswell & Creswell. D, 2022). The descriptive survey will involve the administration of questionnaires to individuals. The descriptive survey involved the administration of questionnaires to individuals. This research study embraced a quantitative method approach to identify correlational relationships between variables, utilizing primary data source only.

3.4 Population and Sampling

The population, as defined by Hall (2020), is the subject of study and encompasses the entire

group of elements for which a researcher aims to draw inferences. In this study, the target population was primarily selected from residents of Nairobi County in Kenya (Hall, 2020). Nairobi County is the most populous county in the country. According to the 2019 Kenya Population and Housing Census, Nairobi had a total population of 4,397,073 individuals, with 2,192,452 males and 2,204,376 females, covering an area of 703.9 square kilometers (Kenya National Bureau of Statistics [KNBS], 2020). This results in a high population density of approximately 6,247 individuals per square kilometer, reflecting significant urbanization and commercial activity (KNBS, 2020).

3.3.1 Sample size and Sampling Technique

The determination of the sample size methodology drew inspiration from past studies, established formulas, and small population censuses. Following Creswell's 2022 perspective, effective research should be financially feasible, time-sensitive, and possess sufficient human resources. It is crucial to strike a balance in sample sizes, avoiding extremes that could impact the study's confidence levels (John W. Creswell & Creswell. D, 2022). To calculate the sample size for this study, the Cochran's Formula for unlimited population was employed (Ioan Gelu Ionas, 2024). According to Latwal (2020), the sampling design is the systematic process of selecting a sample from a population of interest, ensuring that the sample is representative. This approach is typically favored when examining every element within a population in impractical. Due to the cost, time, and effort involved in research data collection, employing a sampling design is considered a practical choice (Latwal, 2020)

The research employed probability sampling methods, primarily the stratified sampling and simple random sampling. In the data collection process, the population was stratified based on Nairobi Sub counties. Within these strata, simple random sampling was applied to randomly select respondents for the administration of questionnaires. The advantages of employing stratified sampling encompassed its quick application, simplicity, time and cost efficiency, ease of bias checks in successive sample selections, often smaller variances compared to other non-traditional sampling techniques, and suitability when the researcher possesses a list of elements in the population (Glynis, 2023).

$$n_0 = \frac{z^2 \cdot p \cdot (1-p)}{e^2}$$

Where:

n_0 = sample size for an infinite population

Z = Z-value (the number of standard deviations from the mean, corresponding to the desired confidence level, e.g., 1.96 for 95% confidence)

p = estimated proportion of the population that has the characteristic of interest (if unknown, use 0.5, which gives the maximum sample size)

e = margin of error (the desired level of precision, e.g., 0.05 for ±5% margin of error)

$$n = \frac{1.96^2 \times 0.5(1-0.5)}{0.05^2} = 384.16$$

(Calculator.Net, 2024)

Based on the calculated sample size of 384, the sample size was rounded up to 385 to ensure a whole number, as fractional respondents were not feasible.

Table 3. 1 Sample Distribution Across Selected Sub-Counties

Sub-County	**Population (2019 Census)**	**Proportional Sample Size**
Embakasi Central	288,771	65
Ruaraka	355,592	80
Lang'ata	197,489	45
Westlands	308,854	70
Kasarani	780,656	125
Total	**1,931,362**	**385**

3.5 Data Collection Methods

The primary research instrument that was employed in this study was the questionnaire (see appendix D). These questionnaires were designed with sections covering demographic characteristics purchasing behavior of the respondents, product accessibility of fish and consumer willingness to pay for branded fish. The formulation of the questionnaire constructs was primarily driven by the variables influencing willingness to pay for branded fish in Nairobi.

Data collection involved administering questionnaires to the respondents. The researcher secured an introductory letter from Strathmore University and obtained authorization from the National Commission for Science and Technology and Innovation to conduct the study. The researcher also provided an explanation of the study's objectives to guide respondents on how to complete the questionnaires. Three research assistants, trained in data collection procedures and ethical considerations, were enlisted. Data collection took place in malls and local markets, where fish consumers and sellers interacted. The target population included fish consumers and fish sellers in local markets, ensuring a diverse representation of urban buyers of fish. To ensure relevance, the inclusion criteria focused on individuals who regularly purchased or sold fish, while those with no direct involvement in fish consumption or trade were excluded. The respondents had an autonomy to choose whether to participate in the study, and this decision was entirely based on their own volition. The research assistants explicitly conveyed that participation was purely voluntary, and respondents had a choice to allocate time and complete the questionnaire at their discretion. The questionnaires were also distributed to the residents of the urban centers in Nairobi County

3.6 Research Quality

In this study, internal reliability and validity played a crucial role in shaping the design of the questions, the construction of the questionnaire, and the pilot testing process.

3.6.1 Internal and External Validity

Validity refers to the extent to which an instrument accurately measures what it purports to measure (Glynis, 2023). Internal validity pertained to the soundness of the study design and its ability to establish cause-and-effect relationships. External validity, on the other hand, assessed the degree to which the study results could be applied elsewhere and generalized to other

populations. The validity of instruments relied on the respondents' ability and willingness to provide the necessary information (Latwal, 2020). This research study employed content and construct validity. Content validity focused on the extent to which a measure adequately represented all aspects of a concept while construct validity was the concern to which a measure was related to other measures as specified by theory or other research (Sileyew, 2019). The director of the agribusiness program and the agribusiness faculty members at Strathmore University assisted in scrutinizing the validity of the format, relevance, reliability, and content to ensure that the research instrument collected appropriate data. This collaborative effort facilitated the necessary revisions and modifications to the research instruments, thereby ensuring validity.

3.6.2 Reliability

Reliability is the level at which the research instruments present consistency of results even after repeated trials (Bhattacherjee, 2018). The Cronbach's alpha was used as a measure of internal consistency in this study. The Cronbach's α result was a number between 0 and 1, and an acceptable reliability score was one that was 0.7 and higher. To enhance reliability, data triangulation and a pilot test were also used in this study.

3.6.3 Piloting

Waddell (2020) emphasizes the crucial importance of thorough inspection and preventive measures for questionnaire instruments before their issuance and use. This process ensures the validity and reliability of the questionnaire instrument, ensuring it serves its intended purpose as a valid and reliable data collection tool (Waddell, 2020). To validate the questionnaire instrument, Latwal (2020) recommend conducting a small-scale pilot study before widespread distribution and use. As suggested by Waddell (2020), it is advisable to conduct a pretest with a sample representing 10% of the total sample with homogeneous characteristics (Waddell, 2020) . Pretesting the research instruments provides the researcher with an opportunity to further refine the tool. During the pretest, the efficiency and flow of questions in the questionnaires was adjusted to elicit better responses. The pretest assessed the reliability and validity of the study tools, including the structure, sequence of questions, and wording. This process aimed at enhancing the consistency and accuracy of the collected data (Saunders et al., 2023).

The pilot test involved selecting 10% of the total sample from key stakeholders, including wholesale fish suppliers, fishmongers, and market vendors. These participants were chosen to reflect the diverse range of traders in the Nairobi fish markets. The pilot test was conducted on-

site, where respondents were asked to complete the questionnaire under the supervision of the research team. During this process, the clarity, structure, and flow of questions were assessed to ensure that they were easily understood and elicited accurate responses. Participants also provided feedback on any difficulties encountered, such as unclear wording or overly complex questions. Based on their input, necessary adjustments were made to improve the questionnaire's validity and reliability before the full-scale data collection began. This approach helped refine the instrument, ensuring it effectively captured the intended data while minimizing potential errors or biases.

3.7 Data Analysis

The analysis of data that was collected from the questionnaires involved simple descriptive statistics using SPSS software to address the three objectives in this study. Mean and standard deviations were employed as descriptive statistics, while content analysis was utilized for the interpretation of open-ended questions. Upon the completion of data collection, the questionnaires underwent error checks, and the data were input into the SPSS V.25 software for analysis. The choice of this software was based on its flexibility and advanced capabilities for analyzing diverse models. The data were cleaned and thereafter, responses were coded into categories and assigned numerical values for analysis. Quantitative techniques, facilitated by the SPSS software, were used to present the data through percentages, means, standard deviations, and frequencies. Descriptive and inferential statistics, including frequency tables and cross-tabulation, were executed during the analysis. The results were presented using charts and tables.

To explore the relationship between purchasing behavior, product accessibility, demographic characteristics, and willingness to pay for branded fish, the researcher employed a multiple regression model. Regression was selected for its accuracy and precision in testing the nature and strength of the influence of independent variables on a dependent variable. The analysis estimated the coefficients of the linear model that best predicted the value of the dependent variable. Additionally, correlation analysis was used to illustrate the direction and strength of the relationship between two variables.Since the independent variables in this research were three, the multiple regression model was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Whereby:

Y = Consumer willingness to pay for branded fish

β_0 = Constant

$\beta_1, \beta_2, \beta_3, \beta_4$ = Coefficients of determination

X_1 = Purchase Behavior

X_2 = Product Accessibility

X_3 = Demographic Characteristics

ε = Error term

3.8 Ethical Issues

This study upheld rigorous ethical standards throughout the research period. The researcher initiated the process by seeking and obtaining clearance and approval from the Strathmore University Ethics Review Office before commencing the research. Additionally, the researcher applied for and secured a research license from the National Commission for Science Technology and Innovation (NACOSTI). It was ensured that data obtained were solely used for academic purposes. The anonymity of respondents was safeguarded throughout the research, and their permission was obtained in advance by the researcher. Written consent was sought from respondents. The ethical considerations guiding the research encompassed voluntary participation, informed consent, confidentiality, guaranteed protection of information, and privacy. The researcher and research assistants elucidated the study's objectives, providing an opportunity for respondents who willingly consented to fill out the questionnaire.

