



Arab American University
Faculty of Graduate Studies

**“A Structural Model of Sustainable Competitive Advantage in
Palestinian Private Hospitals: An Examination of the Interactions
Among Work Ethics, Information System, Service Quality, and
Customer Value”**

By
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**This dissertation was submitted in partial fulfillment of the
requirements for the Doctoral degree in Strategic Management**

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Dissertation Approval

“A Structural Model of Sustainable Competitive Advantage in Palestinian Private Hospitals: An Examination of the Interactions Among Work Ethics, Information System, Service Quality, and Customer Value”

By

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This dissertation was defended successfully on 9.2.2025 and approved by:

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Declaration

I confirm that this dissertation, submitted for the PhD degree, is the product of my own research, except where acknowledgments indicate otherwise. I also declare that it has not been submitted to any other university or institution for a higher qualification.

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A handwritten signature in blue ink, consisting of a long horizontal stroke followed by a loop and a small flourish.

Date: 27/2/2025

Dedication

For the sake of Allah.

To my esteemed teacher, Prophet Mohammed.

To my homeland, Palestine.

To the heroic martyrs and prisoners, symbols of sacrifice.

To my extraordinary parents, whose selflessness knows no bounds.

To my cherished wife Ayah, whose unwavering hope and support light my path.

To my beloved children, Elham, Naim, and Laith, to whom this achievement is dedicated.

To my entire family, I am embodying love and generosity.

I humbly dedicate this dissertation.

Acknowledgment

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Lastly, my profound gratitude goes to my wife Ayah, my children Elham, Naim, Laith and my mother, whose unconditional support and encouragement have been my pillar of strength throughout this journey. Their belief in me made this achievement possible.

Thank you

Samer Naim Atiyeh

Abstract

Background: This study examines the interplay of work ethics, service quality, and information systems in influencing customer value and fostering sustainable competitive advantage in Palestinian private hospitals. The research addresses the challenges faced by healthcare institutions in conflict-affected regions, focusing on the role of ethical practices, technological integration, and service quality.

Methods: This study employed a quantitative cross-sectional design, collecting data from a systematically random sample of 384 hospitalized patients in three private hospitals in the West Bank. A structural model was constructed and analyzed using Smart-PLS to examine both direct and mediating relationships among the variables.

Results: The findings reveal that work ethics ($\beta = 0.180$, $p = 0.002$) and service quality ($\beta = 0.417$, $p = 0.000$) positively influence customer value, with service quality as the stronger driver. However, information systems ($\beta = 0.043$, $p = 0.233$) do not significantly impact customer value directly but contribute to a sustainable competitive advantage when integrated with other strategies. Notably, customer value negatively impacts sustainable competitive advantage ($\beta = -0.405$, $p = 0.000$), suggesting operational challenges in enhancing value perceptions. Service quality emerged as the most critical factor in achieving sustainable competitive advantage ($\beta = 0.560$, $p = 0.000$), while work ethics showed mixed effects ($\beta = -0.137$, $p = 0.024$), enhancing customer value without directly translating to a competitive edge. Information systems directly support SCA ($\beta = 0.165$, $p = 0.002$) but lack mediating effects through customer value.

Conclusion: the results underscore the importance of aligning ethical practices, service quality, and technological advancements with strategic goals to enhance customer value and sustain competitive success. This study contributes to the literature by offering a comprehensive structural model tailored to the unique context of Palestinian private hospitals, providing

actionable insights for improving operational efficiency and patient satisfaction in challenging environments.

Keywords: Work Ethics, Service Quality, Information Systems, Customer Value, Sustainable Competitive Advantage, Private Hospitals, Palestinian Healthcare.

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List of Abbreviations and Symbols

No.	Abbreviation	Meaning
1.	GCC	Gulf Cooperation Council
2.	WHO	World Health Organization
3.	GDP	Gross Domestic Product
4.	SCA	Sustainable Competitive Advantage
5.	RO	Research Objectives
6.	RQ	Research Questions
7.	H	Hypotheses
8.	HIS	Health Information Systems
9.	RBV	Resource-Based View
10.	IT	Information Technology
11.	HIEs	Health Information Exchanges
12.	EHRs	Electronic Health Records
13.	CDSS	Clinical Decision Support Systems
14.	IS	Information System
15.	SDL	Service-Dominant Logic
16.	PCBS	Palestinian Central Bureau of Statistics
17.	UNRWA	United Nations Relief and Works Agency
18.	NGOs	Non-Governmental Organizations
19.	AHG	Arab Hospitals Group
20.	CCU	Cardiac Care Units
21.	ICU	Intensive Care Units
22.	SEM	Structural Equation Modeling
23.	CFA	Confirmatory Factor Analysis
24.	WE	Work Ethics
25.	SQ	Service Quality
26.	CV	Customer Value
27.	PI	Professionalism and Integrity
28.	CQS	Commitment to Quality and Safety
29.	TR	Teamwork and Responsibility
30.	CT	Communication and Transparency

31.	PPS-HIS	Patient Perception and Satisfaction with HIS
32.	CI-PAP	Communication Influence on Patient's Attitude and Perception
33.	B-HCD	Benefits of HIS in-Health Care Delivery
34.	T	Tangible
35.	R	Reliability
36.	RES	Responsiveness
37.	A	Assurance
38.	E	Empathy
39.	Inf-SE	Information Seeking
40.	Inf-SH	Information Sharing
41.	RB	Responsible Behavior
42.	PE-I	Personal Interaction
43.	FB	Feedback
44.	TOL	Tolerance
45.	H	Helping
46.	PS	Price Sensitivity
47.	PU-I	Purchase Intentions
48.	CB	Complaining Behavior
49.	WOM	Word-of-mouth
50.	α	Cronbach's Alpha
51.	CR	Composite Reliability
52.	AVE	Average Variance Extracted
53.	HTMT	Heterotrait-Monotrait
54.	VIF	Variance Inflation Factor

Chapter One

Introduction

1.1 Introduction and Background

In today's global healthcare landscape, there is a growing demand for excellence in healthcare services, highlighting the need for quality, affordability, and safety in patient care (Ashrafuzzaman et al., 2024). Organizations in an increasingly competitive global healthcare industry are constantly searching for ways to achieve and sustain competitive advantage (Azeem et al., 2021). Hospitals, in particular, face significant challenges related to service quality, technological advancements, and ethical practices (Asi, 2022). These challenges have a profound impact on the functionality and efficiency of the healthcare sector, particularly within the private hospital network (Phillimore et al., 2013). Healthcare systems in the United States, Europe, and other developed regions have experienced substantial transformations, driven by innovations in information technology, such as Electronic Health Records, telemedicine, and data analytics (Colombo et al., 2020). Moreover, ethical standards in healthcare delivery have gained prominence, with an increasing focus on transparency, patient autonomy, and corporate social responsibility (Olorunsogo et al., 2024).

Over the last few decades, healthcare organizations worldwide have been adopting various strategic frameworks to meet the growing demands for quality care while maintaining profitability (Chow-Chua & Goh, 2002; Conrad & Shortell, 1996; Ginter et al., 2018). With the rise of patient-centered care models, the importance of delivering high-quality services has grown substantially (Ali et al., 2021). Historically, the healthcare sector was largely insulated from competitive forces due to the essential nature of its services (Enthoven, 1993). However, shifts in policy, technological innovation, and patient awareness have introduced a more competitive landscape (Mady et al., 2023). This competitive environment requires hospitals to

go beyond the basics of care delivery and focus on building and sustaining unique competitive advantages, such advantages often stem from the integration of ethical practices, advanced information systems, and consistent service quality (Liu et al., 2022).

In the Middle East and North Africa region, healthcare systems have also undergone significant changes, though at a varying pace compared to their Western counterparts (Hiyari, 2020). Many countries, including those in the Gulf Cooperation Council (GCC), have invested heavily in healthcare infrastructure to match the growing needs of their populations (El-Saharty & Liu, 2021). The rapid growth of private healthcare providers in the region has increased competition, forcing hospitals to innovate and improve service quality through the development role of Information systems (Asi, 2022; Phillimore et al., 2013). Work ethics in the MENA region are often shaped by cultural, religious, and societal values, which influence both the perception and practice of ethical behavior in the workplace (Taghavi & Segalla, 2023).

The healthcare system in Palestine functions under distinct challenges, largely driven by persistent political conflict and economic instability (Asi, 2022). These factors have impacted both public and private healthcare sectors, with private hospitals facing significant pressure to provide high-quality care despite constrained resources and frequent interruptions. Achieving sustainable competitive advantage in this environment is especially difficult yet crucial for the survival of these hospitals (Dwikat et al., 2023). Palestinian private hospitals operate within a mixed healthcare system, where services are offered by public, private, and international entities, all facing similar challenges and limitations (Tavruri et al., 2023).

According to the World Health Organization, WHO (2023) report, the Palestinian economy presents both obstacles and opportunities for development. Despite being classified as a lower-middle-income region; economic growth has been observed. The GDP increased from USA\$ 51.2 million in 2010 to USA\$ 13,269.7 million in 2016, with per capita GDP also

seeing improvements. While these economic gains offer a foundation for potential growth in the healthcare sector, sustainable competitive advantage requires more than just economic stability. It calls for a strategic approach that aligns internal capabilities with external opportunities to create lasting value in the market. However, recent studies have highlighted the potential for healthcare performance improvements in Palestine, indicating that the private hospital sector could achieve competitive gains through better organizational practices (Abu-Eideh, 2014; Abu-Rmeileh & Iriqat, 2024; Badwan & Atta, 2020; Samarah, 2018; Sarsour & Dombrecht, 2016). By focusing on the interactions between work ethics, information systems, service quality, and customer value, this research will identify the pathways through which private hospitals can achieve sustainable competitive advantage and sustain their competitiveness in the long term.

This study seeks to explore how key factors—work ethics, service quality, and information systems—interact to influence customer value and contribute to sustainable competitive advantage in Palestinian private hospitals. It aims to address the gaps in existing literature by focusing on the unique challenges these hospitals face in conflict-affected regions and the strategies they employ to stay competitive. By examining these elements within the Palestinian context, the research will offer valuable insights into the role of ethical practices, technological integration, and service quality in achieving long-term success in the healthcare sector. To tackle these challenges, the study proposes the development of a Structural Model for Achieving Sustainable Competitive Advantage, integrating critical factors such as work ethics, information systems, service quality, and customer value. This comprehensive framework will enable private hospitals in Palestine to navigate their complex circumstances, improve operational efficiency, and enhance patient satisfaction in a region characterized by continuous adversity.

1.2 Study Significance and Justification

The healthcare industry plays an essential role in society by delivering high-quality, affordable, and safe services (Debie et al., 2022). In today's competitive and rapidly evolving landscape, private hospitals must continuously strive to enhance their performance, not only to meet patient expectations but also to remain sustainable (Kieft et al., 2014). This study addresses the growing need for a strategic framework that supports private hospitals in achieving Sustainable Competitive Advantage through a comprehensive examination of work ethics, information systems, service quality, and customer value.

Theoretically, this study contributes to the literature by offering a structural model that clarifies how hospitals can align their internal resources with external opportunities to maintain a competitive edge. Through this approach, the research fills a critical gap in understanding how private hospitals can use work ethics, advanced information systems, superior service quality, and customer value to achieve sustained success. Although previous studies have explored various dimensions of hospital competitiveness, there is a lack of integrated research that simultaneously examines the interplay of these key factors in private healthcare settings. (Fahy et al., 2004; Rodríguez et al., 2020; Singh et al., 2020; Vrontis et al., 2022).

From a practical perspective, the findings of this research will offer actionable insights for private hospitals looking to enhance patient care while staying financially viable. By investigating how work ethics directly influence service quality (Setiawan et al., 2021), the study provides hospital management with evidence-based strategies to improve service delivery. The role of information systems in streamlining healthcare operations and enhancing decision-making will also be highlighted, offering a clear pathway for healthcare administrators to invest in technologies that improve clinical outcomes and operational efficiency (Meri et al., 2019). Furthermore, the exploration of customer value underscores the importance of understanding patient needs in shaping the overall service experience (Mentzer

& Williams, 2001). The findings will help healthcare organizations develop strategies that prioritize patient satisfaction, loyalty, and value creation, contributing to their long-term competitiveness (AlBrakat et al., 2023). The insights provided by this research are especially relevant as the healthcare sector continues to navigate a landscape marked by rapid technological advancement and shifting patient expectations.

This research will make a unique contribution to both academia and industry. **Academically**, it will expand the body of knowledge on how strategic factors like work ethics, service quality, and information systems intersect to create value for patients in a competitive healthcare environment. **Industry** professionals will benefit from the clear, evidence-based strategies developed for improving service quality, patient care, and overall hospital competitiveness. Additionally, the study's exploration of SCA will provide healthcare leaders with a framework for long-term viability in an increasingly dynamic and competitive market.

1.3 Problem Statement and Defining of Research Gap

The healthcare industry is currently facing profound transformations, driven by changing patient expectations, rapid technological advancements, and intensifying competition among healthcare providers (Chauhan et al., 2024). Private hospitals, in particular, are confronted with the challenge of sustaining a competitive edge while ensuring the delivery of high-quality, patient-centered care (Ambrosio, 2020). Although leading private hospitals have successfully achieved sustainable competitive advantages through optimized work ethics, integrated information systems, and customer-focused service strategies (Haseeb et al., 2019), there is still a significant gap in understanding how these elements can be aligned to create long-term success across the broader healthcare sector.

Traditional competitive strategies, such as cost leadership or niche specialization, are increasingly susceptible to imitation and disruption in today's fast-evolving market (Climent &

Haftor, 2021). This necessitates innovative approaches, including leveraging unique resources, capabilities, and partnerships to maintain an advantage. The core problem is that there is limited research exploring how private hospitals can effectively respond to evolving patient demands, capitalize on technological advancements, and navigate competitive pressures to build SCAs that are sustainable over the long term (Giao et al., 2020).

Furthermore, the impact of work ethics on service quality remains unclear. It is vital to explore whether a strong work ethic, characterized by qualities like discipline, honesty, and dedication, can lead to enhanced healthcare delivery (Mishra & Tikoria, 2021). Similarly, while information systems are central to modern healthcare operations, there is a need to investigate how their adoption can optimize healthcare services and improve customer satisfaction (Smith & Eloff, 1999; Wardana, 2024). Finally, the challenge of defining and measuring service quality in private hospitals persists, and understanding its role in fostering customer value and satisfaction is critical for competitive success (Alrubaiee & Alkaa'ida, 2011; Endeshaw, 2020).

The opportunity lies in developing strategies that integrate work ethics, information systems, and service quality to maximize customer value, satisfaction, and loyalty. Without addressing these challenges, private hospitals may struggle to maintain a sustainable competitive position in an increasingly competitive healthcare landscape (Kourtis et al., 2021). Therefore, this research aims to fill the gap by identifying the critical factors that contribute to the alignment of these elements and proposing strategies that empower private hospitals to deliver superior healthcare services. The findings will have important implications for healthcare management, policy development, and the broader effort to improve the quality of care in the private healthcare sector.

1.4 Study Objectives and Questions

The overarching aim of this thesis is to develop a structural model that examines the interactions among work ethics, information systems, service quality, and customer value in achieving Sustainable Competitive Advantage in private Palestinian hospitals.

1.4.1 Research Objectives:

This research focuses specifically on private hospitals in Palestine and evaluates factors that contribute to achieving Sustainable Competitive Advantage from the patient's perspective. The study will not cover public hospitals, and the findings will be limited to the context of private healthcare within the region. The research will explore the influence of specific organizational and service-related factors such as work ethics, service quality, information systems, and customer value, which may not be applicable across other industries or regions. To achieve the research aim, the following specific research objectives have been set:

RO1: To identify the level of influence of work ethics, service quality, information systems, and customer value on achieving sustainable competitive advantages in private Palestinian hospitals from the patient's perspective.

RO2: To investigate the direct effect of customer value on sustainable competitive advantage in private Palestinian hospitals.

RO3: To assess the influence of work ethics, service quality, and information systems on customer value in private Palestinian hospitals from the patient's perspective.

RO4: To analyze the mediating role of customer value in the relationship between work ethics, service quality, information systems, and sustainable competitive advantage in private Palestinian hospitals.

1.4.2 Research Questions

To address the research objectives, the following research questions have been formulated:

RQ1: What is the level of influence of work ethics, service quality, information systems, and customer value on sustainable competitive advantages in private Palestinian hospitals from the patient's perspective?

RQ2: What is the direct impact of customer value on sustainable competitive advantage in private Palestinian hospitals?

RQ3: How do work ethics, service quality, and information systems affect customer value in private Palestinian hospitals from the patient's perspective?

RQ4: What is the mediating role of customer value in the relationship between work ethics, service quality, information systems, and sustainable competitive advantage in private Palestinian hospitals?

1.5 Study Limitations

While this research is designed with care and thoughtful methodology, it has certain limitations that must be acknowledged. Recognizing these limitations early on will not only provide transparency but also help future researchers build upon this study by addressing its shortcomings. Below are the key limitations of this study:

Scope Limitations: The research focuses specifically on private hospitals in Palestine, examining the interactions between work ethics, information systems, service quality, customer value, and sustainable competitive advantage. This narrow focus may limit the understanding of how these factors interact in other contexts, such as public hospitals or in countries with different healthcare structures (Savolainen, 2009). The study does not account

for potential interactions with other variables not included in the model, which could affect the overall conclusions.

Methodological Constraints: This research primarily employs quantitative methods, which, while useful for identifying patterns and relationships, may oversimplify the complexities of the hospital environment (Saba & Tagliagambe, 2023). The quantitative approach might not fully capture the nuances of the patient experience or the internal dynamics of hospital operations (Austin & Sutton, 2014). Additionally, using surveys or structured data collection methods could lead to biased or incomplete responses, potentially affecting the validity of the results (Wolf et al., 2021).

Resource Constraints: Due to time limitations, the research will be conducted with a relatively small sample size and may face constraints in gathering comprehensive data from all private hospitals in Palestine. The constrained timeframe may also prevent longitudinal tracking of changes over time, which would provide a more dynamic understanding of the relationships among the variables (Murray et al., 2022).

Generalizability of Findings: The results of this study may not be directly applicable to other regions or healthcare systems. Unique characteristics of the Palestinian healthcare sector, such as regulatory frameworks, local economic conditions, and patient demographics, could limit the generalizability of the findings to other countries or sectors. It is important to note that the findings may not fully capture the complexities of healthcare systems in different cultural or economic settings (Tonelli et al., 2018).

1.6 Structural Outline

Chapter One – Introduction: In this chapter, the context and background of the study are introduced, including the challenges faced by Palestinian private hospitals in achieving sustainable competitive advantage. The study's justification is discussed, highlighting the need

for a strategic framework that integrates work ethics, information systems, service quality, and customer value. The problem statement outlines the gap in current research and the need for innovative strategies. Research aims, objectives, and questions are clearly defined, and the study's limitations are acknowledged.

Chapter Two - Literature Review: This chapter will review existing literature related to the key factors influencing sustainable competitive advantage in the healthcare sector. It will cover theories and models relevant to work ethics, information systems, service quality, and customer value, and how these elements interact to impact competitive success. The review will also address the unique challenges faced by private hospitals in conflict-affected regions, particularly in Palestine, and the existing gaps in the literature that this research aims to address.

Chapter Three - Methodology: This chapter will outline the research design and methodology used to explore the interactions among work ethics, information systems, service quality, and customer value in achieving sustainable competitive advantage. It will detail the research approach, data collection methods, and analysis techniques. The chapter will also discuss the rationale for choosing quantitative methods, potential biases, and how these limitations will be addressed.

Chapter Four—Results: This chapter presents the results of the data analysis. It includes a detailed account of how work ethics, information systems, service quality, and customer value influence sustainable competitive advantage in private Palestinian hospitals. The chapter presents statistical findings and interprets the data in relation to the research objectives and questions.

Chapter Five – Discussion: This chapter will discuss the implications of the research findings in the context of existing literature. It will analyze how the identified factors contribute to sustainable competitive advantage and offer insights into how private hospitals in Palestine

can leverage these elements to enhance their performance. The discussion will also address the study's limitations and propose recommendations for future research.

Chapter Six - Conclusion and Recommendations: The final chapter will summarize the key findings of the research, highlight the contributions to both theory and practice and provide actionable recommendations for private hospitals in Palestine. It will also outline potential avenues for future research and discuss the broader implications of the study's results for the healthcare sector.

1.7 Conceptual Framework

The conceptual framework of this study comprises distinct components aimed at assessing and understanding the interrelationships among Work Ethics, Information Systems, Service Quality, and Customer Value within the context of private hospitals. These components are integral to elucidating the mechanisms through which these variables interact and contribute to the attainment of sustainable competitive advantages.

1.7.1 Conceptual Definitions

Sustainable Competitive Advantages: encompass the enduring strengths and distinctive qualities of private hospitals that enable them to maintain a competitive edge over time. This includes factors such as high-quality service provision, patient loyalty, positive word-of-mouth, and financial stability.

Work Ethics: refers to a set of moral principles, values, and behaviors that guide the attitudes and conduct of healthcare professionals in private hospitals. It encompasses qualities such as honesty, discipline, accountability, diligence, teamwork, creativity, and dedication in the context of their work.

Information Systems: encompass the technological tools, processes, and infrastructure utilized within private hospitals for data collection, management, analysis, and the delivery of

essential healthcare information. These systems facilitate the seamless flow of information among various hospital departments and functions.

Service Quality: pertains to the degree to which private hospitals meet or exceed patient expectations in the delivery of healthcare services. It encompasses both tangible aspects (e.g., medical outcomes) and intangible aspects (e.g., communication, empathy) that contribute to patient satisfaction.

Customer Value: represents the perceived benefits and advantages that patients derive from their interactions with private hospitals. It includes psychological benefits (e.g., peace of mind), functional benefits (e.g., effective treatment), and experiential benefits (e.g., a positive healthcare journey), weighed against the associated costs (e.g., time, and financial expenditure).

Demographic Factors: These are specific attributes of a population, such as age, race, and sex. They encompass socioeconomic data that can be quantified, such as job status, educational attainment, income level, marriage rates, and birth dates, among others.

1.7.2 Conceptual Model:

The conceptual model encompasses the following variables: Work Ethics, Information Systems, and Service Quality, which serve as the independent variables. Customer Value is a mediator, while Sustainable Competitive Advantage is the dependent variable. This relationship is illustrated in the model as follows:

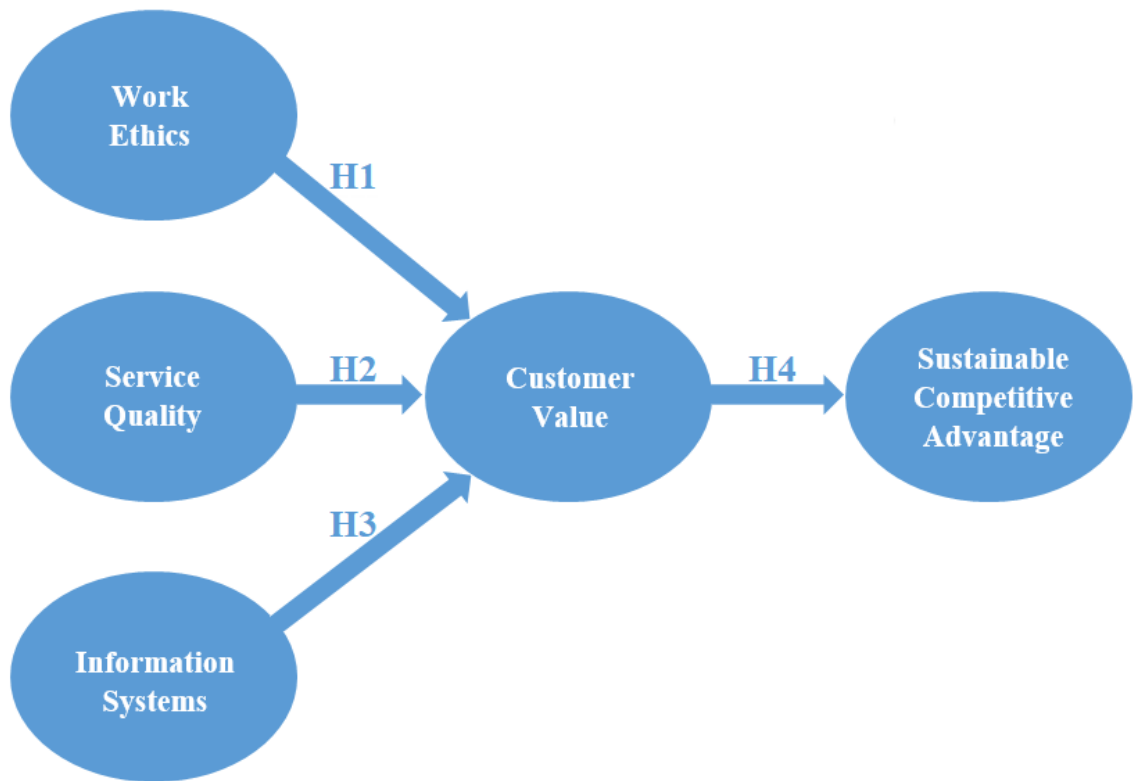


Figure (1.1) Conceptual Framework of the Study

Based on this model, the current research is testing the following hypotheses:

- H1:** Work ethics has a positive effect on customer value.
- H2:** Service quality has a positive impact on customer value.
- H3:** Information systems have a positive effect on customer value.
- H4:** There is a relationship between customer value and sustainable competitive advantages.
- H5:** Customer value significantly mediates the relationship between information systems, service quality, work ethics, and sustainable competitive advantage in the healthcare sector.

1.7.3 Operational Definitions

1.7.3.1 Dependent Variable

Sustainable competitive advantage: A descriptive study was conducted by Warraich et al. (2013) to determine the service differentiators employed in private hospitals and the extent

to which they contribute to sustainable competitive advantage. 12 indicators are divided into seven categories: (a) Product, (b) People, (c) Place, (d) Price, (e) Physical evidence, (f) Process, and (g) Promotion. Five-point- Likert- scale will be used to assess each indicator, from (5) strongly agree to (1) strongly disagree.

1.7.3.2 Independent Variable

Work Ethics: refers to a set of moral principles, values, and behaviors that guide the attitudes and conduct of healthcare professionals in private hospitals. The indicators used to measure the work ethics construct are adopted from the study by Boatwright and Slate (2002). A total of 8 indicators are used under 4 categories including (a) Professionalism and Integrity, (b) Commitment to Quality and Safety, (c) Teamwork and Responsibility, (d) Communication and Transparency.

Information Systems will be operationalized by evaluating the extent to which private hospitals have adopted and integrated advanced technological solutions for data management and communication. 13 indicators will be used to measure Information Systems. these indicators were utilized and validated by Asare (2016) under three dimensions, which are: (a) Patients Perception and Satisfaction with HIS, (b) HIS Communication Influence on Patient's Attitude and Perception, and (c) Benefits of HIS in Health Care Delivery, Patients Assessment.

Service Quality: The SERVQUAL framework developed by A. Parasuraman et al. (1988) is an important method of evaluating service quality for service industries. This approach suggests that customer satisfaction depends upon many elements rather than a singular factor. Service quality is the disparity between consumers' expectations of service and their assessment of the service they receive. 27 indicators distributed based on five dimensions of quality, which are: (a) Tangible, (b) Reliability, (c) Responsiveness, (d) Assurance, and (e) Empathy.

Customer Value will be assessed through 26 indicators distributed based on 7 dimensions of Customer Value, these indicators were utilized and validated by Yi and Gong (2013), which are: (a) Information seeking, (b) Information sharing, (c) Responsible behavior, (d) Personal interaction, (e) Feedback, (f) Helping, (g) Tolerance.

Table 1.1 provides a summary of the conceptual and operational definitions of the research variables, including the sources and measurement scales for each construct.

Table (1.1) Conceptual and Operational Definitions

Construct	Type of Construct	Conceptualization	Operationalization	Source/ Author(s)	Scale
Sustainable Competitive Advantage	Dependent Variable	Encompass the enduring strengths and distinctive qualities of private hospitals that enable them to maintain a competitive edge over time.	12 indicators are divided into 7 categories: (a) Product, (b) People, (c) Place, (d) Price, (e) Physical evidence, (f) Process, and (g) Promotion.	Warraich, K. M., Warraich, I. A., & Asif, M. (2013).	Five-point Likert scale
Work Ethics	Independent Variable	A set of moral principles, values, and behaviors that guide the attitudes and conduct of healthcare professionals in private hospitals.	8 indicators are used under 4 categories including (a) Professionalism and Integrity, (b) Commitment to Quality and Safety, (c) Teamwork and Responsibility, and (d) Communication and Transparency.	Boatwright, J. R., & Slate, J. R. (2002).	Five-point Likert scale
Information Systems	Independent Variable	Technological tools, processes, and infrastructure are utilized within private hospitals for data collection, management, analysis, and the delivery of essential healthcare information.	13 indicators are used under 3 dimensions, which are: (a) Patient Perception and Satisfaction with HIS, (b) HIS Communication Influence on Patient's Attitude and Perception, and (c) Benefits of HIS in Health Care Delivery, Patients Assessment.	Asare, S. (2016).	Five-point Likert scale
Service Quality	Independent Variable	This pertains to the degree to which private hospitals meet or exceed patient expectations in the delivery of healthcare services.	27 indicators distributed based on 5 dimensions of quality, which are: (a) Tangible, (b) Reliability, (c) Responsiveness, (d) Assurance, and (e) Empathy.	Parasuraman, A., Zeithaml, V. A., & Berry, L. (1988).	Five-point Likert scale
Customer Value	Mediator Roll Variable	represents the perceived benefits and advantages that patients derive from their interactions with private hospitals.	26 indicators distributed based on 7 dimensions of Customer Value, these indicators were utilized and validated by Yi and Gong (2013), which are: (a) Information seeking, (b) Information sharing, (c) Responsible behavior, (d) Personal interaction, (e) Feedback, (f) Helping, (g) Tolerance.	Yi, Y., & Gong, T. (2013).	Five-point Likert scale

Chapter Two

Theoretical Framework

2.1 Introduction

This chapter builds on related literature on work ethics, information systems, service quality, customer value, and sustainable competitive advantage. Our objective is to link theoretical constructs with empirical evidence, drawing upon a diverse array of academic disciplines with a particular focus on the healthcare sector. Beyond merely recounting existing literature, this section investigates the interplay between the variables at the heart of our study. It sheds light on the complex dynamics that shape these concepts, contributing to an enriched understanding of their interactions.