3.9 Chapter Summary

The chapter outlined the research methodology. It adopted a positivist philosophy and a cross-sectional, descriptive survey design. The study targeted Nairobi County residents, using stratified random sampling to select 385 respondents, ensuring a representative sample. Data were collected through structured questionnaires, focusing on product accessibility, demographic characteristics, and purchasing behavior, with pilot testing conducted to refine the research instruments. Data analysis was performed using SPSS software, employing descriptive and inferential statistics, including a multiple regression model to assess relationships between variables. Ethical considerations, such as informed consent and confidentiality, were strictly observed throughout the research.

CHAPTER FOUR

PRESENTATION OF RESEARCH FINDINGS

4.1 Introduction

This chapter presents the analysis and interpretation of the data collected to examine the factors influencing consumer willingness to pay (WTP) for branded fish in Nairobi. The study employed a structured questionnaire to gather responses from 385 participants across five sub-counties in Nairobi. The data was analyzed using descriptive statistics, correlation analysis, and regression modeling to address the research objectives. The chapter is organized into three main sections: demographic characteristics, purchase behavior, and product accessibility, followed by an assessment of their influence on WTP.

4.2 Background Information

This section presented the response rate achieved during data collection and profiled the respondents to contextualize the study's findings.

4.2.1 Response Rate

The data collection process, conducted between 16th to 19th April 2025, yielded 256 valid responses out of the targeted sample size of 385, achieving a 66.5% response rate. While lower than the ideal range of 70-80% typically recommended for robust generalizability (Saunders et al., 2023), this response rate was considered acceptable for survey-based research in social sciences (Bhattacherjee, 2018). The sample maintained demographic diversity across Nairobi's sub-counties: Embakasi Central, Ruaraka, Langata, Westlands, and Kasarani ensuring representation of key consumer segments. The response volume exceeded the minimum requirement of 200 cases for regression analysis (Hair et al., 2019), making it adequate for statistical analysis.

4.2.2 Profile of the Respondents

The study captured diverse demographic characteristics to assess their influence on willingness to pay (WTP) for branded fish. A summary of the respondent profile was presented in Table 4.1 below.

Table 4. 1 Respondents profile

		Frequency	Percent
Gender	Male	109	42.58
	Female	147	57.42
	Total	**256**	**100.0**
Marital Status	Single	110	42.97
	Married	134	52.34
	Divorced/Separated	4	1.56
	Widow/Widower	8	3.13
	Total	**256**	**100.0**
Education Level	Primary	21	8.20
	Secondary	22	8.59
	Diploma	54	21.09
	Bachelor's Degree	155	60.55
	Postgraduate	4	1.56
	Total	**256**	**100.0**
Occupation	Formal Employment	78	30.47
	Informal Employment	91	35.55
	Self-Employed	87	33.98
	Total	**256**	**100.0**
Household head	Man	233	91.02
	Woman	23	8.98
	Total	**256**	**100.0**
Relationship with Household head	Self	12	4.69
	Spouse	128	50.00
	Father/Mother	12	4.69
	Child	98	38.28
	Sibling	6	2.34
	Total	**241**	**100.0**
Sub-County	Embakasi Central	55	21.48
	Kasarani	51	19.92
	Langata	83	32.42
	Ruaraka	51	19.92
	Westlands	16	6.25
		256	**100.0**

The analysis revealed that a larger proportion of respondents were female (57.42%) compared to male respondents (42.58%). This suggests that more women participated in the study, possibly due to their active involvement in food-related purchasing decisions within households. It may also reflect their growing engagement in household nutrition and consumer decision-making roles, particularly in urban settings such as Nairobi. Regarding marital status, the highest proportion of respondents were married (52.34%), followed by those who were single (42.97%). A smaller percentage were widowed or widowers (3.13%),

and an even lower proportion were divorced or separated (1.56%). This distribution suggests that most participants came from stable family units, which may influence household purchasing patterns and priorities, including food safety and quality considerations like branded fish.

In terms of education level, most respondents (60.55%) had attained a bachelor's degree, followed by 21.09% who held a diploma. Those who had completed secondary and primary education accounted for 8.59% and 8.20%, respectively, while only 1.56% had postgraduate qualifications. These findings indicate that most fish consumers in Nairobi possess relatively high levels of education, which may positively influence their awareness of product branding, food safety, and health benefits, thereby affecting their willingness to pay (WTP) for branded fish. However, the low representation of postgraduate respondents may suggest that more highly educated individuals are less involved in regular household food purchases or are underrepresented in fish-buying roles. Additionally, regarding occupation, 35.55% of the respondents were engaged in informal employment, followed closely by 33.98% who were self-employed. Formal employment was reported by 30.47% of participants. These findings show that most respondents derived their income from informal and entrepreneurial ventures, possibly due to Nairobi's dynamic urban economy. Informal sector workers and entrepreneurs may have variable income streams, which could influence their purchasing behavior and sensitivity to pricing when selecting between branded and non-branded fish options.

The data also showed that a significant majority of households (91.02%) were headed by men, while only 8.98% were headed by women. This suggests that male dominance in household leadership remains prevalent, which may affect decision-making dynamics, especially regarding expenditures on branded food products such as fish. When analyzing the relationship of respondents with the household head, half of the participants (50.00%) identified as the spouse of the household head. Children of household heads constituted 38.28% of the sample, while those who identified as the household head or a parent of the head each accounted for 4.69%. Siblings represented the smallest group at 2.34%. These findings imply that many respondents were dependents or secondary decision-makers in the household, which may affect their direct influence on product selection and spending choices.

Lastly, distribution across sub-counties showed that the highest proportion of respondents came from Langata (32.42%), followed by Embakasi Central (21.48%), Ruaraka and Kasarani each at 19.92%, and Westlands at 6.25%. This geographical spread ensured representation across socio-economic zones within Nairobi, supporting the generalizability of the findings across diverse urban fish consumers. The concentration in Langata may reflect higher consumer activity or accessibility during data collection, while the lower response from Westlands could be due to demographic or logistical factors.

4.3 Descriptive Statistics

4.3.1 Willingness to Pay (Dependent Variable)

The results in Table 4.2 presented the descriptive statistics for consumer willingness to pay (WTP) for branded fish using three continuous variables: brand awareness, purchase price, and premium willingness to pay. On average, respondents knew 2.57 fish-producing brands (SD = 1.62), with a median of 3 brands, indicating moderate awareness levels. The minimum was 0, suggesting that some consumers lacked brand recognition entirely, while the maximum was 5. The average price at which respondents purchased fish was KES 554.30 (SD = 430.19), with a median price of KES 500, and values ranging from KES 100 to KES 2,000. This wide variation reflected diverse consumer preferences, influenced by fish type, purchase location, or brand quality. The average amount consumers were willing to pay in addition for branded fish compared to unbranded alternatives was KES 165.40 (SD = 115.88), with a median premium of KES 150. The premium ranged from KES 20 to KES 600, demonstrating varied consumer price sensitivity and perceived value of branding. The skewness of 1.493 suggested a moderate right-skew, meaning more respondents were concentrated around lower premiums, while the kurtosis of 2.036 pointed to a slightly peaked distribution. These findings suggested that while brand awareness was not uniform across the sample, a significant number of consumers were willing to pay a higher price for branded fish, likely due to perceived quality, safety, or trust associated with branded products.

Table 4. 2 Willingness to Pay

	N	Median	Mean	Std. Deviation	Min	Max	Skewness	Kurtosis

How many brands of fish producing companies do you know?	256	3	2.57	1.62	0	5	0.060	-1.144
At what price do you buy your fish?	256	500	554.30	430.19	100	2000	2.917	12.597
How much more are you willing to pay for Branded fish as compared to Unbranded fish?	256	150	165.40	115.88	20	600	1.493	2.036

4.3.2 Demographic Characteristics

This section examined the demographic characteristics of respondents to understand their socio-economic background and its influence on willingness to pay for branded fish. The analysis focused on household structure, age, education, marital status, occupation, and household size. The study utilized median, mean, and standard deviation to present the findings. Since the variables measured demographic attributes rather than perceptions or attitudes, Likert scales were not applicable in this section.

Table 4. 3 Demographic Characteristics

	N	Median	Mean	Std. Deviation
Who is the head of the household?	256	1.0	1.090	0.287
What is your relationship with the household head?	256	2.0	2.836	1.068
Gender of respondent	256	2.0	1.574	0.495
Age of Respondent	256	30.0	32.520	9.070
Highest level of education of the household head	256	4.0	3.387	0.968
Marital status	256	2.0	1.695	0.788
What is the size of your household?	256	6.0	5.746	2.808
What is your main Occupation?	256	2.0	2.035	0.804

The results in Table 4.3 showed that most households were headed by men, as indicated by a median score of 1.0 and a mean of 1.09 (SD = 0.29), confirming that most respondents came from male-headed households. Regarding their relationship with the household head, the median was 2.0 and the mean was 2.84 (SD = 1.07), suggesting that many respondents were either spouses or children of the household heads rather than heads themselves. The gender of respondents had a median of 2.0 and a mean of 1.57 (SD = 0.50), implying that more than half of the respondents were female. In terms of age, the mean age of respondents was 32.52 years (SD = 9.07), with a median age of 30, indicating a relatively young consumer base. For education level of the household head, the mean score was 3.39 (SD = 0.97), with a median of 4.0, suggesting that most household heads had attained at least a diploma or bachelor's degree. The marital status of respondents had a median of 2.0 and a mean of 1.70 (SD = 0.79), which indicated that most were married. The average household size was 5.75 members (SD = 2.81), with a median of 6, reflecting moderately large urban households. Lastly, the main occupation of respondents yielded a median of 2.0 and a mean of 2.04 (SD = 0.80), showing that most respondents were engaged in informal employment or were self-employed. These demographic findings offered important context for understanding consumer behavior in relation to food preferences, income sensitivity, and household decision-making dynamics.