2.2 Conceptual Foundation

2.2.1 Sustainable Competitive Advantage

Sustainable Competitive Advantage is a critical concept for organizations across various sectors, as it underpins long-term success and market leadership (Paek et al., 2019). SCA enables an organization to achieve and maintain a superior market position that is difficult for competitors to replicate (Kasyoka, 2010). This advantage can originate from various sources such as brand recognition, technological advancements, and product innovation (Muita, 2013). The Resource-Based View (RBV) of the firm offers a deeper understanding of SCA by highlighting the importance of valuable, rare, inimitable, and non-substitutable resources. These resources can be both tangible, such as advanced medical technologies and facilities, and intangible, such as organizational culture and brand reputation (Barney, 1991).

The essence of sustaining competitive advantage lies in how effectively an organization acquires, develops, and deploys these resources in ways that competitors cannot easily replicate

(Amaya et al., 2024). Additionally, the continuous innovation of services and processes helps keep a unique value proposition and differentiates the organization from its competitors (Barney, 1991; Porter, 1985). Ultimately, sustaining competitive advantage requires a dynamic approach to resource management and strategic planning, ensuring that the organization remains resilient and adaptable in a competitive and evolving market environment (Wernerfelt, 1984).

Achieving a sustainable competitive advantage is important for long-term business success, focusing on economies of scale, unique distribution channels, strong supplier relationships, and exceptional customer service (Reuter et al., 2010). Factors like industry structure, market trends, government regulations, technological advancements, company culture, and financial resources play significant roles in maintaining this advantage (Rajapathirana & Hui, 2018). Strategies for sustaining competitive advantage include differentiation, cost leadership, and focus, each with its benefits and challenges. Continuous innovation, market adaptation, enhancing customer experience, and leveraging technology are essential steps toward gaining and maintaining a competitive edge (Kuncoro, 2017).

Innovation culture, managerial ethics, and creative ideas are cornerstone elements that play a pivotal role in shaping and strengthening competitive strategies within organizations. Each of these elements contributes to a company's ability to sustain a competitive advantage in a rapidly evolving market landscape. A study conducted by Ali and Anwar (2021) focused on the influence of strategic competitiveness on competitive advantage. The researchers used four dimensions of strategic competitiveness (competitive strategies, innovation culture, managerial ethics, and innovative ideas) to assess the analysis. The findings indicate that competitive strategies, skills & competencies, entrepreneurial thought, and creative ideas have a significant and positive impact on competitive advantage. and the findings suggest that empowerment and

organizational culture play a crucial role in fostering innovation and enhancing competitive advantage.

In the healthcare industry, achieving a sustainable competitive advantage is important for organizations aiming to thrive amidst the sector's rapidly evolving landscape. This competitive edge enables healthcare providers to distinguish themselves from rivals, ensuring long-term success and stability in a market characterized by intense competition, regulatory complexities, and changing patient needs (Gavil & Koslov, 2016). By leveraging unique strengths such as advanced technological capabilities, superior patient care, innovative service delivery models, or efficient operational processes, healthcare organizations can effectively secure a dominant position. This not only enhances their ability to attract and retain patients but also positions them favorably in terms of negotiating with insurers and partners, thus ensuring sustained growth and profitability in the challenging healthcare environment (Judge & Ryman, 2001). A sustainable competitive advantage in healthcare refers to the distinct and long-lasting characteristics, strategies, or attributes that enable healthcare firms to continually beat their competitors (Barney, 1991). It refers to a combination of distinct characteristics and behaviors that identify healthcare providers in a crowded field while also positioning them for long-term success and resilience.

Sustainable competitive advantage in healthcare extends far beyond the realm of financial profitability (Anyim, 2012). It encapsulates the capacity to consistently deliver high-quality patient care, achieve exceptional patient satisfaction, and adapt to the dynamic demands of the healthcare environment. In essence, it reflects a healthcare organization's ability to thrive in the face of ever-changing regulations, technological advancements, and shifting patient expectations.

The pursuit of long-term competitive advantage in healthcare is based on the fundamental idea that excellent healthcare results, patient experiences, and operational

efficiencies are not only compatible but also synergistic (DAN & Ion, 2022). Healthcare firms that thrive in these areas are typically caught in a virtuous cycle of growth, in which improved reputation and patient loyalty lead to higher market share and financial stability. Research conducted by Lestari et al. (2021) and Singh et al. (2020) provided a comprehensive literature review focusing on sustainable competitive advantage in the hospital industry. The studies concluded that hospitals need to establish a strategy to stay competitive in response to policy changes to maintain their positions in the industry, and suggest that changes in strategy should be tailored to the specific type of hospital and the desired positioning results.

In Palestine, achieving a Sustainable Competitive Advantage in the healthcare sector requires leveraging distinct resources and strengths to create significant value and maintain a leading market position (Mousa, 2019). This advantage can arise from unique capabilities such as specialized medical expertise, advanced healthcare technologies, and exceptional patient care services. Investing in cutting-edge medical technologies and fostering innovation in healthcare delivery are crucial strategies for maintaining SCA (Kasyoka, 2010; Paek et al., 2019). Furthermore, enhancing healthcare service quality through strong organizational culture and ethical practices can significantly contribute to an organization's competitive edge (Barney, 1991).

Palestine's healthcare sector can capitalize on its existing resources and strengths by integrating sustainable practices and fostering partnerships with international organizations to improve healthcare infrastructure and service delivery (Giacaman et al., 2003). For instance, the adoption of telemedicine and digital health solutions can expand access to care and improve efficiency, addressing the needs of underserved populations and enhancing overall healthcare quality (Ortega et al., 2020). Additionally, Palestine's unique cultural and historical context offers opportunities for developing specialized medical tourism initiatives, which can attract

patients seeking unique treatment options while contributing to economic growth (Richards et al., 2012).

Investing in education and training for healthcare professionals is also essential to build a skilled workforce capable of driving innovation and maintaining high standards of care (Ramadan et al., 2020). By focusing on these areas, Palestine can enhance its competitive position in the global healthcare market, leveraging its strengths to achieve and sustain a significant competitive advantage (Ali & Anwar, 2021).

Achieving sustainable competitive advantage in healthcare in Palestine faces limitations due to political instability, restricted access to resources, economic constraints, and infrastructure challenges. The political situation can impact the delivery and development of healthcare services, while economic limitations may restrict investments in technology and training essential for competitive advantage. Additionally, access to high-quality healthcare inputs is often hampered by movement restrictions and border controls, affecting the supply chain and availability of medical supplies. Infrastructure challenges, including shortages in healthcare facilities and technology, further constrain the ability to provide advanced care and innovation (Kheir-Mataria, 2019). Amidst economic improvements in Palestine, as reported by the (WHO, 2023), there's a burgeoning potential for the healthcare sector to gain a sustainable competitive advantage. This economic progress paves the way for healthcare services in Palestine to develop and strengthen, contributing to a more competitive healthcare landscape.

2.2.2 Customer Value

Customer value, in a broad sense, encapsulates the perceived benefits that a customer gains from a product or service in comparison to the costs incurred to acquire it (Rintamäki et al., 2007). This concept is pivotal across various industries as it directly influences consumer decisions, loyalty, and overall satisfaction. Zeithaml (1988) defines customer value as the

consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given. This evaluation extends beyond the financial aspect, encompassing quality, convenience, and emotional satisfaction as key components of value (Kotler & Keller, 2009).

Customer value is increasingly recognized as a multi-dimensional construct that goes beyond the traditional cost-benefit analysis (Huang & Zhang, 2008). It encapsulates elements such as emotional connection, brand reputation, and post-purchase services, which collectively contribute to the customer's perception of value (Parvin, 2014). Holbrook (1994) introduced a typology of consumer value, highlighting the experiential, symbolic, and functional aspects of value that businesses need to address to enhance customer satisfaction and loyalty effectively.

Strategies for increasing customer value include prioritizing customer experience, personalizing support interactions, and offering multichannel support options (Melero et al., 2016). Recognizing the importance of customer feedback, both in understanding the current value delivered and in identifying areas for improvement, is crucial (Kumar & Rajan, 2020). Faced with discerning and knowledgeable customers, worldwide competition, and fluctuating economic conditions, providing value to stakeholders and markets has become more essential than ever before. In boardrooms across the world, there's a strong belief that all significant marketing efforts should focus on generating value for customers (Leroi-Werelds, 2019). Implementing changes based on this feedback can significantly enhance customer satisfaction and loyalty.

The advent of digital technology and data analytics has provided businesses with new avenues to enhance customer value (Gellweiler & Krishnamurthi, 2020). Companies are now leveraging technology to personalize the customer experience, predict consumer needs, and deliver tailored solutions that significantly increase perceived value (Shang & Chiu, 2022). For instance, AI-driven recommendations on e-commerce platforms exemplify how technological

innovation can enhance the customer shopping experience by offering personalized product suggestions based on browsing history and purchase behavior (Huang & Rust, 2018). The concept of co-creation, where customers are actively involved in the creation of the product or service, has emerged as a powerful strategy for enhancing customer value. Prahalad and Ramaswamy (2004) suggest that co-creation allows for more personalized and meaningful experiences, as customers play an integral role in shaping the outcome. This collaborative approach not only increases the perceived value of the offering but also strengthens the customer's emotional investment in the brand.

Recently, sustainability and ethical considerations have become increasingly important in consumers' perception of value (Reddy et al., 2023). Customers today are more likely to associate value with products and services that are not only economically beneficial but also socially responsible and environmentally sustainable. Sheth et al. (2011) argue that integrating sustainability into business practices can significantly enhance customer value by aligning with the values and beliefs of the modern consumer, thereby fostering brand loyalty and competitive advantage.

In the context of the healthcare industry, customer value takes on a nuanced dimension, often referred to as patient value. Here, the concept transcends conventional metrics of cost and quality, integrating patient experiences, outcomes, and the broader impacts on health and well-being. Porter (2010) emphasizes that the ultimate goal of healthcare should be to maximize value for patients, defining it as the health outcomes achieved per dollar spent. This approach shifts the focus from the volume and profitability of services provided to the actual results that matter to patients. The implementation of customer value strategies involves a shift towards value-based care, where the focus is on outcomes rather than volume. Emphasizing preventative care, personalized treatment plans, and patient engagement in healthcare decisions are pivotal. Kaplan and Porter (2011) highlight the importance of measuring health outcomes

that matter to patients as a key component of value-based healthcare. By focusing on delivering superior patient value, healthcare providers can achieve better health outcomes at lower costs, thereby enhancing their competitive position in the market.

Understanding and enhancing patient value is of paramount importance in healthcare for several reasons (Teisberg et al., 2020). Firstly, it aligns healthcare providers' objectives with patient needs, promoting a more patient-centric approach to care. This is critical in an era where patients are increasingly informed and have higher expectations regarding their healthcare experiences (Wallace & Teisberg, 2016). Secondly, focusing on patient value encourages the healthcare system to concentrate on achieving the best possible outcomes, which can lead to improved quality of care and patient satisfaction (Teisberg et al., 2020). Additionally, as healthcare costs continue to rise globally, emphasizing value can contribute to more sustainable healthcare systems by ensuring that resources are allocated toward the most effective and efficient interventions (Bodenheimer & Sinsky, 2014).

The research identified numerous elements influencing customer value and perceptions concerning service delivery, including service personnel, service processes, and physical facilities, which are prevalent strategies for service differentiation in private hospitals. It highlighted the proactive engagement of patients in managing their health through diverse activities, contributing to enhanced customer satisfaction and loyalty. Patients and their families, who sought care in these private hospitals, showed a willingness to endorse these facilities to others (Anyim, 2012; Danaher et al., 2023; Peng et al., 2022).

In Palestine, improving customer value in the private healthcare sector is vital for addressing the sophisticated expectations of well-informed patients while dealing with global competitive pressures and economic uncertainties (Daqar & Constantinovits, 2020). Palestinian healthcare organizations have the opportunity to distinguish themselves through strategies like customizing patient support, utilizing various communication channels, and

proactively incorporating patient feedback into enhancements of service delivery (Asi, 2022). These initiatives are crucial for fostering a healthcare setting centered around patient needs. Moreover, highlighting the significance of involving patients in their healthcare management demonstrates a profound effect on boosting customer satisfaction and loyalty (Nguyen & Nagase, 2021). By emphasizing these approaches, Palestine has the potential to propel its healthcare sector forward, delivering exceptional patient value and securing a lasting competitive edge.

2.2.3 Work Ethics

Work ethics represent a collection of values based on discipline, responsibility, and dedication, crucial for both individual performance and organizational success. Characterized by attributes such as diligence, reliability, and a strong commitment to quality, work ethics shape how employees approach their tasks and interact with colleagues (Weaver, 2017). These principles are essential for maintaining high productivity and ensuring that work is performed to the highest standards (Trevino & Nelson, 2021). Work ethics encompass not just the quantity of work but also emphasize the quality of contributions, workplace behavior, and interpersonal relationships (Osibanjo et al., 2015).

Having ethics requires that employees should always be polite, friendly, relentless, and smiling, but still responsible. This attitude is consistent with Gronroos (1990), who claims that customer perceptions of service quality are tied to how customers obtain services from companies in the interaction between buyers and sellers. Work ethics determine the quality of services (Maukar, 2015). According to Olsen et al. (2017), the development of a work culture that enhances work ethics can boost job satisfaction, establish closer relationships, promote discipline, minimize functional control, increase efficiency, foster a desire to learn more and deliver the best for the business and environment.

Additionally, work ethics are closely related to organizational culture and leadership. Leaders who model strong ethical behavior set a standard for their teams, reinforcing the importance of ethical practices in everyday operations. This leadership role is essential for embedding work ethics into the organizational culture and ensuring that all members understand and adhere to the expected standards (Brown & Treviño, 2006). A positive organizational culture that values ethics encourages employees to act with integrity and contribute positively to the workplace environment.

In the healthcare sector, work ethics are particularly critical due to the direct impact they have on patient care, safety, and the overall effectiveness of healthcare services. Healthcare professionals are entrusted with significant responsibilities, given the potential consequences of their work on patients' lives. Upholding high ethical standards is vital to maintaining patient trust, ensuring quality care, and fostering a positive work environment (Carney, 2011). For example, adherence to ethical guidelines and practices ensures that patient care is delivered with integrity, respect, and compassion, which is crucial for building strong patient-provider relationships and enhancing patient satisfaction.

Research underscores the importance of work ethics in healthcare settings. For instance, Yeboah et al. (2022) conducted a study on workplace ethics and organizational performance at Vednan Medical Center in Kumasi, Ghana. Their findings highlight that ethical conduct is a significant determinant of success in healthcare organizations. The study emphasizes that a strong ethical culture contributes to improved organizational performance by fostering trust, collaboration, and effective communication among healthcare staff. Moreover, work ethics in healthcare are linked to several critical outcomes, including reduced errors, increased efficiency, and enhanced team dynamics. Employees with strong work ethics are more likely to engage in practices that promote safety and quality, adhere to best practices, and

continuously seek improvements in their performance (Bowers et al., 2003). This is particularly important in high-stakes environments where errors can have serious consequences.

The work ethics in Palestine, particularly in sectors such as healthcare, are deeply influenced by a complex interplay of cultural, economic, and political factors (Collier & Kienzler, 2018). This dynamic is critical in understanding how organizations, including healthcare providers, navigate their operational and strategic challenges to ensure the delivery of high-quality services (Buchanan, 2020). The challenging environment, characterized by resource constraints and political instability, makes the cultivation of a strong work ethic even more critical to ensure high-quality healthcare delivery.

2.2.4 Service Quality

Service quality is defined as the difference between customer expectations of service and their perceptions of the actual service delivered (Parasuraman et al., 1988). High service quality is important for gaining a competitive advantage, ensuring customer satisfaction, loyalty, and ultimately, profitability (Wijetunge, 2016). It is particularly vital in sectors where the service component plays a significant role, such as healthcare, hospitality, and banking.

The SERVQUAL model, developed by Parasuraman et al. (1988), is a foundational framework for measuring service quality based on the gap between customer expectations and actual service experiences. It identifies five key dimensions crucial for assessing service quality: Tangibles (the physical aspects such as facilities and equipment), Reliability (the consistency and accuracy in delivering promised services), Responsiveness (the willingness and promptness to help customers), Assurance (the competence and courtesy of employees and their ability to instill confidence), and Empathy (the personalized attention and understanding provided to customers). These dimensions collectively help organizations identify service gaps, enhance customer satisfaction, and improve overall service delivery by addressing specific

areas where customer expectations may not align with their actual experiences (Berry & Parasuraman, 1990).

Service quality plays a critical role in achieving sustainable competitive advantage, a study by Dominic et al. (2010) underscores that highly competitive market landscape, merely offering superior products is not sufficient for maintaining a competitive edge. Instead, the integration of high-quality service offerings stands as a pivotal differentiator that can significantly influence customer loyalty, satisfaction, and the overall market position of a company. This, in turn, enhances the company's reputation and brand value, contributing to long-term business success and sustainability.

The conceptual underpinnings of service quality in the healthcare sector are multidimensional, incorporating aspects such as clinical effectiveness, patient safety, patient-centeredness, accessibility, communication, emotional support, and the physical environment (Darzi et al., 2023). These dimensions reflect the complex nature of healthcare delivery, where quality extends beyond clinical outcomes to include patient experiences, safety protocols, and the overall care environment. Donabedian (1988) provides a systematic framework for evaluating healthcare quality by categorizing it into three key components: structure, process, and outcomes. This model emphasizes the interconnectedness of healthcare facilities, the delivery of care, and patient outcomes, illustrating how each component influences and relates to the others (Donabedian, 1988). Additionally, the adaptation of the SERVQUAL model to healthcare highlights the importance of reliability, responsiveness, assurance, empathy, and tangibles, tailored to the specific nuances of healthcare services (Parasuraman et al., 1988).

In Palestine, service quality plays a pivotal role in fostering economic growth and sustainability, as high service standards can enhance corporate reputation and customer loyalty, helping local companies differentiate themselves from regional competitors (Atieh, 2021). In sectors like tourism, which have the potential to grow despite political tensions, the integration

of quality service offerings can help attract both local and international customers, bolstering the overall industry.

Additionally, service quality is crucial across sectors such as healthcare, banking, and tourism, maintaining high service quality is essential for enhancing customer satisfaction and loyalty, and ultimately driving economic development (Almasarweh et al., 2024). A high level of service quality is seen as a significant driver for competitive advantage, which is especially critical in developing regions like Palestine that face challenges related to infrastructure and political instability (Morrar & Gallouj, 2016).

Research in the Palestinian context has found that improving responsiveness and empathy in service delivery significantly contributes to customer satisfaction, particularly in the healthcare sector where patients value personalized care and timely responses (Alayoubi et al., 2020; Aljuneidi, 2023; Atieh, 2021; Kanan et al., 2023). Furthermore, in banking, reliability and assurance are critical in establishing trust, given the economic uncertainty and regulatory challenges in the region.

2.2.5 Information System

An information system is a coordinated network of components designed to collect, process, store, and distribute information to support various organizational functions such as decision-making, coordination, control, analysis, and visualization (Laudon & Laudon, 2004). It comprises several key elements: hardware, which includes physical devices like computers and servers; software, which consists of applications and operating systems that manage hardware resources and perform specific tasks; data, the raw facts processed into meaningful information; procedures (processes), the methods and workflows used to handle data; and people, including end-users and IT professionals who interact with the system (Lenz & Kuhn,

2004; Martikainen et al., 2020; Watson, 2007) Each component plays a critical role in ensuring that the information system operates effectively and meets organizational needs.

The Resource-Based View (RBV) posits that Information Systems (Ramadan et al., 2020) can act as a significant strategic asset, providing organizations with a sustainable competitive advantage if they exhibit characteristics of being valuable, rare, inimitable, and non-substitutable (Barney, 1991). An Information System becomes valuable when it enhances efficiency, productivity, and decision-making, thereby enabling an organization to better achieve its objectives and outperform competitors (Hla & Teru, 2015). This comprehensive view underlines the strategic significance of Information Systems investments and management, emphasizing that systems aligning with these criteria can become crucial to an organization's capability to secure a lasting competitive edge in the marketplace.

Information systems are crucial for various sectors, including healthcare, where they support clinical decision-making, patient management, and operational efficiency. For instance, Electronic Health Records systems streamline patient data management, improve coordination among healthcare providers, and enhance patient care outcomes (Li et al., 2021). By integrating hardware, software, data, procedures, and people, information systems facilitate timely and accurate information delivery, support operational processes, and aid in strategic planning and performance monitoring (Turban et al., 2021). Effective management and utilization of these components are essential for maximizing the benefits of an information system and achieving organizational goals (McLeod & Schell, 2014).

In the healthcare industry, Information Systems are pivotal in securing a sustainable competitive advantage by enhancing operational efficiencies, improving the quality of patient care, and fostering innovation (Hermes et al., 2020). The automation of administrative tasks and efficient workflow facilitation through IS, such as electronic health records (EHRs) and health information exchanges (HIEs), significantly reduce operational costs, enabling

healthcare providers to focus more on patient care (Menachemi & Collum, 2011). These systems are instrumental in supporting clinical decision-making, offering comprehensive access to patient data that improves diagnosis accuracy and treatment personalization (Chaudhry et al., 2006). Embedded clinical decision support systems (CDSS) within IS provide evidence-based recommendations and critical alerts, thus enhancing patient safety and care quality (Osheroff et al., 2012).

Furthermore, IS empowers patients through engagement tools like patient portals and telemedicine services, providing easy access to health information and healthcare providers, which promotes better health management and outcomes (Ricciardi et al., 2013). IS also plays a vital role in healthcare research and innovation, analyzing vast datasets to identify trends, improve care delivery models, and develop novel treatments, further driving the competitive edge of healthcare organizations (Bates et al., 2014). This comprehensive impact highlights the strategic importance of IS as an essential asset for achieving and maintaining a competitive advantage in the rapidly evolving healthcare landscape.

In Palestine, IS plays a crucial role across sectors such as healthcare, education, and business, providing essential infrastructure for improved operational efficiency and decision-making (Al Shobaki & Abu-Naser, 2017). Effective IS management enhances organizational capabilities, leading to better performance and competitive advantage, even in the challenging environment of Palestine (Dwikat et al., 2022). The adoption and integration of IS in Palestine have proven to be critical in sectors like healthcare, where systems such as Electronic Health Records (EHRs) and Health Information Exchanges (HIEs) are increasingly being used to improve patient care, coordination, and management (Venkateswaran et al., 2022). These systems enhance operational efficiencies by streamlining administrative tasks, allowing healthcare providers to focus more on patient care while reducing costs (Menachemi & Collum, 2011). Additionally, IS empowers healthcare providers through clinical decision support

systems (CDSS), which offer real-time, evidence-based recommendations that improve diagnosis accuracy and patient safety (Osheroff et al., 2012).

Palestinian organizations are also leveraging IS for educational purposes, enabling e-learning platforms and remote education services, which have gained significance, especially during periods of conflict and movement restrictions (Khalidi, 2020). Moreover, businesses in Palestine are adopting IS to enhance communication, improve customer service, and streamline supply chains, contributing to their competitiveness in both local and international markets (Ramadan et al., 2020). The strategic importance of IS in Palestine is further emphasized by the Resource-Based View (RBV), which suggests that IS can provide organizations with a sustainable competitive advantage by being valuable, rare, and inimitable (Barney, 1991).

2.3 Theory Building and Hypotheses Development

2.3.1 Influence of work ethics on customer value

A firm's reputation depends on its ethical culture, and having good business ethics can give a company a competitive advantage (Mella & Gazzola, 2015). Business ethics is one of the most valuable intangible assets for companies competing. A strong ethical culture contributes to the creation of a brand that attracts top talent and fosters shareholder trust (Azmi, 2006). Companies can establish a sustainable worldwide competitive advantage by implementing a strategy that no one else can replicate. Furthermore, organizations must adapt in order to maintain a long-term competitive advantage. One of the most essential components in maintaining a competitive advantage is an organizational culture that depends on good ethics, which is one of the reasons why a firm wants to become a great place to work (Cahyono & Hakim, 2020; Peterson, 2013; sleeknote, 2023).

According to Azmi (2006), business ethics will always help the organization, both in the short and long term, because it can boost competitive advantage. In the same line,

Barutçugil (2004) indicated that organizations with ethics gain a variety of benefits, including increased efficiency, employee accountability, communication efficiency, and competitive advantage. This notion on the effect of work ethics on competitive advantage is also reinforced in several recent studies (Gronroos, 1990; Maukar, 2015; Rahmantlya & Djazuli, 2019).

The code of work ethics, which governs the conduct and behavior of professionals in any specific industry, is an important component of any profession (Bateman, 2012). A professional code of work ethics is also a tool for ensuring that professionals provide quality service and successfully meet the demands of their clients, as well as prohibiting inappropriate professional behavior (Wainaina et al., 2015). Most businesses have established a professional code of conduct that establishes standards of honesty, professionalism, and confidentiality that employees must follow in the workplace.

Organizations characterized by strong ethical cultures are seen as more trustworthy by consumers, more attractive as workplaces for top talent, and more sustainable in the long term (Cahyono & Hakim, 2020). Boatwright and Slate (2002) highlight how ethical practices contribute to organizational efficiency, employee accountability, and competitive differentiation. This underscores the universal value of ethics in building a strong, positive brand identity and securing a sustainable market position.

The integration of work ethics into healthcare delivery is seen as a cornerstone for building patient trust and loyalty (Miao et al., 2020). The ethical behaviors and practices of healthcare professionals, including integrity, empathy, accountability, and professionalism, significantly impact patient perceptions and experiences. These ethical dimensions are critical in patient-centered care, where the focus extends beyond medical treatment to include emotional support and respect for patient privacy and rights (Sinclair et al., 2016; Skorpen Tarberg et al., 2020; Tehranineshat et al., 2019). Such practices not only enhance the quality

of care but also embed a sense of value and respect within the healthcare experience, aligning with patients' expectations of compassionate care (Sharp et al., 2016).

In the landscape of healthcare services, where patient-centered care and quality outcomes are paramount, the influence of work ethics on customer value has emerged as a critical area of inquiry (Ferrell, 2004). The ethical conduct and values exhibited by healthcare professionals play a pivotal role in shaping the perceptions and experiences of patients within private hospitals (Ahmed & Khan, 2023).

In an era where healthcare customers are not only seeking medical expertise but also compassionate and patient-centric care, the ethical dimensions of healthcare provision have gained heightened significance (Sinclair et al., 2016; Skorpen Tarberg et al., 2020; Tehranineshat et al., 2019). Work ethics, encompassing attributes such as integrity, empathy, accountability, and professionalism, define the moral compass that guides healthcare professionals in their interactions with patients. The fundamental premise of this examination lies in the recognition that work ethics extend far beyond a code of conduct; they are integral to the very fabric of healthcare delivery (Gilman, 2005). The ethical commitment of healthcare practitioners resonates deeply with patients, influencing their trust, satisfaction, and overall value perception regarding the healthcare experience (Top et al., 2015).

Moreover, as healthcare providers strive to maintain their competitive edge in an increasingly discerning and informed customer landscape, understanding the profound implications of work ethics on customer value becomes a strategic imperative. Ethical healthcare practices not only foster patient loyalty but also contribute to a positive reputation, word-of-mouth recommendations, and sustained success in the healthcare sector (sleeknote, 2023).

H1: Work ethics has a positive effect on customer value.

2.3.2 Influence of service quality on customer value

Research has advanced service and/or product quality as a primary determinant of customer value in the healthcare industry (Wijoyo, 2018). Service quality, or the degree to which a service meets customers' expectations, serves as a linchpin in determining a firm's success across various outcomes (Milakovich, 1995). High service quality not only leads to enhanced customer satisfaction and loyalty but also contributes to the firm's reputation, operational efficiency, and financial performance (Abd-El-Salam et al., 2013).

Service quality in healthcare is multidimensional, encompassing factors such as reliability, responsiveness, assurance, empathy, and tangibles (A. Parasuraman et al., 1988). These dimensions collectively influence patient perceptions of care quality and, by extension, their perceived value. Integrating the SERVQUAL model, Parasuraman et al. (1988) seminal work, with healthcare-specific research, offers a comprehensive framework for assessing service quality's impact on customer value. It emphasizes the need for healthcare organizations to align their operations and services with these quality dimensions to meet or exceed patient expectations.

Service quality in healthcare is multidimensional, encompassing key factors such as reliability, responsiveness, assurance, empathy, and tangibles, all of which significantly impact customer value (Parasuraman et al., 1988). **Reliability** reflects the ability of healthcare providers to deliver services consistently and accurately, which builds trust and enhances patient satisfaction. Reliable service ensures that patient expectations are met and care is delivered effectively, leading to higher perceived value (Mehrotra & Bhartiya, 2020). **Responsiveness** measures the willingness and promptness of healthcare staff to address patient needs and concerns (Muthoni, 2023). Quick and efficient responses not only improve the patient experience but also increase the perceived value of the service by demonstrating that patient needs are prioritized (Parasuraman et al., 1988).

Assurance involves the competence and professionalism of healthcare providers, including their ability to instill confidence in patients through their expertise and behavior (Agha, 2022). High levels of assurance contribute to patient trust and perceived value by ensuring that patients feel safe and well cared for (Parasuraman et al., 1988). **Empathy** reflects the personalized attention and care provided by healthcare professionals (Hojat et al., 2023). When staff show genuine concern and understanding of patients' individual needs, it enhances the overall patient experience and value by making patients feel valued and respected (Parasuraman et al., 1988). Lastly, **Tangibles** refer to the physical aspects of healthcare service, such as the cleanliness of facilities and the appearance of equipment and staff (DCunha et al., 2021). Well-maintained and professional physical environments positively influence patient perceptions and contribute to the overall value of the service (Bitner, 1992).