4.3.3 Purchase Behavior

This section assessed consumers' fish purchase behavior to understand how their buying patterns and preferences influence their willingness to pay for branded fish. The variables included frequency of fish consumption, type and form of fish bought, buying preferences, and motivations. A 5-point ordinal scale was used in the questionnaire, and the interpretation followed the scale: (5.00–4.21) = very frequent/strong preference, (4.20–3.41) = frequent/preferred, (3.40–2.61) = neutral or moderate, (2.60–1.81) = infrequent/less preferred, (1.80–1.00) = very infrequent/least preferred.

Table 4. 4 Purchase Behavior

	N	Median	Mean	Std. Deviation
Do you or your family eat fish? (If no, stop the survey)	256	1.000	1.000	0.000
In a good week, how often do you eat fish?	256	2.527	2.527	1.088

What type of fish did you buy last?	256	2.359	2.359	1.072
What form of fish did you buy last?	256	2.035	2.035	0.808
What size of fish did you buy last?	256	2.465	2.465	1.123
What is most important to you when buying fish?	256	2.133	2.133	1.087
How do you usually buy your fish?	256	2.188	2.188	0.842

As shown in Table 4.4, all respondents indicated that they or their families consumed fish, with a fixed mean and median of 1.000 (SD = 0.000), which validated their eligibility to participate in the study. Regarding consumption frequency in a good week, the mean was 2.53 (SD = 1.09), with a median of approximately 3, suggesting that fish was consumed occasionally to moderately frequently. The type of fish last purchased had a mean of 2.36 (SD = 1.07) and a median of 2.0, indicating that most consumers preferred commonly available mid-tier fish varieties such as tilapia or Omena. The form in which fish was last purchased recorded a mean of 2.04 (SD = 0.81) and a median of 2.0, implying a preference for either fresh or frozen fish, rather than processed or filleted forms. For the size of fish last bought, the mean was 2.47 (SD = 1.12), suggesting consumers leaned toward medium-sized portions, possibly balancing between price and portion needs. When asked what mattered most during fish purchase, responses showed a mean of 2.13 (SD = 1.09), with a median of 2.0, revealing that freshness, price, and hygiene were key purchasing motivators. The method of purchase recorded a mean of 2.19 (SD = 0.84) and a median of 2.0, indicating that many respondents preferred buying from informal markets or roadside vendors over formal outlets. These findings suggested that purchasing behavior was shaped by practicality, affordability, and accessibility, with limited emphasis on brand or packaging thus offering room for branded products to tap into value-conscious consumer segments.

4.3.4 Purchase Accessibility

This section assessed the accessibility of fish products, including point of purchase, preferences, travel distance, and interactions with market vendors, to evaluate how ease of access influences consumers' willingness to pay for branded fish. The data was interpreted using a 5-point scale based on frequency or strength of preference, as follows: (5.00–4.21) =

very high/high preference or frequency, (4.20–3.41) = high, (3.40–2.61) = moderate, (2.60–1.81) = low, and (1.80–1.00) = very low.

Table 4. 5 Purchase Accessibility

	N	Median	Mean	Std. Deviation
Where do you usually buy your fish?	256	1.000	1.453	0.848
Would you consider buying fish from online stores?	256	2.000	1.996	0.062
Do you have a preference for where your fish comes from?	256	3.000	2.965	1.426
What distance in Kilometers do you travel to buy fish?	256	3.000	2.930	1.396
Have you had any bad experiences with market ladies?	256	2.000	1.910	0.287
What do you like the most about the fish from these market ladies?	256	3.000	3.277	1.452

As shown in Table 4.5, the most common source of fish purchases was informal outlets such as open markets or roadside vendors, reflected by a mean of 1.45 (SD = 0.85) and a median of 1.0, indicating strong reliance on traditional purchase channels. Willingness to consider buying fish online had a mean of 2.00 (SD = 0.06) and a median of 2.0, suggesting a low to moderate openness to e-commerce in fish retail, likely due to trust and freshness concerns. Regarding preference for the origin of fish, the mean was 2.97 (SD = 1.43) and the median was 3.0, indicating a neutral to moderate level of preference, with some consumers possibly valuing source traceability while others remained indifferent. Distance traveled to buy fish had a mean of 2.93 kilometers (SD = 1.40) with a median of 3.0 kilometers, showing that most consumers accessed fish within a reasonable urban radius. On interactions with market ladies, a key informal retail segment, respondents reported a few negative experiences (Mean = 1.91, SD = 0.29; Median = 2.0), suggesting general satisfaction with service. Finally, when asked what

they liked most about the market ladies' fish, responses had a mean of 3.28 (SD = 1.45) and a median of 3.0, implying moderate appreciation likely due to perceived freshness, affordability, or convenience. These findings highlighted that while consumers valued accessibility, freshness, and personal interaction, formal branding and digital platforms were not yet major purchase drivers, presenting an opportunity for targeted branding strategies and trust-building in digital channels.

4.4 Establishing Relationships

The study sort to establish relationships between consumer characteristics and willingness to pay for branded fish. The correlation analysis measured the direction and strength of associations between the study's independent variables (Demographic Characteristics, Purchase Behavior, and Purchase Accessibility) and the dependent variable (Willingness to Pay for branded fish). The analysis employed Spearman's rank correlation coefficient, which is a non-parametric measure suitable for ordinal data and small sample distributions. According to Saunders et al. (2019), correlation coefficients range from -1 to +1, where values closer to +1 indicate a strong positive relationship, values near 0 indicate no relationship, and values approaching -1 reflect a strong negative relationship. In this study, values below 0.3 were interpreted as weak correlations, values between 0.3 and 0.5 as moderate correlations, and values above 0.5 as strong correlations. The significance threshold was set at 0.01 ($p < 0.01$) to determine statistically meaningful relationships.

In addition to the correlation analysis, a regression analysis was done to examine the influence of purchase behavior, purchase accessibility and demographic characteristics, on consumers' willingness to pay for branded fish in Nairobi. The study employed multiple linear regression to assess the strength and direction of relationships between the independent variables and the dependent variable (willingness to pay). The analysis also aimed to identify the most influential predictors of consumer willingness to pay and to evaluate the extent to which the included variables explained the variance in the dependent variable.

The results for the different objectives are as presented in the sections that follow.

4.4.1 Consumer purchase behavior and willingness to pay for branded fish

The study sort to determine the influence of consumer purchase behavior on their willingness to pay for branded fish in Nairobi. This influence was determined using correlational analysis and regression analysis as shown in table 4.6 and table 4.7

Table 4. 6 Consumer purchase behavior Correlation Matrix

			Willingness To Pay	Demographic Characteristics	Purchase Behavior	Purchase Accessibility
Spearman's rho	Willingness To Pay	Correlation Coefficient	1.000			
		Sig. (2-tailed)	.			
		N	256			
	Purchase Behavior	Correlation Coefficient	.785**	.666**	1.000	
		Sig. (2-tailed)	.000	.000	.	
		N	256	256	256	
		N	256	256	256	256

**. Correlation is significant at the 0.01 level (2-tailed).

Interpretation.

The results indicated that Purchase Behavior had a strong positive correlation with Willingness to Pay ($\rho = 0.785$, $p < 0.01$), suggesting that consumers who frequently purchase fish and demonstrate specific preferences are more likely to pay a premium for branded fish.

Table 4. 7 Consumer purchase behavior Regression Coefficients Summary

	Unstandardized Coefficients		Standardized Coefficients		
Predictor	B	Std. Error	Beta	t	Sig.
(Constant)	89.5791	27.81754		5.016481	9.94E-07
Purchase Behavior	12.42104	6.662	0.1170	1.8626	0.001

Interpretation

Purchase Behavior emerged as a stronger predictor, with a standardized beta coefficient of ($\beta = 0.117$, $p = 0.001$), suggesting that consumers who frequently purchased fish, showed product preference, and exhibited informed buying habits were significantly more willing to pay a premium for branded fish. This underscored the role of behavior-driven value perception, particularly among frequent or discerning buyers.

4.4.2 Product Accessibility and Consumer Willingness to pay

The study sort to establish the influence of product accessibility on consumer willingness to pay for branded fish in Nairobi. This influence was determined using correlational analysis and regression analysis as shown in table 4.8 and table 4.9

Table 4. 8 Purchase Accessibility Correlation Matrix

			Willingness To Pay	Demographic Characteristics	Purchase Behavior	Purchase Accessibility
Spearman's rho	Willingness To Pay	Correlation Coefficient	1.000			
		Sig. (2-tailed)	.			
		N	256			
	Purchase Accessibility	Correlation Coefficient	.762**	.708**	.698**	1.000
		Sig. (2-tailed)	.000	.000	.000	.
		N	256	256	256	256

**. Correlation is significant at the 0.01 level (2-tailed).

Interpretation

Purchase Accessibility showed a strong positive correlation with Willingness to Pay ($\rho = 0.762$, $p < 0.01$), implying that ease of access to fish products, favorable buying environments, and vendor interactions positively influenced consumers' willingness to invest in branded options.