Together, these dimensions of service quality create a comprehensive framework for assessing and enhancing customer value in healthcare settings. By addressing each dimension effectively, healthcare providers can improve patient satisfaction, foster loyalty, and achieve higher overall value perceptions among their patients (Carney, 2011; Yeboah et al., 2022).

The healthcare sector, more than ever, needs to prioritize service quality due to the increasing consumerism among patients (Meesala & Paul, 2018). They now seek not only effective medical treatment but also a high-quality service experience that addresses their needs and expectations comprehensively. According to Senić and Marinković (2013), the perceived quality of healthcare services significantly impacts patient satisfaction and their perceived value, ultimately influencing their loyalty to healthcare providers. This relationship highlights the importance of healthcare organizations continuously improving service quality to create and sustain high levels of customer value.

The linkage between service quality and customer value in healthcare is further elucidated through empirical studies, such as those conducted by Nguyen et al. (2021) and

Abbas (2023). These studies highlight the critical role of service quality dimensions in shaping patient satisfaction and loyalty, offering insights into the nuances of patient perceptions and expectations. For instance, while emotional aspects may not directly influence perceived value, functional elements, and social influence emerge as significant predictors of patient satisfaction and perceived value. This nuanced understanding is crucial for healthcare providers aiming to devise patient-centric strategies that enhance both service quality and customer value.

The relationships between perceived quality, customer value, and behavioral intentions in health care have been clarified by Choi et al. (2004), the findings of their research have revealed that service quality has a substantial impact on customer value. Moreover, the emphasis on patient safety and friendly interactions, as highlighted by Abbas (2023), underscores the importance of human elements in healthcare delivery. Ensuring rapid, accurate, and affordable services, coupled with a focus on safety and empathy, can significantly enhance the perceived quality of care and, by extension, the institution's reputation among patients.

Theoretically, this body of research contributes to the broader understanding of how service quality dimensions' influence customer value in healthcare settings. It supports the development of hypotheses centered on the specific roles of different service quality factors in enhancing patient satisfaction and loyalty. Practically, these insights inform healthcare management practices, suggesting that a focus on comprehensive service quality improvement—spanning operational, emotional, and social aspects—can enhance perceived patient value. This, in turn, supports the achievement of competitive advantage through differentiated service delivery and improved patient outcomes.

H2: Service quality has a positive impact on customer value.

2.3.3 Influence of information systems on customer value

Companies use information technology to gain a sustainable competitive advantage in a variety of ways, including creating new opportunities for companies to outperform their competitors by reducing costs or differentiating themselves; creating barriers to entry, creating costs for change, or changing the basis of competition, and invading new markets (Porter, 1985). Superior capability and superior resources, according to Mao et al. (2016), impact a company's efforts to build a competitive advantage. Ferdinand (2003) supports this viewpoint, explaining that the essence of competitive excellence is a unique combination of resources and capabilities, as explained by resource-based theory.

According to Davenport and Short (1990), information technology encompasses all computer-based capabilities, such as software applications, computer hardware, and telecommunications, which includes data transfer. Many firms employ information technology to assist their strategic goals, such as achieving excellence in long-term competitiveness, because of its superiority (Hallowell et al., 2016). To maintain a sustained competitive advantage, businesses must effectively manage their information technology assets. These assets include human resources, technology, and interactions between information technology and management as users (Marchiori et al., 2022). Computers are intended to speed up and increase the accuracy of data processing and traffic so that strategic decisions may be made more quickly, improving long-term competitive advantage (Goodhue, 1997).

Incorporating information systems into healthcare delivery is vital for attaining superior service quality and boosting patient value. (Prakash & Srivastava, 2019). Advanced information systems, such as Electronic Health Records (EHRs), telehealth platforms, and patient management systems, play a pivotal role in streamlining operations, improving patient care coordination, and enhancing data management and analysis capabilities. Electronic Health Records (EHRs) centralize patient information, enabling healthcare providers to access

comprehensive and up-to-date patient data, which improves diagnostic accuracy and treatment efficiency (Li et al., 2021). Telehealth platforms facilitate remote consultations and monitoring, allowing for timely and flexible care delivery while reducing barriers to access, thereby enhancing patient convenience and engagement (Krupinski & Shea, 2022). Patient management systems support the organization and scheduling of patient care activities, from appointment booking to follow-up care, which improves operational efficiency and reduces administrative burdens (Buntin et al., 2011). Collectively, these systems contribute to a more coordinated and responsive healthcare environment, ultimately boosting patient satisfaction and value by delivering higher quality, more accessible, and efficient care. These systems not only improve the efficiency and effectiveness of healthcare services but also contribute to a better patient experience by minimizing wait times, simplifying service procedures, and ensuring more personalized care (Feldman et al. (2018); Ko and Chou (2020)).

The computerization of reminders and prevention guidelines has been shown in numerous studies to promote adherence (Balas et al., 2000). Reminders are especially useful in the treatment of chronic illnesses, which account for a significant portion of healthcare expenditure (Lobach & Hammond, 1994). Patient tracking and efficient communication between physicians and patients about tracking and deviations are required for the management of these disorders; IT will make this much easier. Information technology performance, according to Orlikowski (1993) and Davenport and Short (1990), supports long-term competitive advantage. While increasing the use of Information Technology in healthcare will have a range of benefits, the quality benefits will most likely be the most significant. This would, in particular, boost the likelihood of successful processes and enable the provision of evidence-based decision help to providers, thus closing the evidence-practice gap.

Enhancing safety can be achieved by leveraging IT in several ways, including implementing problem-solving checks, effectively disseminating information about critical

irregularities to providers for prompt response, and promoting seamless communication across providers (Hallowell et al., 2016). Effective communication between patients and healthcare providers is crucial for ensuring patient safety, especially in non-hospital settings. A high majority of outpatient adverse medication events may have been avoided or mitigated with greater communication between patients and providers, according to one study (Sciamanna et al., 2000). When information is electronically recorded in electronic medical records, which are significantly more comprehensive than claims databases, quality measurement is considerably altered when compared to direct improvement. It's become possible to discover patients with specific disorders regularly, ask questions about their current laboratory values, and even check through their notes for specific issues, such as new problems (Honigman et al., 2001).

Asare (2016) research highlights that patients have generally positive attitudes toward the implementation of information systems in healthcare delivery. The study revealed that patients appreciate the efficiency, accuracy, and enhanced communication facilitated by these systems. Information systems, such as electronic health records (EHRs) and patient management systems, are perceived by patients as instrumental in improving the quality of care they receive. By streamlining processes and ensuring that patient information is accurately and promptly available to healthcare providers, these systems contribute significantly to patient satisfaction and the perceived value of healthcare services.

H3: Information systems have a positive effect on customer value.

2.3.4 Influence of Customer Value on Sustainable Competitive Advantage

The enhancement of customer value plays a fundamental role in shaping an organization's ability to achieve and sustain a competitive advantage. In the context of healthcare or other service-based industries, providing high customer value not only improves

satisfaction and loyalty but also creates a robust platform for long-term success (Singh et al., 2020). Customer value refers to the perception of benefits relative to costs from the customer's perspective, which significantly impacts their decision-making process and preference for a particular service (Chen & Dubinsky, 2003).

A sustainable competitive advantage (SCA) is defined as the ability of an organization to consistently outperform its competitors over time by delivering unique value propositions that are difficult for others to replicate or substitute (Mao et al., 2016; Porter, 1985). This is particularly relevant in dynamic industries where innovation, customer expectations, and market conditions continually evolve. Organizations that consistently deliver exceptional customer value create a competitive moat around their offerings, enabling them to secure a distinctive market position (Rintamäki et al., 2007).

The link between customer value and competitive advantage is grounded in the Resource-Based View (RBV) of the firm, which posits that unique resources and capabilities enable a firm to achieve a SCA. In this context, the ability of a firm to create superior customer value is considered a unique resource that cannot be easily replicated by competitors (Barney, 1991). Moreover, the Service-Dominant Logic (SDL) of marketing emphasizes that value is co-created with customers and that this value co-creation process is a key driver of competitive advantage (Vargo & Lusch, 2004).

Moreover, Customer Value Theory suggests that businesses can create superior value by delivering products or services that better meet the needs of their customers than their competitors do. According to Porter's Competitive Advantage Theory (1985), businesses that deliver a unique value proposition, either through cost leadership or differentiation, can gain a competitive advantage. This advantage becomes sustainable when it is difficult for competitors to replicate or erode (Porter, 1985). Additionally, customer value is a core element of competitive advantage because it aligns directly with the differentiation strategy emphasized

by Porter (1985). When companies are able to innovate in ways that create additional value for customers—whether through improved product features, personalized services, or sustainable practices—they gain a differentiation advantage that is often difficult for competitors to match. For instance, in industries focusing on green practices or sustainability, businesses that deliver products or services aligned with environmental and social concerns add unique value that resonates with customers, fostering a stronger and more loyal customer base (Mao et al., 2016).

Empirical studies support the theory that customer value significantly impacts a firm's competitive advantage. (Woodruff, 1997) argues that understanding and delivering on customer value drivers are essential for developing loyalty and a sustainable competitive edge. Further, research by (Salem Khalifa, 2004) demonstrates that customer value creation leads to superior market performance and competitive advantage by enhancing customer satisfaction and loyalty, which are critical determinants of market success.

Customer value in healthcare refers to the unique and perceived benefits that patients derive from the services and experiences provided by healthcare providers (Teisberg et al., 2020). Recognizing that patient satisfaction and loyalty are essential, healthcare organizations have increasingly come to understand that the influence of customer value extends far beyond immediate financial gains (Sharma, 2017). Instead, it has become a linchpin for attaining sustainable competitive advantage.

In healthcare settings, where patient outcomes and satisfaction are critical, organizations that focus on enhancing the overall experience, addressing patient needs more effectively, and delivering superior value through quality care are more likely to achieve sustainable competitive advantage (Rivers & Glover, 2008). Patients who perceive high value in their healthcare experiences are more likely to continue using the services of a healthcare provider and recommend them to others, thereby enhancing the provider's reputation and competitive standing in the market (Porter & Teisberg, 2006). Sustainable competitive

advantage entails the ability of healthcare organizations to consistently outperform rivals over the long term, while simultaneously meeting the evolving needs and expectations of patients and other stakeholders (Anabila, 2019).

Yi and Gong (2013) developed and validated a scale for measuring customer value co-creation behavior, which is defined as the actions taken by customers that contribute to the value-creation process. In the context of healthcare, this can encompass a range of activities, from patients sharing detailed health information with their healthcare providers, participating in treatment decision-making processes, adhering to prescribed treatment plans, and engaging in health-promoting behaviors outside of the healthcare setting. By actively participating in these co-creation activities, patients can significantly influence the quality and effectiveness of the healthcare services they receive, thereby enhancing their perceived value of these services.

H4: There is a relationship between customer value and sustainable competitive advantages.

2.3.5 Customer Value as a Mediating Role in the Relationship Between Information Systems, Service Quality, Work Ethics, and Sustainable Competitive Advantage

Customer value serves as an important mediator in the relationship between information systems, service quality, work ethics, and sustainable competitive advantage (Badawi et al., 2024). This mediating role is significant because it encapsulates the perceived benefits that customers (patients, in healthcare) derive relative to the costs they incur, thereby influencing their overall satisfaction and loyalty (Arslan, 2020). In the context of strategic management, a firm's ability to deliver superior customer value directly impacts its competitive positioning and long-term success (Sullivan et al., 2018).

Information Systems play a vital role in enhancing customer value by streamlining healthcare processes, improving patient care coordination, and enabling comprehensive data

management (Buntin et al., 2011). Electronic Health Records (EHRs), telehealth platforms, and patient management systems not only facilitate efficient operations but also contribute to better patient outcomes and experiences (Krupinski & Shea, 2022). These systems enhance the accuracy of patient information, reduce waiting times, and improve overall service delivery, thus elevating the perceived value of the service provided.

In healthcare, Information Systems Theory highlights the importance of using technology to improve decision-making, enhance operational efficiency, and deliver higher-quality services (Burch & Grudnitski, 1989). This theory posits that the effective use of information systems contributes to better organizational performance. Information systems facilitate the coordination of care, improve access to patient data, and ensure seamless communication among healthcare providers. These improvements directly impact service quality, reduce errors, and improve the timeliness of care, which significantly enhances customer value (Mithas et al., 2016).

Service Quality, characterized by dimensions such as reliability, responsiveness, assurance, empathy, and tangibles, directly influences customer satisfaction and perceived value (Parasuraman et al., 1988). Reliability ensures consistent and dependable service; responsiveness involves timely assistance; assurance builds confidence in the service provider's competence; empathy reflects personalized attention; and tangibles refer to the physical aspects of the service environment. High service quality across these dimensions increases customer value by meeting or exceeding patient expectations, which in turn supports the development of a sustainable competitive advantage (Parasuraman et al., 1988).

Customer value acts as a mediator between service quality and sustainable competitive advantage by translating the benefits of service quality into customer loyalty and long-term relationships. When customers perceive high value from the quality of services they receive,

they are more likely to become loyal to the service provider, recommend the provider to others, and resist switching to competitors (Kankam, 2022).

Work Ethics impact service quality and customer value by ensuring that employees uphold high standards of professionalism, responsibility, and integrity (Weaver, 2017). In healthcare, strong work ethics lead to better patient interactions, improved care delivery, and enhanced trust in the healthcare provider. This positive influence on service quality directly translates into higher customer value and reinforces competitive positioning (Trevino & Nelson, 2021). Ethical Theory posits that adherence to high moral standards and ethical practices in the workplace fosters trust, accountability, and responsibility (Pojman, 1995). In healthcare, work ethics emphasize not only the technical competencies of medical staff but also their commitment to ethical principles such as patient confidentiality, honesty, respect, and fairness (Desai & Kapadia, 2022). These ethical behaviors contribute to improved service quality, as healthcare providers who maintain strong work ethics tend to offer more consistent, compassionate, and personalized care.

Customer value acts as a mediator in the relationship between work ethics and sustainable competitive advantage. The ethical behavior of healthcare providers influences how patients perceive the quality of care, which translates into higher customer satisfaction and loyalty (Rochayatun et al., 2023). When patients recognize that their healthcare provider adheres to ethical standards and offers compassionate, responsible care, their perception of value increases. This increase in perceived value strengthens the organization's competitive position, as satisfied patients are more likely to remain loyal, recommend the provider, and contribute to a positive reputation.

The Resource-Based View (RBV) complements this by suggesting that information systems are valuable organizational resources that, when effectively utilized, can become a source of SCA. However, it is through the creation of customer value—such as improved

patient satisfaction, reduced waiting times, and accurate medical records—that these systems help build a competitive advantage that is sustainable over time. Thus, customer value serves as a mediator in the relationship between IS and SCA. Alos, From a RBV perspective, service quality can be considered an intangible resource that, when effectively managed, provides a company with a unique competitive position. However, to translate this resource into a sustainable advantage, customer value must act as the conduit through which service quality influences loyalty and competitiveness. Finally the RBV, mentioned the work ethics can be viewed as an intangible asset that differentiates an organization from its competitors. When healthcare providers are known for their ethical conduct, they build trust and credibility with patients, leading to improved customer satisfaction and loyalty. However, this ethical asset translates into sustainable competitive advantage only when it enhances customer value—specifically, when patients perceive that the ethical standards upheld by the organization lead to better care, stronger relationships, and an overall better experiences (Barney, 1991). By focusing on these resources and their management, healthcare organizations can create unique value propositions that differentiate them from competitors and sustain their competitive advantage (Kotler & Keller, 2009).