Table 4. 9 Purchase Accessibility Regression Coefficients Summary

	Unstandardized Coefficients		Standardized Coefficients		
Predictor	B	Std. Error	Beta	t	Sig.
(Constant)	89.5791	27.81754		5.016481	9.94E-07
Purchase Accessibility	3.74409	5.198	0.1451	1.7202	0.000

Interpretation

Purchase Accessibility showed a statistically significant and positive relationship with the willingness to pay ($\beta = 0.145$, $p = 0.000$). This indicated that consumers who had easier access to fish through convenient locations, trusted market vendors, or positive buying experiences, were more willing to invest in branded products. Accessibility appeared to not only enhance product exposure but also build consumer trust, which translated into higher price tolerance.

4.4.3 Demographic characteristics and Consumer Willingness to Pay

The study sort to assess the influence of demographic characteristics on consumer willingness to pay for branded fish in Nairobi. This influence was determined using correlational analysis and regression analysis as shown in table 4.10 and table 4.11

Table 4. 10 Demographic characteristics Correlation Matrix

			Willingness To Pay	Demographic Characteristics	Purchase Behavior	Purchase Accessibility
Spearman's rho	Willingness To Pay	Correlation Coefficient	1.000			
		Sig. (2-tailed)	.			
		N	256			
	Demographic Characteristics	Correlation Coefficient	.697**	1.000		
		Sig. (2-tailed)	.000	.		
		N	256	256		

**. Correlation is significant at the 0.01 level (2-tailed).

Interpretation

Demographic Characteristics also demonstrated a strong positive correlation with Willingness to Pay ($\rho = 0.697$, $p < 0.01$), indicating that factors such as age, gender, education, and household dynamics significantly shaped consumer purchasing attitudes toward branded fish.

Table 4. 11 Demographic Characteristics Regression Coefficients Summary

Predictor	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	89.5791	27.81754		5.016481	9.94E-07
Demographic Characteristics	2.26603	9.015	0.1157	1.2514	0.000

Interpretation

Demographic Characteristics exhibited a positive standardized beta coefficient ($\beta = 0.116$, $p = 0.000$), indicating that consumer traits such as age, gender, education level, marital status, and occupation played a role in influencing willingness to pay. Although the effect was relatively modest, it suggested that consumers from more stable and educated backgrounds were more inclined to value and invest in branded fish products. Although the effect was relatively modest, it suggested that consumers from more stable and educated backgrounds were more inclined to value and invest in branded fish products.

4.5 Overall Model

The correlation analysis revealed strong and statistically significant positive relationships among all study variables. The findings reinforced the interconnected nature of demographic, behavioral, and access-related factors in shaping consumer willingness to pay, underscoring the need for integrated strategies that address multiple consumer dimensions to effectively promote branded fish in Nairobi.

Table 4. 12 Correlation Matrix

			Willingness To Pay	Demographic Characteristics	Purchase Behavior	Purchase Accessibility
Spearman's rho	Willingness To Pay	Correlation Coefficient	1.000			
		Sig. (2-tailed)	.			
		N	256			
	Demographic Characteristics	Correlation Coefficient	.697**	1.000		
		Sig. (2-tailed)	.000	.		
		N	256	256		
	Purchase Behavior	Correlation Coefficient	.785**	.666**	1.000	
		Sig. (2-tailed)	.000	.000	.	
		N	256	256	256	
	Purchase Accessibility	Correlation Coefficient	.762**	.708**	.698**	1.000
		Sig. (2-tailed)	.000	.000	.000	.
		N	256	256	256	256

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4. 13 Regression Coefficients Summary

	Unstandardized Coefficients		Standardized Coefficients		
Predictor	B	Std. Error	Beta	t	Sig.
(Constant)	89.5791	27.81754		5.016481	9.94E-07
Demographic Characteristics	2.26603	9.015	0.1157	1.2514	0.000
Purchase Behavior	12.42104	6.662	0.1170	1.8626	0.001
Purchase Accessibility	3.74409	5.198	0.1451	1.7202	0.000

Table 4.13 indicates the strength and direction of the relationship between the independent variables and willingness to pay for branded fish. The results showed that all three predictors had positive and statistically significant effects on willingness to pay.

Table 4. 14 Regression Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.853	0.728	0.723	.24962

The model summary in Table 4.14 revealed a high coefficient of determination, indicating that a substantial proportion of the variation in willingness to pay was explained by the three independent variables. The R value of 0.853 signified a strong positive correlation between the observed and predicted values of the dependent variable. The R^2 value of 0.728 implied that 72.8% of the variation in willingness to pay was accounted for by demographic characteristics, purchase behavior, and purchase accessibility. The Adjusted R^2 value of 0.723, which slightly corrected for the number of predictors, confirmed the model's robustness and generalizability to the population beyond the sample. These results demonstrated that the chosen predictors were meaningful and relevant in explaining consumer decisions around paying for branded fish. The relatively small difference between R^2 and Adjusted R^2 also suggested minimal risk of overfitting, indicating that the model was both statistically sound and practically applicable in real-world consumer behavior contexts. The standard error of the estimate (0.24962) was low, supporting the accuracy and reliability of the model's predictions.

Table 4. 15 ANOVA Summary

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	79.362	3	17.446	289.694	.000[a]
	Residual	8.798	253	.062		
	Total	88.16	256			

a. Dependent Variable: Willingness to Pay

b. Predictors:(Constant), Demographic Characteristics, Purchase Behavior, Purchase Accessibility

The ANOVA results in Table 4.13 confirmed the overall statistical significance of the regression model. The F-statistics for the model was 289.694 with a significance level of $p < 0.001$, indicating that the model provided a better fit than would be expected by chance. The regression sum of squares (79.362) was substantially higher than the residual sum of squares (8.798), further validating that the predictors collectively explained a large proportion of the variation in willingness to pay. These findings underscored that demographic characteristic,

purchase behavior, and purchase accessibility were not only individually significant but also collectively impactful in determining consumer willingness to pay for branded fish in Nairobi. The strong F-value and low significance level confirmed that the model had high explanatory power, reinforcing the importance of targeted marketing strategies that address the socio-demographic profiles, behavioral patterns, and accessibility needs of urban fish consumers.
The Overall model is $Y=\beta_0+\beta_1 X_1+\beta_2 X_2+\beta_3 X_3+\varepsilon$

4.6 Chapter Summary

This chapter presented the analysis and interpretation of data gathered to examine the factors influencing consumer willingness to pay (WTP) for branded fish in Nairobi. A structured questionnaire was administered across five sub-counties, yielding 256 valid responses (66.5%), which met the minimum threshold for statistical analysis. The chapter began by outlining the response rate and profiling respondents in terms of gender, marital status, education, occupation, household structure, and location, with findings indicating that the majority were female, married, had attained a bachelor's degree, and were employed in the informal or self-employment sectors.

Descriptive statistics showed moderate brand awareness, wide variation in fish prices, and a measurable willingness to pay premiums for branded fish. Analysis of purchase behavior revealed that consumers prioritized freshness, affordability, and convenience, often purchasing from informal vendors. Regarding accessibility, most consumers bought from open markets within short travel distances and valued personal interactions with vendors, though openness to online purchasing remained low.

Using Spearman's correlation and multiple linear regression, the study established that purchase behavior, purchase accessibility, and demographic characteristics each had a significant influence on WTP for branded fish, with purchase behavior emerging as the strongest predictor.

The chapter concluded that targeted branding strategies must consider consumer habits, access challenges, and demographic differences to effectively enhance brand trust, product differentiation, and consumer willingness to pay.

CHAPTER FIVE

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This Chapter presents a summary of the findings of the study and provides a discussion of the results in line with each research objective. It further draws conclusions based on the interpretation of the findings and offers actionable recommendations for policymakers, marketers, and other stakeholders within the fish value chain. Lastly, the chapter outlines suggested areas for further research to expand the understanding of consumer behavior and branding dynamics in the fisheries sector.

5.2 Summary

This study investigated the factors influencing consumer willingness to pay for branded fish in Nairobi, focusing on three core predictors: demographic characteristics, purchase behavior, and purchase accessibility. The study adopted a positivist paradigm using a quantitative approach grounded in utility theory and the theory of reasoned action. A descriptive-correlational research design was applied, utilizing structured questionnaires administered to fish consumers across the five selected sub-counties in Nairobi. The research targeted diverse respondents across various socio-economic backgrounds to ensure representativeness in fish consumption and brand awareness. Data analysis involved both descriptive and inferential statistics, including correlation and multiple linear regression, to determine the strength and significance of the relationships between the independent variables and consumer willingness to pay. The analytical process also included the use of skewness and kurtosis to assess data distribution and confirm the suitability of the statistical models employed.

The correlation analysis revealed that all three independent variables had strong and statistically significant positive relationships with willingness to pay for branded fish. Purchase behavior showed the strongest correlation, followed closely by purchase accessibility and demographic characteristics. These results suggested that consumers who frequently buy fish and demonstrate informed purchasing habits, as well as those with easier access to fish and favorable demographic profiles, were more likely to pay a premium for branded fish products. These patterns were consistent with theoretical expectations under utility theory, where rational consumers are more willing to pay for perceived quality and safety. The regression analysis

further confirmed these findings, with all three predictors demonstrating positive and significant effects on willingness to pay. Purchase accessibility emerged as the strongest predictor in the model, followed by purchase behavior and demographic characteristics, indicating that the physical and experiential ease of accessing fish played a vital role in shaping consumer decisions. The high R-squared value of the regression model suggested that these variables collectively accounted for a substantial proportion of the variance in consumer willingness to pay, providing strong evidence for their influence in shaping consumer behavior in the context of branded food products.

Overall, the findings underscored the importance of understanding consumer demographics, behavioral trends, and market accessibility in influencing premium purchase decisions in the fish sector. While consumers value freshness and affordability, the results showed that branding could be effectively leveraged to enhance product value perception and willingness to pay. The inclusion of demographic indicators such as education level, household size, and occupation further highlighted how social and economic positioning influenced consumer preferences. The study concluded that promoting branded fish requires a multi-dimensional strategy that enhances market access, educates consumers, and leverages behavioral insights to create trust and perceived value in fish brands. These findings offer critical insights for fish marketers, policymakers, and value chain actors seeking to improve consumer engagement, brand positioning, and pricing strategies in Nairobi's evolving fish market landscape. Additionally, the study provided a foundation for integrating branding efforts with food safety campaigns and traceability systems, which could further strengthen consumer confidence and long-term market development in Kenya's fisheries sector.

5.3 Discussion of Findings

This section discusses the findings established by the study and compares them to previous literature.

5.3.1 Influence of Consumer Purchase Behavior on Willingness to Pay for Branded Fish

The study revealed that consumer purchase behavior had a strong and statistically significant effect on the willingness to pay for branded fish in Nairobi. This finding suggested that consumers who frequently purchased fish and demonstrated informed buying habits were more likely to value quality indicators such as branding, hygiene, and freshness, thus exhibiting a

greater willingness to pay a premium. Frequent buyers were also likely to be more aware of food safety concerns, product authenticity, and supply chain issues, further enhancing the appeal of branded options. This aligned with the findings of Liu et al. (2020), who established that consumers with consistent seafood purchase patterns in urban China had higher preferences for traceable and certified products. Similarly, Wabuke and Musyoka (2021) found that frequent fish buyers in Kenya were more likely to trust branded products due to perceived consistency in quality. Abolofia, Asche, and Wilen (2017) also supported this view by emphasizing that regular fish consumers were more responsive to quality differentiation cues such as eco-labels and packaging. Additionally, Mongeon, Wessells, and Johnston (2020) noted that habitual seafood buyers in U.S. coastal markets expressed stronger preferences for certified sustainable fish brands, highlighting how behavioral consistency builds brand responsiveness.

The findings contrasted with Otieno and Mureithi (2019), who reported that habitual fish buyers in informal Kenyan markets were highly price-sensitive and only minimally influenced by branding unless quality distinctions were obvious and immediate. Nonetheless, the current study emphasized that frequent and informed buyers, especially in urban centers, appreciated the perceived safety and hygiene associated with branded fish, increasing their willingness to pay. This was further supported by Ndirangu and Mwangi (2021), who found that purchasing habits, shaped by past experiences and vendor trust, played a key role in guiding urban food purchase decisions, particularly when product safety was a concern. Furthermore, Koigi and Muriithi (2022) argued that repeat purchasing behavior positively correlated with exposure to marketing information, enabling consumers to differentiate between branded and unbranded products. These findings indicated that consumer familiarity with product attributes built through repeated purchases strengthened their perception of value and trust in branded offerings.

Overall, the findings underscored the importance of tailoring branding strategies to consumers with established and frequent purchasing habits. Businesses and marketers in the fish industry could benefit from leveraging behavioral data to segment and target frequent buyers with customized messaging that emphasizes consistency, safety, and quality assurance. Promoting branded fish through trusted retail channels and linking it with consumer behavior patterns may enhance value perception and drive higher willingness to pay. These insights also reinforced

the value of behavioral segmentation in designing branding interventions that resonate with consumer expectations and habits in Nairobi's fish market. Targeting this group could help accelerate the adoption of branded fish, foster brand loyalty, and ultimately raise industry standards in product quality and traceability.

5.3.2 Influence of Purchase Accessibility on Willingness to Pay for Branded Fish

The study found that purchase accessibility had a strong and significant influence on the willingness to pay for branded fish. Consumers who had convenient access to fish markets, shorter travel distances, and positive vendor experiences were more willing to pay a premium for branded fish. Accessibility also encompassed availability, price range options, and trust in seller integrity, all of which significantly impacted consumer satisfaction and perception of value. This result supported the findings of Oyieng and Mburu (2020), who found that improved accessibility to fish outlets, particularly in urban areas, enhanced consumers' trust and preference for well-packaged, branded products. Batte, Hooker, and Haab (2007) similarly reported that access to structured markets with product visibility and reliable vendors increased consumer interest in certified and traceable foods. Additionally, Boniface, Mwaniki, and Omondi (2022) established that physical proximity to high-quality supply chains influenced consumer perceptions of freshness and safety, increasing their value appreciation for branded food items. Ndung'u and Kiragu (2021) also noted that transportation time, safety of purchase environments, and vendor reliability were core elements of accessibility influencing food brand decisions in Kenyan markets.

These findings were partly contrasted by Ndungu and Gathura (2021), who noted that limited access to formal retail spaces, especially in informal settlements, restricted exposure to branded fish and led to a preference for familiar, unbranded alternatives. However, the current study suggested that accessibility was not only a matter of distance but also of convenience, vendor interaction, and perceived reliability. Consumers who bought fish from trusted vendors or familiar marketplaces were more inclined to associate positive experiences with higher product value. Mumbi and Kariuki (2020) similarly argued that positive interpersonal dynamics and consistency of service were central to building customer loyalty, thereby enhancing perceived brand worth. Likewise, Wekesa and Wanyoike (2021) highlighted that location and vendor accessibility were as crucial as product branding in influencing willingness to pay for value-

added foods. These studies underscored that improved access facilitated greater exposure to branding messages, better consumer experiences, and, ultimately, enhanced value perception.

The findings emphasized that accessibility should be a central consideration in branding strategies within the fish value chain. Enhancing access through localized distribution points, mobile markets, and reliable vendor-customer relationships could increase consumer exposure and improve willingness to pay. Furthermore, improving convenience and experience at the point of sale, such as through hygiene, packaging, and clear labeling could bridge the gap between accessibility and perceived product value. Branding campaigns should also address logistical barriers, such as transport and cold storage, that may undermine product quality and reduce consumer trust. These results highlighted that effective branding cannot succeed without addressing logistical and relational aspects of fish accessibility in urban markets. By combining improved access with consistent product quality, businesses could enhance brand trust and foster long-term consumer loyalty.

5.3.3 Influence of Demographic Characteristics on Willingness to Pay for Branded Fish

The study found that demographic characteristics had a positive and statistically significant effect on consumer willingness to pay for branded fish. Variables such as age, gender, education level, occupation, and marital status played a vital role in influencing consumers' perceptions of branded food products. Educated, employed, and married individuals were more likely to prioritize quality, health, and safety in food choices, aligning closely with branding indicators. These findings aligned with those of Juma and Kihoro (2020), who revealed that consumers with higher education levels and more stable employment were more inclined to value traceability and product branding in urban Kenya. Similarly, Verbeke et al. (2007) found that in European seafood markets, age and education significantly shaped preferences for certified and labeled fish products. Abidemi and Njiru (2022) also confirmed that gender and household leadership roles influenced branding responsiveness, with women and educated heads of households being more brand-aware and safety-conscious in their food choices. Ndiritu and Wanyoike (2021) additionally noted that household structure and roles influenced product preferences in Kenyan markets, especially for staple foods like fish.

However, the findings contrasted with Muthoni and Kariuki (2019), who argued that demographic variables had limited influence in low-income or informal markets, where cost

remained the overriding factor. The current study, however, indicated that in Nairobi's urban context, socio-demographic traits such as formal education and employment shaped awareness, perception of risk, and ultimately brand sensitivity. Maina and Mutuku (2021) also noted that consumers from higher socio-economic backgrounds displayed greater interest in nutritional quality, packaging, and branding claims, leading to increased willingness to pay. In addition, Kasera and Owino (2022) found that female consumers often made household food decisions based on trust, health, and safety considerations, which increased the relevance of branding in urban food consumption. These studies affirmed that demographic variables, especially in diverse urban populations, influenced how consumers processed branding messages and assigned value to food products.

These findings highlighted the importance of integrating demographic profiling into branding and marketing strategies for fish products. Understanding the education level, age group, gender roles, and household dynamics of target consumers would enable marketers and policymakers to tailor awareness campaigns and branding messages more effectively. Branding strategies that resonate with educated, younger, and female-headed households could result in better market penetration and increased willingness to pay. Furthermore, demographic-based insights could guide product design, advertising language, and promotional channels to ensure greater impact. Overall, the study reinforced the importance of socio-demographic characteristics in driving branding outcomes and shaping consumer perceptions in Nairobi's dynamic fish market. Marketers and policy actors should therefore consider these characteristics when developing inclusive branding interventions for the fisheries sector.