In summary, customer value mediates the relationship between information systems, service quality, work ethics, and sustainable competitive advantage by enhancing patient satisfaction and loyalty. This mediation underscores the importance of integrating advanced technologies, maintaining high service standards, and fostering strong ethical practices to achieve and sustain a competitive edge in the healthcare sector.

H5: Customer value significantly mediates the relationship between information systems, service quality, work ethics, and sustainable competitive advantage in the healthcare sector.

Chapter Three

Methodology

4.1 Introduction

This chapter describes the methods used to examine the interactions of work ethics, information systems, service quality, and customer value and their combined impact on sustainable competitive advantage in Palestinian Private Hospitals. It provides a comprehensive explanation of the research design, population, approach, sample, inclusion and exclusion criteria, data collection procedures, and the measures taken to ensure the reliability and validity of the questionnaire. Additionally, ethical considerations related to the study are discussed to ensure compliance with research standards and participant confidentiality.

4.2 Design

This study employs a quantitative and cross-sectional research design to examine the interactions among work ethics, information systems, service quality, and customer value on sustainable competitive advantage in Palestinian private hospitals. The quantitative approach is ideal for this research as it allows for collecting and analyzing large amounts of data, which subsequently enables testing hypotheses (Achieng'Odembo, 2013). This approach allows relationships between the variables of interest to be quantitatively analyzed, providing robust statistical evidence for the study's conclusions.

A cross-sectional design is chosen for its practicality and efficiency. This design involves collecting data from the target population at a single point in time, allowing researchers to investigate the relationships between variables without the need for long-term data collection (Setia, 2016). The cross-sectional approach is particularly suitable for this study as it enables the researcher to gather data from multiple participants quickly and cost-effectively, making it feasible given the available resources. It is also commonly used in

healthcare research to describe population characteristics or explore correlations between key variables within a specific timeframe.

This design is especially relevant in the healthcare context, as it allows for the collection of real-time data from hospital patients, facilitating insights into how work ethics, information systems, and service quality influence customer value and sustainable competitive advantage. Given the dynamic and resource-constrained healthcare environment, the cross-sectional approach provides a snapshot of the current situation, offering valuable data that can inform decision-making and strategies (Mitchell & Maxwell, 2013) aimed at enhancing competitive advantage.

4.3 Study Population and Settings

The study population consists of patients from three private hospitals in the West Bank, all of which are part of the Arab Hospitals Group. These hospitals: Istishari Arab Hospital, Ibn Sina Specialized Hospital, and Specialized Arab Hospital were selected to represent the private healthcare sector in Palestine. These hospitals are situated in different regions of the West Bank, ensuring geographical diversity and a more comprehensive sample for the study.

According to PCBS (2023a), there are 54 hospitals in the West Bank, distributed across four primary sectors responsible for delivering healthcare services in Palestine:

- The government health sector, which includes hospitals operated by the Ministry of Health and Military Medical Services.
- UNRWA (United Nations Relief and Works Agency for Palestine Refugees in the Middle East).
- Non-governmental organizations (NGOs).
- The private sector, which encompasses 17 hospitals.

This study focuses on the private sector hospitals, particularly those under the Arab Hospitals Group, as they offer a consistent healthcare service framework that is critical to assessing competitive advantage. These three hospitals collectively have a total bed capacity of 432 beds, and their daily hospitalized patient count corresponds to approximately 80% of this capacity, which results in an average of 346 daily hospitalized patients (AHG, 2023). The patient distribution across the hospitals is as follows:

- Istishari Arab Hospital has the largest share with 176 daily hospitalized patients, with a bed capacity equal to 220.
- Ibn Sina Specialized Hospital, with 112 operational beds, accommodates 90 daily hospitalized patients.
- Specialized Arab Hospital, with 100 operational beds, sees around 80 daily patients.

The selection of these hospitals offers a robust and diverse representation of the private healthcare sector in Palestine, enabling the study to draw insights from various operational practices and patient demographics.

4.4 Study Population and Settings in Palestine

The estimated population in Palestine at the end of 2023 reached approximately 5.55 million, comprising around 2.82 million males and 2.73 million females, with a sex ratio of 103.2 males for every 100 females (PCBS, 2023b) as shown in Table 4.1.

PCBS (2023b) In the West Bank, the population was estimated at 3.29 million by mid-2023, with approximately 1.68 million males and 1.62 million females, giving a sex ratio of 103.7 males per 100 females. Meanwhile, the Gaza Strip population for the same year was estimated at 2.26 million, consisting of 1.14 million males and 1.11 million females, with a sex ratio of 102.7 males for every 100 females.

Table (3.1) Estimated Population in Palestine by Region and Sex, End-Year 2021-2023

Year/Region	Females	Males	Both Sex
Palestine	2,729,908	2,818,549	5,548,457
West Bank	1,616,150	1,675,256	3,291,406
Gaza Strip	1,113,758	1,143,293	2,257,051

Table 4.2 illustrates the population distribution across Palestinian governorates. Hebron was the most populous in the West Bank, with an estimated population of 832,702 by the end of 2023. In contrast, Jericho had the smallest population, estimated at 55,762. The selected sample populations of Nablus, Ramallah, and Jenin had a combined total of 1,165,760, representing 35.4% of the West Bank's population and 21% of the total population of Palestine (PCBS, 2023b).

Table (3.2) Population of Palestine by governorate, end of 2023

City	Population	City	Population
Hebron	832,702	Deir al-Balah	323,425
Gaza	758,134	Rafah	279,135
Jerusalem	497,482	Bethlehem	356,405
North Gaza	451,451	Tylkarim	204,726
Khan Yunis	444,906	Qalqilya	128,385
Nablus	435,608	Salfit	86,890
Ramallah and Al-Bireh	373,747	Tubas	69,502
Jenin	356,405	Jericho	55,762

The number of children (under 18 years old) was estimated at 2.39 million, representing around 44% of the total population (41% in the West Bank and 47% in the Gaza Strip). Regarding the age structure, Palestine is characterized by a high proportion of youth, with approximately half of the population comprising children and young people. The median age of the population in Palestine was around 19.76 years in 2023, meaning that nearly half of the population is below this age (PCBS, 2023b).

4.5 Sample

A Systemic Random Sample is a type of sampling method where participants are selected systematically from a larger population. In the context of your study, a systemic random sample involves selecting hospitalized patients based on a predefined set of criteria, ensuring that the sample is representative but chosen in a structured manner. This approach allows researchers to avoid selection bias by following a specific pattern rather than making arbitrary decisions (Rahi, 2017). Key Aspects of the Systemic Random Sample in Your Study:

- Target Population: All hospitalized patients in the selected private Palestinian hospitals.
- Inclusion Criteria: Adult in-patients over the age of 19, who have been hospitalized for more than one day but fewer than 30 days.
- Admission Days: The sample is restricted to patients admitted on specific days of the week (Saturday, Monday, Wednesday).
- Age Group Selection: From each age group, the first five admitted patients are selected.

This systematic approach ensures that the sample is spread across different days of the week and a range of patient ages, improving the diversity and representativeness of the sample within the selected hospitals (Baltes & Ralph, 2022). However, while systemic random sampling provides some level of randomness, it is not fully random in the statistical sense, as the selection follows a set structure rather than being entirely unpredictable (Brus & De Gruijter, 1997).

The recommended minimum sample size of 384 for the hospitalized patients was determined while taking into account a marginal error of 5%, a confidence level of 95%, and an estimated response distribution of approximately 50%. This calculation was performed using the following formula derived from the Raosoft® Application:

$$n = \frac{Z^2(c/100)^2 r(100-r)}{E^2 + \frac{Z^2 c^2 r(100-r)}{N}}$$

Based on PCBS (2023b), the study population was selected as follows: our selected sample populations of Nablus, Ramallah, and Jenin had a combined total of 1,165,760, representing 35.4% of the West Bank of Palestine. Additionally, in terms of age structure distribution in Palestine, the number of children (under 18 years old) accounted for approximately 41% in the West. Based on the population distribution in Palestine by governorate at the end of 2023, the sample distribution was as follows:

- Nablus (Specialized Arab Hospital) accounted for 37% of the total sample size, which is equal to 142 out of 384 participants.
- Ramallah (Istishari Arab Hospital) accounted for 32%, which is equal to 123 participants.
- Jenin (Ibn Sina Specialized Hospital) accounted for 31%, totaling 119 participants.

According to PCBS (2021) the age group distribution in the West Bank shows that the largest age group is between 5 to 9 years, accounting for 11.9% of the population. In contrast, the smallest age group is those over 80 years old. This indicates that younger age groups are more prevalent in the Palestinian population, as illustrated in Table 4.3.

Table (3.3) Percentage Distribution of Population in Palestine by Age Groups

Age Group	West Bank	Age Group	West Bank
0-4	12.9%	45-59	4.5%
5-9	11.9%	50-54	3.8%
10-14	11.0%	55-59	3.1%
15-19	10.2%	60-64	2.3%
20-24	9.5%	65-69	1.5%
25-29	8.9%	70-74	1.0%
30-34	7.5%	75-79	0.6%
35-39	5.7%	80+	0.6%
40-44	5.0%		

The selected sample in each hospital reflects the age distribution of the Palestinian population and the geographical area. Table 4.4 below outlines the percentage and number distribution of each age group in the three selected private Palestinian hospitals—Specialized

Arab Hospital, Istishari Arab Hospital, and Ibn Sina Specialized Hospital. This table provides a clear breakdown of how the sample is distributed across different age groups and hospitals, ensuring a representative and balanced study population.

Table (3.4) Sample Distribution by Hospital and Age Group

Hospital	Age Group	% Distribution	% Overall	# of Sample	Total
Specialized Arab Hospital	Less Than 25 years	9.5%	18%	25	142
	From 26 to 35 years	16.4%	30%	43	
	From 36 to 45 years	10.7%	20%	28	
	More Than 46 years	17.4%	32%	46	
Istishari Arab Hospital	Less Than 25 years	9.5%	18%	22	123
	From 26 to 35 years	16.4%	30%	37	
	From 36 to 45 years	10.7%	20%	24	
	More Than 46 years	17.4%	32%	40	
Ibn Sina Specialized Hospital	Less Than 25 years	9.5%	18%	21	119
	From 26 to 35 years	16.4%	30%	36	
	From 36 to 45 years	10.7%	20%	24	
	More Than 46 years	17.4%	32%	38	

4.6 Inclusion and Exclusion Criteria

4.6.1 Inclusion Criteria

To ensure the relevance and reliability of the data collected, specific inclusion criteria have been established for the study:

- **Palestinian Private Hospitals:** The study focuses exclusively on patients admitted to private hospitals in Palestine, as these institutions operate under different regulations and management practices compared to public and non-profit facilities. This distinction allows for a targeted analysis of the private healthcare sector's dynamics.
- **Hospitalized Patients (In-Patients):** Only patients currently hospitalized will be included in the study. This focus on in-patients is essential, as their experiences and perceptions of healthcare services differ significantly from those of outpatients. In-patients typically have more direct interactions with hospital staff, which are critical for assessing service quality, work ethics, and overall customer value.

- **Adult Patients (Over the Age of 19):** Participants must be adults, as the study aims to gather insights from individuals capable of providing informed consent and articulate feedback regarding their hospital experiences. Including only adults ensures that the data reflects the perspectives of a mature demographic that engages with healthcare systems as primary decision-makers.
- **Patients Hospitalized for More Than One Day but less Than 30 Days:** To capture a comprehensive view of the patient experience, only those hospitalized for a minimum of one day and a maximum of 30 days will be included. This time frame is essential, as it allows for sufficient interaction with healthcare services while excluding those with very short stays that may not provide an adequate basis for assessing service quality and customer value.

4.5.2 Exclusion Criteria

The study also outlines specific exclusion criteria to maintain data integrity and relevance:

- **Critically Unwell Patients (CCU and ICU Patients):** Patients in Critical Care Units (CCU) or Intensive Care Units (ICU) will be excluded, as their conditions may hinder their ability to provide informed and coherent responses. This exclusion is crucial to ensure that the feedback collected is representative of patients who can engage meaningfully with the study's objectives.
- **Patients Unable to Participate Cognitively or Psychologically:** Individuals who, due to cognitive impairments or psychological conditions, cannot comprehend or respond to the questionnaire will be excluded. This criterion ensures that the data gathered is reliable and valid, reflecting the experiences of those who can adequately articulate their perceptions.

- **People Unable to Read or Write:** Patients who cannot read or write will also be excluded, as they would face challenges in understanding and responding to the questionnaire. This ensures that all participants can engage with the study materials effectively, further enhancing the reliability of the collected data.

By establishing these clear inclusion and exclusion criteria, the study aims to gather a focused and representative sample that accurately reflects the interactions of work ethics, information systems, service quality, and customer value on sustainable competitive advantage in the context of Palestinian private hospitals.

4.7 Data Collection

The researcher designed a self-administered online survey for this study to gather the necessary information. A total of 384 admitted patients from the selected hospitals received an electronic version of the questionnaire, created using Google Forms, with data entered via tablets. The data collection period extended from mid-October 2024 to the end of November 2024.

The researcher developed a comprehensive questionnaire comprising five distinct parts, each drawing upon established studies to ensure content validity and reliability. This multi-faceted approach allows for a robust examination of the relationships between work ethics, information systems, service quality, customer value, and sustainable competitive advantage in the context of Palestinian private hospitals.

4.7.1 Variables and Measurement

- **Work Ethics:** The first part adopts indicators for measuring work ethics from the study by Boatwright and Slate (2002). This section is crucial as it captures the ethical standards hospitalized patients uphold, which can significantly impact patient

experiences and perceptions of service quality. The work ethics indicators will provide insights into how professionalism and ethical conduct correlate with patient satisfaction and trust in healthcare providers.

- **Information Systems:** The Second part incorporates indicators for assessing information systems, validated by Asare (2016). This section evaluates the efficiency and effectiveness of electronic health records, telehealth platforms, and other technologies in enhancing patient care and streamlining hospital operations. By measuring the impact of these systems, the study can explore their contribution to improved service delivery and customer value.
- **Service Quality:** The third part utilizes the SERVQUAL framework developed by A. Parasuraman et al. (1988) to evaluate service quality across five dimensions: reliability, responsiveness, assurance, empathy, and tangibles. This well-established model allows for a structured approach to measuring the quality of services provided by the selected hospitals. By examining service quality through this lens, the study can identify strengths and areas for improvement within the hospitals' operations.
- **Customer Value:** The fourth part includes customer value indicators utilized by Yi and Gong (2013). This section seeks to understand how patients perceive the value of services received during their hospital stay. By capturing various dimensions of customer value, the study can assess the alignment between patient expectations and actual experiences.
- **Sustainable Competitive Advantage:** The last part of the questionnaire focuses on service differentiators utilized in private hospitals, referencing the study by Warraich et al. (2013). This section aims to evaluate the specific features and practices that set these hospitals apart from competitors and their role in achieving sustainable

competitive advantage. By identifying and measuring these differentiators, the study can assess their effectiveness and relevance within the local context.

The questionnaire is composed of three main sections, each designed to capture specific data related to the participants:

- Section one: provide clear instructions about the research and researcher, and how the participants navigate the questionnaire.
- Section two: included the respondent's Demographic Factors including Hospital name, participant age, gender, education level, and Length of stay.
- Section three: 86 indicators will be used under 5 dimensions to measure the research variables as shown in table (4.5).

This structured and detailed approach to questionnaire development will enable the researcher to collect meaningful data that can inform insights into the interplay between various factors influencing sustainable competitive advantage in Palestinian private hospitals.

To ensure that the questionnaire was suitable for the Palestinian context, a rigorous translation and back-translation process was implemented. First, the questionnaire was translated from English to Arabic by a certified Palestinian translator fluent in both languages. To maintain the integrity of the content, a different translator independently back-translated the Arabic version into English. The back-translated version was then compared with the original to identify and resolve any discrepancies in meaning or clarity (Brislin, 1970). Additionally, local healthcare professionals reviewed the Arabic version to ensure that the language, terminology, and cultural references were appropriate for the Palestinian healthcare context, enhancing the instrument's relevance and comprehensibility (Sperber, 2004). This methodical process ensured conceptual equivalence between the original and translated versions, improving the questionnaire's validity and minimizing the risk of misinterpretation or cultural bias in the study.

Table (3.5) Items for Measuring Constructs

Construct	Type of Construct	Indicators	Categories	Source/ Author(s)
Sustainable Competitive Advantage	Dependent Variable	12 indicators	6 categories: (a) Product, (b) People, (c) Place, (d) Price, (e) Physical evidence, (Golafshani) Process, and (g) Promotion.	Warrach, K. M., Warrach, I. A., & Asif, M. (2013).
Work Ethics	Independent Variable	8 indicators	4 categories: (a) Professionalism and Integrity, (b) Commitment to Quality and Safety, (c) Teamwork and Responsibility, and (d) Communication and Transparency.	Boatwright, J. R., & Slate, J. R. (2002).
Information Systems	Independent Variable	13 indicators	3 categories: (a) Patient Perception and Satisfaction with HIS, (b) HIS Communication Influence on Patient's Attitude and Perception, and (c) Benefits of HIS in Health Care Delivery, patient assessment.	Asare, S. (2016).
Service Quality	Independent Variable	27 indicators	5 categories: (a) Tangible, (b) Reliability, (c) Responsiveness, (d) Assurance, and (e) Empathy.	Parasuraman, A., Zeithaml, V. A., & Berry, L. (1988).
Customer Value	Mediator Roll Variable	26 indicators	6 categories: (a) Information seeking, (b) Information sharing, (c) Responsible behavior, (d) Personal interaction, (e) Feedback, (Golafshani) Helping, and (g) Tolerance.	Yi, Y., & Gong, T. (2013).

4.8 Data Analysis

The data analysis for this study will be conducted using several quantitative techniques to ensure a comprehensive understanding of the relationships among the key variables (Hoskins & Mariano, 2004): Work Ethics, Information Systems, Service Quality, Customer Value, and Sustainable Competitive Advantage. These variables will be analyzed through descriptive and

inferential statistical methods, including reliability testing, correlation analysis, and structural equation modeling (SEM).

Descriptive Statistics: The first step in the analysis will involve the calculation of descriptive statistics, including means, standard deviations, frequencies, and percentages for all demographic data and key variables. This will provide an overview of the sample characteristics and the distribution of responses, helping to identify any potential trends or patterns within the data (Altukhi & Aljohani, 2024).

Reliability Testing: To ensure the internal consistency of the questionnaire, Cronbach's alpha will be calculated for each of the constructs—Work Ethics, Information Systems, Service Quality, Customer Value, and Sustainable Competitive Advantage. A Cronbach's alpha value of 0.70 or above will be considered acceptable for demonstrating reliability (Hair Jr et al., 2011).

Correlation Analysis: Pearson's correlation coefficient will be used to examine the relationships between the independent variables (Work Ethics, Information Systems, Service Quality) and the mediating variable (Customer Value), as well as their influence on the dependent variable (Sustainable Competitive Advantage). This analysis will provide initial insights into the strength and direction of the associations between the variables (Gogtay & Thatte, 2017).

Structural Equation Modeling (SEM): The primary analytical technique for testing the hypothesized relationships will be SEM. SEM is a multivariate statistical analysis method that allows researchers to examine the structural relationships between multiple variables simultaneously. The advantage of SEM is its ability to handle complex models with multiple mediating and dependent variables, as well as account for measurement error (Kline, 2023). SEM will be conducted using AMOS or SmartPLS software, depending on the model's complexity and the sample size.

Measurement Model: The first stage of SEM will involve validating the measurement model through confirmatory factor analysis (CFA). This will assess the validity and reliability of the constructs and confirm whether the observed variables (survey items) adequately represent the underlying latent variables (Sujati & Akhyar, 2020).

Structural Model: After validating the measurement model, the structural model will be tested to examine the hypothesized relationships between Work Ethics, Information Systems, Service Quality, Customer Value, and Sustainable Competitive Advantage. The mediating role of Customer Value in these relationships will also be analyzed.

Hypotheses Testing: The significance of the direct, indirect, and total effects in the structural model will be examined using the standardized regression weights (beta coefficients) and p-values. A p-value of less than 0.05 will indicate statistically significant relationships among the variables, and the mediation effect of Customer Value will be tested using the bootstrapping method (Preacher & Hayes, 2008). The results from these analyses will help to confirm or reject the hypotheses, offering a detailed understanding of how Work Ethics, Information Systems, and Service Quality contribute to Sustainable Competitive Advantage through the mediating role of Customer Value in Palestinian private hospitals.

4.9 Pilot Study

A pilot study is a preliminary investigation conducted to assess the feasibility and effectiveness of the research design and methodology before large-scale research (Moore et al., 2020). It involves pretesting research instruments or questionnaires to identify potential issues and refine the study's processes. The primary aim of a pilot study is to eliminate unnecessary and inefficient questions and improve the clarity of the research instruments (Rhoda et al., 2023). Conducting a pilot study ensures that respondents consistently understand the

questionnaire, provide appropriate answers, and that the instrument accurately measures the intended variables without introducing bias (Dillman et al., 2000).

Typically, a pilot study involves selecting a small group, usually 10% of the total sample, to represent various sub-categories of the population (Connelly, 2008). In this study, a pilot was conducted at Ibn Sina Specialized Hospital in Jenin, where 35 patients were selected, representing 10% of the expected sample size for the full study. Ethical approval and necessary permissions were secured before conducting the pilot study to ensure the research adhered to ethical standards.

4.10 Questionnaire Reliability

Reliability refers to the consistency and stability of a measurement over time, ensuring that the instrument accurately reflects the variables it is intended to measure (Golafshani, 2003). In this study, reliability will be assessed using Cronbach's alpha, a widely used statistical measure to determine the internal consistency of a set of items or scales within a questionnaire. Cronbach's alpha provides an estimate of how well the items in a particular construct are positively correlated to one another.

Cronbach's Alpha Coefficient: The scale for measuring reliability typically ranges from 0 to 1. A Cronbach's alpha value of 0.70 or above is considered acceptable for demonstrating adequate internal consistency (Nunnally & Bernstein, 1994). This means that the items within the same construct (such as Work Ethics, Information Systems, Service Quality, Customer Value, or Sustainable Competitive Advantage) are measuring the same underlying concept. If the alpha coefficient is below 0.70, this may suggest that the items in the scale are not sufficiently correlated, and adjustments to the questionnaire items may be necessary. A Cronbach's alpha of 0.90 or higher indicates excellent reliability, suggesting that the items have

a very high internal consistency and are closely related, which is desirable for constructs that are highly specific and well-defined.

For each of the key variables in the study—Work Ethics, Information Systems, Service Quality, Customer Value, and Sustainable Competitive Advantage—the alpha coefficient will be calculated to ensure the reliability of the scales. If the results indicate low reliability, further investigation into individual items will be conducted, such as removing or revising poorly performing items. This will ensure that the questionnaire provides reliable and accurate data for subsequent analysis.

The results of the Cronbach's alpha reliability test for each domain in the study, including Work Ethics, Information Systems, Service Quality, Customer Value, and Sustainable Competitive Advantage, are presented in Table 4.6. This table shows the number of items per domain and the corresponding alpha values. A total of 86 indicators were evaluated across the study's variables, with a final Cronbach's alpha of 0.946, indicating excellent overall reliability. Specific alpha values for each domain, such as 0.87 for Professionalism and Integrity under Work Ethics and 0.90 for Tangibility under Service Quality, confirm the instrument's robust internal consistency. Overall, there are no areas that require further review to address the lower alpha values.

Table (3.6): Cronbach's Alpha results (reliability of the study)

Indicators	Domain Name	# of Items	Alpha Value
Work Ethics	Professionalism and Integrity	2	0.87
	Commitment to Quality and Safety	2	0.72
	Teamwork and Responsibility	2	0.97
	Communication and Transparency	2	0.81
Information system	Patients Perception and Satisfaction with HIS	5	0.65
	HIS Communication Influence on Patient's Attitude and Perception	4	0.64
	Benefits of HIS in Health Care Delivery, Patients Assessment	4	0.62

Service Quality	Tangible	9	0.90
	Reliability	5	0.81
	Responsiveness	4	0.69
	Assurance	4	0.88
	Empathy	5	0.62
Customer Value	Information seeking	3	0.69
	Information Sharing	4	0.70
	Responsible behavior	4	0.81
	Personal interaction	5	0.93
	Feedback	3	0.89
	Helping	4	0.82
	Tolerance	3	0.66
Sustainable Competitive Advantage	Word-of-mouth	2	0.94
	Purchase Intentions	3	0.69
	Price Sensitivity	3	0.75
	Complaining Behavior	4	0.65
Total		86	0.96

4.11 Questionnaire validity

The validity, as described by Kerlinger (1973), refers to the degree to which an instrument measures what it is intended to measure. In other words, it concerns the accuracy and appropriateness of the tool in evaluating the specific constructs that the researcher seeks to study. For this research, content validity was ensured by involving a panel of experts.

To assess the content validity of the questionnaire, the researcher consulted four experts. These included two specialists in strategic management and two academic experts in research methodology, including a statistician. These experts provided feedback on the structure, content, and clarity of the items in the questionnaire. Their recommendations were carefully integrated to improve the instrument, ensuring that it accurately measured the intended variables across different domains such as Work Ethics, Information Systems, Service Quality, Customer Value, and Sustainable Competitive Advantage.

The construct validity of the questionnaire was examined through Pearson Correlation tests. This test measured the correlation between individual items within the domains and the

overall construct they were intended to measure. A significant correlation would indicate that the items within a domain are effectively measuring the same underlying concept.

The results of the Pearson Correlation Test are displayed in Table 4.7, showing the strength and significance of the correlations across different domains. Most of the items exhibited significant positive correlations, reinforcing the validity of the questionnaire. For example, within the Work Ethics domain, "Professionalism and Integrity" had a perfect correlation value ($r = 1$), indicating extremely high validity. Similarly, in the Information System domain, "Benefits of HIS in Health Care Delivery, Patients Assessment" had a significant correlation ($r = .409$, $p = 0.015$). Overall this demonstrates that these items were valid in measuring the constructs they were designed for.

Table (3.7): Person correlation result (validity of the study)

Indicators	Domain Name	Value (r)	Significant Value (P)
Work Ethics	Professionalism and Integrity	1	
	Commitment to Quality and Safety	0.221	0.201
	Teamwork and Responsibility	0.295	0.085
	Communication and Transparency	.748**	0.001
Information system	Patients Perception and Satisfaction with HIS	0.268	0.12
	HIS Communication Influence on Patient's Attitude and Perception	0.143	0.411
	Benefits of HIS in Health Care Delivery, Patients Assessment	.409*	0.015
Service Quality	Tangible	.346*	0.042
	Reliability	0.232	0.181
	Responsiveness	.511**	0.002
	Assurance	0.285	0.097
	Empathy	.437**	0.009
Customer Value	Information seeking	.607**	0.001
	Information Sharing	.554**	0.001
	Responsible behavior	.461**	0.005
	Personal interaction	.404*	0.016
	Feedback	.402*	0.017
	Helping	.582**	0.001
	Tolerance	.540**	0.001
Sustainable Competitive Advantage	Word-of-mouth	.348*	0.041
	Purchase Intentions	.339*	0.047
	Price Sensitivity	0.291	0.09

Complaining Behavior

-0.195

0.262

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

* Correlation is significant at the 0.05 level (2-tailed).

4.12 Ethical Consideration

Ensuring the ethical integrity of the research is paramount, and this study adheres to the ethical guidelines outlined by the Arab American University. Before commencing data collection, ethical clearance was obtained from the university's ethics committee to ensure that all procedures align with ethical research standards.

The first page of the questionnaire includes a comprehensive information sheet outlining the purpose, objectives, and significance of the study. This provides potential participants with all the necessary information to make an informed decision about their involvement. The information sheet clearly states that participation in the study is voluntary, and participants have the right to withdraw at any stage without any negative consequences.

To ensure the confidentiality and privacy of all participants, no personal identifying information, such as names or specific personal data, was collected. Participants were assured that their responses would be anonymized and that no unauthorized individuals would have access to their data. The researcher emphasizes that all data will be stored securely on a password-protected computer, and only the researcher and their supervisor will have access to the raw data.

In addition, the study complies with the principle of non-maleficence, ensuring that no harm comes to the participants, whether physically, emotionally, or professionally. All steps will be taken to minimize any potential risks. For example, the questions in the questionnaire were carefully designed to avoid any sensitive or invasive topics that could cause discomfort to the participants.

Chapter Four

Result

4.4 Introduction

This chapter outlines the study's findings and analysis, offering key insights derived from evaluating the measurement and structural models. It includes a descriptive analysis and an assessment of the measurement model, ensuring the constructs' reliability and validity. Additionally, the chapter covers hypothesis testing using PLS-SEM and SPSS, providing a comprehensive view of the data analysis process.

4.5 Characteristics of Respondents

Table (4.1) summarizes the demographic characteristics of the respondents across several variables. A total of 384 participants were surveyed from three hospitals: Ibn Sina Specialized Hospital (31.0%), Istishari Arab Hospital (32.0%), and Specialized Arab Hospital (37.0%). Regarding age distribution, 17.7% of the respondents were under 25 years old, 30.2% were between 26 and 35 years old, 19.8% were aged 36 to 45 years, and 32.3% were over 46 years old. Regarding gender, 59% of the respondents were male, while 41% were female. The respondents' educational qualifications varied: 15% reported having no formal education, 24% had a high school diploma, 25% held a diploma degree, 1% had a higher diploma, 28% possessed a bachelor's degree, and 7% had a master's degree or higher. Finally, the length of stay was categorized as follows: 32% stayed for less than 2 days, 39% stayed for 3 to 5 days, 14% stayed for 6 to 7 days, and 16% stayed for more than 8 days. This table provides a comprehensive overview of the demographic profiles of the study participants.