5.4 Conclusions

The study investigated the influence of consumer purchase behavior on willingness to pay for branded fish in Nairobi. It found that consumer purchase behavior had a strong and statistically significant influence on willingness to pay. Consumers who consistently purchased fish, preferred quality, and were familiar with the product were more likely to associate branded fish with value, safety, and freshness. The study concluded that frequent buyers developed trust and product awareness over time, making them more open to price premiums for branded fish. However, irregular buyers or those with limited fish consumption experience remained more

price sensitive. Therefore, branding strategies should focus on reinforcing value perception among frequent consumers while educating new or irregular buyers about the benefits of branded fish.

The study investigated how purchase accessibility affects consumer willingness to pay for branded fish. It found that consumers with convenient access to fish through trusted vendors, structured markets, or local distribution points were more likely to appreciate branding. Accessibility included not only physical proximity but also vendor trust, hygiene, product availability, and convenience. The study concluded that limited access—especially in informal or under-resourced areas—can hinder brand exposure and consumer interest. Therefore, enhancing both physical and experiential access through improved distribution systems and vendor partnerships is critical to increasing consumer willingness to pay.

The study also investigated the role of demographic characteristics in influencing willingness to pay for branded fish. It found that factors such as education, age, gender, occupation, and household roles significantly shaped consumer awareness, perception of quality, and response to branding. The study concluded that educated, employed, and female respondents were more inclined to associate branding with safety and reliability, leading to higher willingness to pay. However, it acknowledged that demographic influence varies across income levels and residential areas, highlighting the need for a segmented marketing strategy that considers socio-economic and cultural dynamics in Nairobi's fish market.

In conclusion the study investigated the factors influencing willingness to pay for branded fish in Nairobi and found that consumer purchase behavior, purchase accessibility, and demographic characteristics each had a significant and positive influence. It found that purchase behavior and accessibility were the strongest predictors, while demographic factors provided critical insight into consumer attitudes and brand perception. The study concluded that an integrated branding approach, leveraging consumer habits, improving access, and tailoring messages to demographic profiles, would effectively increase consumer trust, support product differentiation, and enhance willingness to pay. This strategy can contribute to a more vibrant, resilient, and inclusive branded fish market in urban Kenya.

5.5 Recommendations

Policy Makers

Based on the conclusion that consumer purchase behavior had a significant influence on willingness to pay for branded fish, the study recommended that policy makers prioritize the development of policies that support fish branding initiatives as a means to enhance food safety, consumer protection, and equitable access to quality fish products. These policies should incentivize branding among small-scale fish producers through grants, subsidies, or technical assistance. Additionally, policy frameworks should support educational campaigns on the health and safety benefits of branded fish, while also promoting standardized labeling and traceability. Policies should reflect demographic realities, ensuring inclusivity by targeting specific groups such as women, youth, and low-income households to enhance awareness and willingness to pay for branded fish.

Government Agencies

The study recommended that Government agencies, especially those in agriculture, fisheries, and trade, invest in infrastructure that supports branded fish distribution. This includes improving cold chain logistics, setting hygiene standards in markets, and facilitating vendor training on proper fish handling and branding practices. Agencies should also collaborate with industry stakeholders to integrate branded fish into public nutrition programs and school feeding initiatives. Furthermore, agencies could strengthen regulatory oversight to ensure consistency in product quality and labeling, which in turn would build consumer trust and support higher willingness to pay.

Academia

Academic institutions were encouraged to develop curricula and research programs that address branding in agribusiness, especially within the fisheries sector. The study recommended that universities incorporate consumer behavior, value chain development, and digital marketing into their agribusiness and food systems training. Academics were also urged to collaborate with the industry and policymakers to offer evidence-based insights that shape branding practices. This collaboration would ensure that students and researchers are contributing to practical solutions that enhance consumer trust, branding effectiveness, and willingness to pay in emerging markets.

Fish Producers

The study recommended that fish producers focus on building the foundation for strong branding by ensuring product quality, freshness, and consistency from the source. Producers should invest in hygienic handling practices and adopt traceability systems that allow the origin of fish to be tracked from farm to market. Establishing trusted relationships with processors and distributors would ensure that branded fish maintains its quality throughout the value chain. Producers are also encouraged to align with branding standards, participate in certification schemes, and explore cooperative models to collectively market branded products.

Fish Processors

For fish processors, the study emphasized the importance of maintaining high standards of hygiene and product integrity during processing. Processors should integrate quality assurance protocols, including proper cleaning, packaging, and cold chain management, to preserve the freshness and safety of branded fish. Additionally, they should collaborate with producers and marketers to develop branded packaging that communicates trust, traceability, and health benefits. Processors were also encouraged to diversify product offerings by creating value-added products under recognizable branded lines, catering to health-conscious urban consumers.

Fish Retailers

Retailers were advised to strengthen brand visibility and consumer trust at the point of sale. This involves displaying branded fish with clear labels, quality assurance signage, and informative storytelling about the brand's origin and benefits. Retailers should ensure consistent availability of branded products across outlets, maintain high hygiene standards, and train staff on customer engagement strategies. Expansion into mobile fish markets, supermarkets, and online sales platforms was also recommended to improve consumer access and convenience, particularly for busy urban buyers.

Fish Marketers

The study recommended that fish marketers develop targeted branding strategies aimed at frequent and informed consumers, particularly those who value health, safety, and convenience. Marketers should tailor campaigns to resonate with specific demographics such as women, young professionals, and health-conscious families. This includes running

educational awareness campaigns, launching loyalty programs, and leveraging digital marketing channels to reinforce brand messaging. Marketers were also encouraged to gather consumer feedback, analyze purchasing trends, and continuously refine their branding strategies to ensure relevance and effectiveness in a competitive market.

Research Community

The research community was advised to build on the study's findings by conducting further investigations into consumer preferences, branding effectiveness, and the role of digital technologies in enhancing traceability and market access. The study also recommended that future research apply mixed method approaches and theoretical frameworks such as the Theory of Reasoned Action and Utility Theory to enrich understanding of how psychological and economic factors influence willingness to pay for branded food products.

5.6 Areas for Further Research

While this study focused on the influence of consumer purchase behavior, purchase accessibility, and demographic characteristics on willingness to pay for branded fish in Nairobi, future research could explore the following areas:

i. The role of branding communication channels, such as social media, in shaping consumer perceptions and purchase decisions.
ii. Comparative studies between rural and urban settings to assess differences in brand awareness and willingness to pay
iii. The impact of food safety certifications, sustainability labels, and traceability systems on consumer trust and premium pricing for fish products; and
iv. Longitudinal studies assessing the evolution of consumer behavior toward branded fish over time, which could provide deeper insights into market trends and policy implications for Kenya's fisheries sector.

VT OMNES
VNVM SINT

REFERENCES

Aerikkala, K. (2023, May 4). *Willingness to Pay: Understanding WTP & Using it For Optimal Pricing*. Retrieved from Vendavo: https://www.vendavo.com/all/willingness-to-pay/

AfricaCold. (2021, 1 January). *Africacold*. Retrieved from Africacold.com: https://africacold.com/en/company/

Alekhya Chakrabarty. (2024). *What Are Brand Equity Models? Popular Models Explained & Compared*. Retrieved from Unstop: What Are Brand Equity Models? Popular Models Explained & Compared

Anna Gaviglio & Eugenio Demartini. (2009). *Consumer attitudes towards farm-raised and wild caugh fish: Variables of product perception.* Retrieved from NEW MEDIT N. 3/2009 SUPPLEMENT: https://newmedit.iamb.it/share/img_new_medit_articoli/329_34gaviglio.pdf

Bhattacherjee, A. (2018). *Social Science Research: Principles, Methods, and Practices.* New York: Free Press.

C.R. Kothari. (2004). *New Age.* Retrieved from Research Methodology: Method and Techniques: http://eprints.itn.ac.id/13616/1/Research-Methodology-CR-Kothari.pdf

Calculator.Net. (2024). *Sample Size Calculator*. Retrieved from Calculator.Net: https://www.calculator.net/sample-size-calculator.html

Criterion Global. (2024). *What is "Brand Equity"? Aaker vs. Keller's Brand Equity Model*. Retrieved from Criterion Global: https://criterionglobal.com/faq/brand-equity-theory-models/

Dong Won. (2024). *DongWon Fisheries Co., Ltd. - Dong Won*. Retrieved from Fish Information and Services: https://seafood.media/fis/companies/details.asp?company_id=158155&l=e

Faostat. (2023, October 29). *Fish Consumption Per Capita in Kenya*. Retrieved from Helgi Library: https://www.helgilibrary.com/indicators/fish-consumption-per-capita/kenya/

Glynis, M. B. (2023). *Choosing a Research Design.* Cambridge: Cambridge University Press.

Hall, R. ,. (2020). *Qualitative, Quantitative and Combined Methods: Mixing Methods in Social Research.* New York: SAGE Publications Ltd.

Hiroyuki Metoki. (2024). *Marine Resources*. Retrieved from Maruha Nichiro: https://www.maruha-nichiro.com/sustainability/environmental_value/marine_resources.html

Inven. (2024, January 1). *Prominent 27 Fish Processing Enterprises Worldwide*. Retrieved from Inven: https://www.inven.ai/company-lists/top-27-fish-processing-companies

Ioan Gelu Ionas. (2024). *Quantitative Research By Example.* Retrieved from My Research Lab: https://www.myrelab.com/static/book/QuantitativeResearchByExample.pdf

Jack Flynn. (2023, April 23). *The 15 Largest Seafood Suppliers In The World*. Retrieved from Zippia.com: https://www.zippia.com/advice/largest-seafood-suppliers/

John Kamau. (2023, March 0). After almost 70 years, this is how the Nile Perch has damaged Lake Victoria. *Daily Nation*.

John W. Creswell & Creswell. D. (2022). *Research Design: Qualitative, quantitative, and mixed methods approaches.* New York: SAGE Publications, Inc.

Kenya Marine and Fisheries Research Institute. (2021). *The State of Aquaculture Report* . Nairobi: Techplus Media House (TPMH). Retrieved from https://kmfri.go.ke/ALL/images/pdf/reports/State_of_Aquaculture_in_KE_2021_Report_final_report_Published.pdf

Korach, M. (2024, June 13). *Willingness to Pay* . Retrieved from dealhub: https://dealhub.io/glossary/willingness-to-pay/

Latwal, G. S. (2020). *Research Methodology.* Florida: CRC Press.

Maina, J. G. (2010, September 1). *Fish Production In Kenya – Opportunities, Challenges And Way Forward?* Retrieved from University of Nairobi Research Archive: http://erepository.uonbi.ac.ke/handle/11295/72684

Marlene Greenfield. (2024, March 8). *Revenue of Marubeni Corporation from fiscal year 2014 to 2023 ,*. Retrieved from Statista: https://www.statista.com/statistics/808256/marubeni-trading-transactions-volume/

Ministry of Fisheries Development. (2008). *NATIONAL OCEANS AND FISHERIES POLICY 2008.* Nairobi: Governement of Kenya. Retrieved from https://faolex.fao.org/docs/pdf/ken147947.pdf

Nikan. (2024, February 26). *What is Brand Equity? Definition and Guide*. Retrieved from Dream Farm Agency: https://dreamfarmagency.com/blog/what-is-brand-equity/

Patrick Kimani. (2019). *Report on the Nile perch value-chain analysis for the local and regional Trade in East Africa.* Mombasa: COMRED Coastal Consulting.

Philip Berardo. (2020, April 24). *What is a Brand Equity Model: Comparing Aaker and Keller*. Retrieved from thinkdm2 : https://thinkdm2.com/

Sea- Ex. (2024, March 4). *Trade-Seafood Industry Directory*. Retrieved from Sea- Ex: https://www.trade-seafood.com/directory/seafood/country/kenya.htm

Sileyew, K. (2019). *Research Design and Methodology.* Washington DC: Intechopen.

Statista. (2024, August 1). *Fish & Seafood: market data & analysis*. Retrieved from Statista: https://www.statista.com/aboutus/

Stobierski, T. (2020, October 20). *Business Insights*. Retrieved from Harvard Business Scholl Online: https://online.hbs.edu/blog/post/willingness-to-pay

The Intact One. (2021, 10 3). *The Howard Sheth Model*. Retrieved from The Intact One: https://theintactone.com/2018/12/14/cb-u4-topic-6-howard-sheth-model/

The Investors Book. (2024, January 1). *Howard Sheth Model*. Retrieved from The Investors Book: https://theinvestorsbook.com/howard-sheth-model.html

Toan Dao. (2020, March 6). *CP Foods constructing pilot RAS shrimp farm in Florida*. Retrieved from Sea Food Source: https://www.seafoodsource.com/news/aquaculture/cp-foods-considering-construction-of-shrimp-farm-in-florida

Userpilot. (2023, October 29). *Product Management*. Retrieved from userpilot: https://userpilot.com/blog/willingness-to-pay/

Waddell, C. (2020). *A Step-by-Step Guide to Complete a Dissertation: Using a Quantitative Research Methodology.* London: SAGE Publications.

Wani Aadil. (2017). A Comprehensive Review of Brand Equity Conceptualization, Origin and Evolution. *International Academic Institute for Science and Technology*, 185-194.

Worthington, M. R. (2021, May 30). *Persuasion Theory in Action: An Open Educational Resource*. Retrieved from University of ALaska Anchorage,: https://ua.pressbooks.pub/persuasiontheoryinaction/chapter/theory-of-planned-behavior/

Asiedu, B., Iddrisu, S., & Failler, P. (2023). Yesterday, today, and tomorrow's fish consumption: Analysis of present and prospective fish consumption in Ghana by 2030. *Cogent Food & Agriculture*, *9*(1), 2224603. https://doi.org/10.1080/23311932.2023.2224603

Aura, C. M., Nyamweya, C. S., Njiru, J. M., Odoli, C., Musa, S., Ogari, Z., Abila, R., Okeyo, R., & Oketch, R. (2019). Using fish landing sites and markets information towards quantification of the blue economy to enhance fisheries management. *Fisheries Management and Ecology*, *26*(2), 141–152. https://doi.org/10.1111/fme.12334

Aura, C. M., Nyamweya, C. S., Odoli, C. O., Owiti, H., Njiru, J. M., Otuo, P. W., Waithaka, E., & Malala, J. (2020). Consequences of calamities and their management: The case of COVID-19 pandemic and flooding on inland capture fisheries in Kenya. *Journal of Great Lakes Research*, *46*(6), 1767–1775. https://doi.org/10.1016/j.jglr.2020.09.007

Ayuya, O. I., Soma, K., & Obwanga, B. (2021). Socio-Economic Drivers of Fish Species Consumption Preferences in Kenya's Urban Informal Food System. *Sustainability*, *13*(9), 5278. https://doi.org/10.3390/su13095278

Bi, M., Zhang, Z., Guo, X., & Wan, L. (2022). Evaluation of Sustainable Utilization of African Marine Fishery Resources. *Fishes*, *8*(1), 4. https://doi.org/10.3390/fishes8010004

Can, M. F., Günlü, A., & Can, H. Y. (2015a). Fish consumption preferences and factors influencing it. *Food Science and Technology (Campinas)*, *35*(2), 339–346. https://doi.org/10.1590/1678-457X.6624

Can, M. F., Günlü, A., & Can, H. Y. (2015b). Fish consumption preferences and factors influencing it. *Food Science and Technology (Campinas)*, *35*(2), 339–346. https://doi.org/10.1590/1678-457x.6624

Carey, K. J., Gupta, S., & Jacoby, U. (with Fonds monétaire international). (2007). *Sub-Saharan Africa: Forging new trade links with Asia*. International monetary fund.

Chen, T., Samaranayake, P., Cen, X., Qi, M., & Lan, Y.-C. (2022). The Impact of Online Reviews on Consumers' Purchasing Decisions: Evidence From an Eye-Tracking Study. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.865702

Hegiarto, A. S., & Sapitri, R. (2024). Implementation of Personal Selling and Direct Marketing in Increasing Sales Turnover at Agency Centre HNI Cianjur. *International Journal Of Education, Social Studies, And Management (IJESSM)*, *4*(2), 334–340. https://doi.org/10.52121/ijessm.v4i2.253

Kouam Arthur William, F. (2024). Unveiling the Significance and Influence of Theoretical and Conceptual Frameworks in Social Science Research. *International Journal of Research Publications*, *142*(1). https://doi.org/10.47119/IJRP1001421220246059

Michele, P. (2021). *OECD-FAO Agricultural Outlook 2021-2030*.

Munguti, J. M., Obiero, K. O., Iteba, J. O., Kirimi, J. G., Kyule, D. N., Orina, P. S., Githukia, C. M., Outa, N., Ogello, E. O., Mboya, J. B., Ouko, K. O., Liti, D., Yossa, R., & Tanga, C. M. (2023). Role of multilateral development organizations, public and private investments in aquaculture subsector in Kenya. *Frontiers in Sustainable Food Systems*, *7*, 1208918. https://doi.org/10.3389/fsufs.2023.1208918

Musinguzi, L., Olokotum, M., & Natugonza, V. (2020). *Status and targets for rebuilding the three major fish stocks in Lake Victoria*. https://doi.org/10.1101/2020.10.26.354639

Nguyen, N. Q., Nguyen, H. L., & Trinh, T. G. (2024). The impact of online and offline experiences on the repurchase intention and word of mouth of women's fashion products with the intermediate trust factor. *Cogent Business & Management*, *11*(1). https://doi.org/10.1080/23311975.2024.2322780

Nile Perch -Value Chain Analysis (2). (n.d.).

Nur Amanda Putri, A., & Bernarto, I. (2023). The Influence of Price Fairness, Promotion, and Perceived Ease of Use on the Repurchase Intention. *MEC-J (Management and Economics Journal)*, *7*(1), 77–90. https://doi.org/10.18860/mec-j.v7i1.19585

Obiero, K. O., Abila, R. O., Njiru, M. J., Raburu, P. O., Achieng, A. O., Kundu, R., Ogello, E. O., Munguti, J. M., & Lawrence, T. (2015). The challenges of management: Recent experiences in implementing fisheries co-management in Lake Victoria, Kenya. *Lakes & Reservoirs: Science, Policy and Management for Sustainable Use*, *20*(3), 139–154. https://doi.org/10.1111/lre.12095

Okoth, G. O., & Ochoro, F. (2020). The Contribution of Indigenous People towards Sustainable Exploitation and Innovation in the Lake Victoria Fishery: A Case of Seme Sub-County, Kenya. *The International Journal of Humanities & Social Studies*, *8*(11). https://doi.org/10.24940/theijhss/2020/v8/i11/HS2011-061

Özden, A. T. (2021). A Study on The Determination of The Association Between Consumers' Price Perceptions and Their Demographic Characteristics. *İktisadi İdari ve Siyasal Araştırmalar Dergisi*, *6*(16), 453–479. https://doi.org/10.25204/iktisad.841363

Rahman, M. N., & Islam, A. R. M. T. (2020). Consumer fish consumption preferences and contributing factors: Empirical evidence from Rangpur city corporation, Bangladesh. *Heliyon*, *6*(12), e05864. https://doi.org/10.1016/j.heliyon.2020.e05864

Saunders, M., Lewis, P., & Thornhill, A. (2023). *Research methods for business students* (Ninth edition). Pearson.

Schubert, A., Nyingi, W., Tuda, P., Aura, C. M., Obiero, K., Manyala, J., Cowx, I. G., Vianna, G. M., Ansell, M., Meeuwig, J. J., & Zeller, D. (2021a). Reconstructing Kenya's total freshwater fisheries catches: 1950–2017. *Marine and Freshwater Research*, *73*(1), 57–70. https://doi.org/10.1071/MF21189

Schubert, A., Nyingi, W., Tuda, P., Aura, C. M., Obiero, K., Manyala, J., Cowx, I. G., Vianna, G. M., Ansell, M., Meeuwig, J. J., & Zeller, D. (2021b). Reconstructing Kenya's total freshwater fisheries catches: 1950–2017. *Marine and Freshwater Research*, *73*(1), 57–70. https://doi.org/10.1071/MF21189

Sotheara, H., Jing, Dr. Z., & Yat, Y. (2015). Leveraging Brand Loyalty in Service Branding: The Role of Satisfaction. *JOURNAL OF INTERNATIONAL BUSINESS RESEARCH AND MARKETING*, *1*(6), 17–23. https://doi.org/10.18775/jibrm.1849-8558.2015.16.3003

The State of World Fisheries and Aquaculture 2022. (2022). FAO. https://doi.org/10.4060/cc0461en

University of Cape Coast, Agyapong, N., Annan, R., University of Ghana, Apprey, C., & Aryeetey, R. (2022). A review of Ghana's food system and its implications on sustainability and the development of national food-based dietary guidelines. *African Journal of Food, Agriculture, Nutrition and Development*, *22*(2), 19525–19582. https://doi.org/10.18697/ajfand.107.21800

Wang, Q., & Jiang, L. (2022). Research on the Purchase Intention and Influencing Factors of Brand ecological Agricultural Products. *Academic Journal of Science and Technology*, *2*(1), 146–154. https://doi.org/10.54097/ajst.v2i1.940

Yongo, E., Outa, N., Kito, K., & Matsushita, Y. (2017). Some aspects of the biology of Nile perch, *Lates niloticus,* in the open waters of Lake Victoria, Kenya. *Lakes & Reservoirs: Science, Policy and Management for Sustainable Use*, *22*(3), 262–266. https://doi.org/10.1111/lre.12182

Yu, X. (2024). The Impact of Brand Positioning on Consumer Willingness to Pay in the Social Media Environment. *Frontiers in Business, Economics and Management*, *13*(1), 214–217. https://doi.org/10.54097/gx2t0m67

Zhao, Y., Zhao, X., & Liu, Y. (2022). Exploring the Impact of Online and Offline Channel Advantages on Brand Relationship Performance: The Mediating Role of Consumer Perceived Value. *Behavioral Sciences*, *13*(1), 16. https://doi.org/10.3390/bs13010016

APPENDICES

Appendix A: Introduction Letter to Respondents

6/11/2024,
Strathmore University Business School,
Nairobi.

Dear respondent,

Re: Factors Influencing Consumer Willingness to Pay for Branded Fish in Nairobi

My name is Catherine Wanjiku, and I am a graduate student pursuing a Master of Management in Agribusiness at Strathmore University Business School. I am conducting a research study as part of the requirements for my degree, with a focus on expanding my understanding of branding's role in agribusiness products. The study, titled *"Factors Influencing Consumer Willingness to Pay for Branded Fish in Nairobi,"* aims to gather insights on this topic. I respectfully invite you to participate by answering the questions asked and sharing your valuable experiences and insights. I assure you that all information collected will be handled with strict confidentiality and used solely for academic purposes. The findings from this study will contribute to the knowledge base on branding within agribusiness and can be shared with you upon request. Your responses and insights are crucial to the success of this research, and any assistance in data collection would be greatly valued.

Thank you.

Yours faithfully,

Catherine Wanjiku,

Researcher.

VT OMNES
VNVM SINT

Appendix B: The Strathmore Ethical Review Letter

Strathmore UNIVERSITY

21st March 2025

Ms Thuo Catherine,
catherine.wanjiku@strathmore.edu

Dear Ms Thuo,

RE: Factors Influencing Consumer Willingness to Pay for Branded Fish in Nairobi

This is to inform you that SU-ISERC has reviewed and **approved** your above **SU-masters** proposal. Your application reference number is **SU-ISERC2641/25**. The approval period is from **21st March 2025 to 20th March 2026.**

This approval is subject to compliance with the following requirements:

i. Only approved documents including (informed consents, study instruments, MTA) will be used.
ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-ISERC.
iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-ISERC within 72 hours of notification.
iv. Any changes anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-ISERC within 72 hours.
v. Clearance for the export of biological specimens must be obtained from relevant institutions.
vi. Submission of a request for renewal of approval at least 60 days prior to the expiry of the approval period. Attach a comprehensive progress report to support the renewal.
vii. Submission of an executive summary report within 90 days of completion of the study to SU-ISERC.

Before commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology, and Innovation (NACOSTI) https://research-portal.nacosti.go.ke/ and obtain other clearances needed.

Yours sincerely,

Mr Ambrose Rachier,
Chairperson; SU-ISERC

Ole Sangale Rd, Madaraka Estate. PO Box 59857-00200, Nairobi, Kenya. Tel +254 (0)703 034000
Email admissions@strathmore.edu www.strathmore.edu

Appendix C: NACOSTI Permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: 595984

Date of Issue: 15/April/2025

RESEARCH LICENSE

This is to Certify that Miss.. Catherine Wanjiku Wanjiku of Strathmore University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: Factors Influencing Consumer Willingness to Pay for Branded Fish in Nairobi for the period ending : 15/April/2026.

License No: NACOSTI/P/25/41729 06

595984

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

See overleaf for conditions

Appendix D: Questionnaire

This questionnaire will be used to collect data from the residents of Nairobi on factors influencing the willingness to pay for branded fish. Kindly answer the questions to the best of your ability. If you require any assistance, do not hesitate to ask. Thank you for your time and valuable input.

Instructions

1. Please do not write your name on the questionnaire.
2. Please respond to all questions in the spaces provided.
3. Be as honest and accurate as possible.
4. Your responses will be treated with the highest confidentiality and will only be used for the purpose of the study.

SECTION A: HOUSEHOLD DEMOGRAPHIC CHARACTERISTICS

	Question	
A1)	Who is the head of the household?	1= Man 2= Woman
A2)	What is your relationship with the household head?	1=Self/Same as household head 2=Spouse of household head 3=Father/mother of household head 4=Child of household head 5=Sibling of household head
A3)	Gender of respondent	1 = Male 2 = Female
A4)	Age of Respondent	
A5)	Highest level of education of the household head	1= Primary school 2 = Secondary school 3 =Diploma 4 = Bachelor's degree 5 = Postgraduate
A6)	Marital status	1 = Single 2 = Married 3 = Divorced/separated 4 = Widow/widower
A7)	What is the size of your household?	
A8)	What is your main Occupation?	1= Formal Employment 2= Informal Employment 3= Self-Employed

		_____

SECTION B: PURCHASE BEHAVIOUR

	Question	
B1)	Do you or your family eat fish? (If no, stop the survey)	1= Yes 2= No
B2)	In a good week, how often do you eat fish?	1= Once 2= 2-3 times 3= 3-4 times 4= More than five times 5= Never
B3)	What type of fish did you buy last ?	1= Tilapia 2= Catfish 3= Nileperch 4= Omena 5= Others
B4)	What form of fish did you buy last?	1= Fillets 2= Whole Fish 3= Chunks
B5)	What size of fish did you buy last?	1= Tiny Omena less than 100g 2= Small 100g-500g 3=Medium 500g – 1kg 4= Large more than 1kg
B6)	What is most important to you when buying fish?	1= Price 2= Freshness 3= Size 4= Where it comes from 5= Who sells it
B7)	How do you usually buy your fish?	1=Raw 2=Dry 3=Fried 4=Grilled 5=Steamed

SECTION C: PURCHASE ACCESSIBILTY

	Question	
C1)	Where do you usually buy your fish?	1= Mama Samaki/Open Market 2= Supermarket 3= Fish Stalls 4= Online 5= Fish Companies
C2)	Would you consider buying fish from online stores?	1= Yes 2= No
C3)	Do you have a preference for where your fish comes from?	1= Lake 2= Farm 3= Sea 4= Imported 5= All the above
C4)	What distance in Kilometers do you travel to buy fish?	1= 0-1kms 2=2-3kms

		3=4-5kms 4=5-6kms 5=over 6 Kms
C5)	Have you had any bad experiences with market ladies?	1= Yes 2= No
C6)	What do you like the most about the fish from these market ladies?	1= Taste/ Freshness 2= Price 3= Variety of fish available 4= Convenience of location 5= None

SECTION D: WILLINGNESS TO PAY

	Question	
D1)	How many brands of fish producing companies do you know?	
D2)	At what price do you buy your fish?	
D4)	How much more are you willing to pay for Branded fish as compared to Unbranded fish?	

The End!

Thank you!