Table (4.1) Results of Analyzing the Demographic variables of respondents

Variables	Options	Frequency	Valid Percentage%
Hospital	Ibn Sina Specialized Hospital	119	31.0

	Istishari Arab Hospital	123	32.0
	Specialized Arab Hospital	142	37.0
Age	Less Than 25 years old	68	17.7
	From 26 to 35 years old	116	30.2
	From 36 to 45 years old	76	19.8
	More Than 46 years old	124	32.3
Gender	Female	157	41
	Male	227	59
Educational Degree	Nothing	57	15
	High school	93	24
	Diploma Degree	96	25
	Higher Diploma Degree	4	1
	Bachelor's Degree	107	28
	Master's and Higher	27	7
Length of Stay	Less Than 2 days	121	32
	From 3 to 5 days	148	39
	From 6 to 7 days	52	14
	More Than 8 days	63	16

4.6 Descriptive Statistics

In this study, the 5-point Likert scale is interpreted as follows: scores from 1 to 2.9 are classified as "low" 3 to 3.9 as "moderate" and 4 to 5 as "high". A skewness value within ± 2.0 and kurtosis below 7.0 are generally considered indicative of normality (Kim, 2013). While most variables in the data fall within these acceptable ranges, some indicators exceed these thresholds, suggesting potential deviations from symmetry or tail distribution. Additionally, the Kolmogorov-Smirnov test results reveal a significance value of 0.000 ($P \leq 0.05$) for all variables, indicating significant deviations from normality. Despite these findings, the skewness and kurtosis values for the majority of variables do not support the assumption of a normal distribution (see Appendix A).

The results in Table 4.2 indicate a high level of agreement on Work ethics (WE), with an overall mean score of 4.06 and a standard deviation of 0.61. Information systems (IS)

showed a moderate level of acceptance, with a mean score of 3.95 and a standard deviation of 0.70. Service quality (SQ) received high satisfaction ratings, with a mean of 4.05 and a standard deviation of 0.61. Customer value (CV) was also rated highly, with a mean of 4.09 and a standard deviation of 0.52. Finally, the mean score for Sustainable Competitive Advantage (SCA) was moderate at 3.90, with a standard deviation of 0.63.

Table (4.2) Mean, Standard Deviation, and Percentage of Constructs

Construct	Mean	Std.	% of Negative response	% of Neutral	% of Positive response	Level of Agreement
WE	4.06	0.61	2.34%	8.82%	88.83%	High
IS	3.95	0.70	6.25%	4.43%	89.32%	Medium
SQ	4.05	0.61	3.07%	4.91%	92.02%	High
CV	4.09	0.52	2.30%	1.91%	95.79%	High
SCA	3.93	0.63	5.23%	5.39%	89.38%	Medium

Work Ethics (WE)

The Work Ethics dimension in this study had an overall mean score of 4.06 with a standard deviation of 0.61 as shown in Table 4.2 displaying the outcomes across the assessed constructs, with 88.83% positive responses. Table 4.3 presents the result among the evaluated constructs, Professionalism and Integrity (PI) achieved a mean of 4.18 and a standard deviation of 0.48, with only 0.26% negative responses, 3.39% neutral, and 96.35% positive responses, reflecting a high level of adherence to these values. Commitment to Quality and Safety (CQS) scored the highest, with a mean of 4.27 and a standard deviation of 0.57, showing 0.78% negative, 3.26% neutral, and 95.96% positive responses, highlighting the organization's strong focus on quality and safety standards.

In contrast, Teamwork and Responsibility (TR) had the lowest level of agreement, with a mean of 3.87, a standard deviation of 0.68, 4.56% negative responses, 14.84% neutral, and 80.60% positive responses, indicating room for improvement in fostering collaboration and

accountability. Similarly, Communication and Transparency (CT) showed moderate agreement, with a mean of 3.90 and a standard deviation of 0.69, comprising 3.78% negative responses, 13.80% neutral, and 82.42% positive responses, signaling gaps in openness and clarity. Overall, the work ethics dimension demonstrated a notably high level of agreement across the assessed areas.

Table (4.3) Mean, Standard Deviation, and Percentage of Work Ethics Dimension

Construct	Mean	Std.	% of Negative response	% of Neutral	% of Positive response	Level of Agreement
PI	4.18	0.48	0.26%	3.39%	96.35%	High
CQS	4.27	0.57	0.78%	3.26%	95.96%	High
TR	3.87	0.68	4.56%	14.84%	80.60%	Medium
CT	3.90	0.69	3.78%	13.80%	82.42%	Medium

The survey results on work ethics dimensions, as summarized in Table 4.4, indicate generally high levels of agreement among respondents. Professionalism and Integrity (PI) scored consistently well, with mean values of 4.16 (Q1) and 4.20 (Q2), corresponding to 95.31% and 97.40% positive responses, respectively, and minimal neutral or negative feedback. These results affirm a strong consensus on the importance of these values. Similarly, Commitment to Quality and Safety (CQS) received high ratings for both Q3 (mean = 4.27) and Q4 (mean = 4.27), with positive responses of 97.40% and 94.53%, indicating widespread agreement and alignment on maintaining quality and safety standards. Teamwork and Responsibility (TR) exhibited strong support overall, with Q5 achieving a mean of 4.02 and 92.97% positive responses.

However, Q6 scored noticeably moderate, with a mean of 3.72, and a significant proportion of neutral responses (28.65%) and 68.23% positive agreement, placing this item in the medium agreement range. This suggests some variability in perceptions of teamwork and shared responsibility. Communication and Transparency (CT) followed a similar pattern, with

Q7 receiving a mean of 3.96 and 90.36% positive responses, while Q8 had a slightly lower mean of 3.85, with 74.48% positive responses and a relatively higher percentage of neutral reactions (21.61%). These findings place this dimension in the medium agreement category.

Table (4.4) Mean, Standard Deviation, and Percentage of Work Ethics Indicators

Construct	Q.#	Mean	Std.	% of Negative response	% of Neutral	% of Positive response	Level of Agreement
PI	Q1	4.16	0.49	0.26%	4.43%	95.31%	High
	Q2	4.20	0.47	0.26%	2.34%	97.40%	High
CQS	Q3	4.27	0.55	0.78%	1.82%	97.40%	High
	Q4	4.27	0.60	0.78%	4.69%	94.53%	High
TR	Q5	4.02	0.68	5.99%	1.04%	92.97%	High
	Q6	3.72	0.68	3.13%	28.65%	68.23%	Medium
CT	Q7	3.96	0.62	3.65%	5.99%	90.36%	Medium
	Q8	3.85	0.76	3.91%	21.61%	74.48%	Medium

Information Systems (IS)

The Information Systems dimension had an overall mean of 3.95 with a standard deviation of 0.70, indicating moderate agreement among respondents, with 89.32% expressing positive responses as shown in Table 4.2. Within this dimension, as presented in Table 4.5, the construct "Patient Perception and Satisfaction with HIS (PPS-HIS)" received a mean score of 3.98 and a standard deviation of 0.29, with 82.3% positive responses, suggesting a moderate view of the health information system (HIS) in terms of patient satisfaction. Despite this positive perception, the construct "HIS Communication Influence on Patient's Attitude and Perception (CI-PAP)" had a moderate mean of 3.92 and a standard deviation of 0.43, with only 56% positive responses. The higher percentage of neutral responses (40.3%) indicates that there is an area for improvement in the effectiveness of HIS communication in shaping patient attitudes and perceptions.

In contrast, the construct "Benefits of HIS in Health Care Delivery and Patient Assessment (B-HCD)" received a higher mean of 4.07, with a standard deviation of 0.24, and a strong positive response rate of 93.8%. This demonstrates high agreement that HIS contributes significantly to healthcare delivery and patient assessment.

Table (4.5) Mean, Standard Deviation, and Percentage of Information System Dimension

Construct	Mean	Std.	% of Negative response	% of Neutral	% of Positive response	Level of Agreement
PPS-HIS	4.00	0.66	6.12%	1.30%	92.58%	Medium
CI-PAP	3.85	0.82	8.85%	9.44%	81.71%	Medium
B-HCD	4.00	0.62	3.78%	2.54%	93.68%	High

The survey results for the Information Systems (IS) dimensions indicate generally strong positive perceptions, with varying levels of agreement across individual items as summarized in Table 4.6. For Patients' Perception and Satisfaction with HIS (PPS-HIS), most respondents provided positive feedback, with Questions Q9, Q12, and Q13 receiving high ratings. These items had means of 4.06, 4.01, and 4.01, respectively, and positive response rates exceeding 91%, suggesting high satisfaction with the system. However, Questions Q10 and Q11 showed somewhat moderate agreement, with means of 3.95 and 3.97, and positive responses of 90.63% and 88.80%. These items also had slightly higher neutral or negative feedback, indicating some variability in satisfaction levels across respondents.

In the HIS Communication Influence on Patient's Attitude and Perception dimension (CI-PAP), the results were mixed. Questions Q14 and Q17 showed high agreement, with means of 3.93 and 3.98, and positive response rates of 90.63% and 90.63%, respectively, indicating that communication through the HIS is generally effective in shaping patient attitudes. However, Questions Q15 and Q16 had lower means of 3.82 and 3.68, with positive response rates of 68.49% and 77.08%, respectively. These questions also showed a notable proportion

of neutral responses, suggesting areas for improvement in how HIS communication affects patient perceptions.

For the Benefits of HIS in Health Care Delivery and Patient Assessment (B-HCD), this dimension received consistently high ratings. Questions Q19 and Q21 had means of 4.05 and 4.03, with positive response rates of 95.31% and 91.67%, indicating strong agreement that HIS contributes positively to healthcare delivery and patient assessment. Other questions in this dimension, including Q18 and Q20, also received high ratings, with means ranging from 3.95 to 4.05 and positive response rates ranging from 93.49% to 94.27%, reflecting consensus on the effectiveness of HIS in these areas.

Table (4.6) Mean, Standard Deviation, and Percentage of Information System Indicators

Construct	Q.#	Mean	Std.	% of Negative response	% of Neutral	% of Positive response	Level of Agreement
PPS-HIS	Q9	4.06	0.65	4.95%	0.52%	94.53%	High
	Q10	3.95	0.69	7.29%	2.08%	90.63%	Medium
	Q11	3.97	0.70	6.25%	4.95%	88.80%	Medium
	Q12	4.01	0.66	5.21%	3.13%	91.67%	High
	Q13	4.01	0.60	4.43%	1.04%	94.53%	High
CI-PAP	Q14	3.93	0.74	8.07%	1.30%	90.63%	Medium
	Q15	3.82	0.89	6.77%	24.74%	68.49%	Medium
	Q16	3.68	0.86	13.28%	9.64%	77.08%	Medium
	Q17	3.98	0.78	7.29%	2.08%	90.63%	Medium
B-HCD	Q18	3.97	0.55	3.13%	2.60%	94.27%	Medium
	Q19	4.05	0.66	3.91%	0.78%	95.31%	High
	Q20	3.95	0.60	4.43%	2.08%	93.49%	Medium
	Q21	4.03	0.65	3.65%	4.69%	91.67%	High

Service Quality (SQ)

The survey results on service quality dimensions, as shown in Table 4.2, reflect a generally favorable perception, with an overall score of 4.05 and a high 92.02% positive

response rate. As shown in Table 4.7, within this dimension, the construct Tangible (T) aspect received a mean of 4.11 with 94.33% positive responses, indicating satisfaction with the physical facilities and elements. Reliability (R) also scored well, with a mean of 4.11 and 90.36% positive responses. The Responsiveness (RES) dimension had a mean of 3.92 and 86% positive responses, placing it in the medium range. This suggests that while the service is generally satisfactory, there is room for improvement in responding promptly to patient needs. Assurance (A) received a high mean of 4.12, with 97.98% positive responses, demonstrating strong confidence in the competence and courtesy of staff. Finally, the Empathy (E) dimension scored a mean of 4.01 with 91.41% positive responses, reflecting general satisfaction with personalized care.

Table (4.7) Mean, Standard Deviation, and Percentage of Service Quality Dimension

Construct	Mean	Std.	% of Negative response	% of Neutral	% of Positive response	Level of Agreement
T	4.11	0.51	1.56%	4.11%	94.33%	High
R	4.11	0.63	1.82%	7.81%	90.36%	High
RES	3.92	0.64	4.04%	9.96%	86.00%	Medium
A	4.12	0.52	1.89%	0.13%	97.98%	High
E	4.01	0.73	6.04%	2.55%	91.41%	High

The survey results in Table 4.8 provide insights into respondents' perceptions of service quality dimensions, including Tangible, Reliability, Responsiveness, Assurance, and Empathy. In the Tangible (T) dimension, most questions received high levels of agreement, with means ranging from 4.02 to 4.22, indicating strong satisfaction with the physical aspects of service. However, Q26, with a mean of 3.99, showed a slightly lower positive response rate (92.7%), placing it in the medium agreement category. This suggests that while the physical facilities and elements are generally well-received, there are areas that could benefit from further improvement. The Reliability (R) dimension showed high agreement for most questions, with

means ranging from 4.09 to 4.24 and positive response rates above 90%. Q34, however, had a mean of 3.91, with only 72.14% positive responses and a significant neutral response rate of 26.4%, indicating some variability in service dependability.

For Responsiveness (RES), questions like Q36 and Q38 scored highly, with means of 4.07 and 4.02, and positive response rates exceeding 93%. However, Q37 (mean 3.76) and Q39 (mean 3.83) had a medium agreement, with positive responses of 70.05% and 84.64%, respectively, suggesting that improvements in responsiveness are needed, particularly in addressing needs promptly. The Assurance (A) dimension consistently scored highly across all questions, with means ranging from 4.04 to 4.16, and positive response rates consistently above 97%, reflecting strong trust in the competence and courtesy of the staff. In the Empathy (E) dimension, while Q45 and Q46 received high ratings, with positive responses exceeding 94%, Q44, Q47, and Q48 had lower scores. Q44 (mean 3.96) and Q47 (mean 3.89) had positive response rates of 89.32% and 91.41%, respectively, which places them in the medium category. This suggests that while respondents are generally satisfied with the empathy and personalized care provided, there is room for improvement, particularly in ensuring consistency in patient care.

Table (4.8) Mean, Standard Deviation, and Percentage of Service Quality Indicators

Construct	Q.#	Mean	Std.	% of Negative response	% of Neutral	% of Positive response	Level of Agreement
T	Q22	4.02	0.54	3.13%	4.17%	92.71%	High
	Q23	4.12	0.42	0.00%	3.39%	96.61%	High
	Q24	4.19	0.39	0.00%	0.00%	100.00%	High
	Q25	4.22	0.49	0.00%	3.65%	96.35%	High
	Q26	3.99	0.66	7.29%	0.00%	92.71%	Medium
	Q27	4.13	0.46	0.00%	5.21%	94.79%	High
	Q28	4.01	0.66	3.65%	10.42%	85.94%	High
	Q29	4.22	0.53	0.00%	5.73%	94.27%	High
	Q30	4.12	0.44	0.00%	4.43%	95.57%	High

R	Q31	4.09	0.64	1.82%	8.07%	90.10%	High
	Q32	4.24	0.60	1.82%	0.26%	97.92%	High
	Q33	4.18	0.56	1.82%	0.52%	97.66%	High
	Q34	3.91	0.76	1.82%	26.04%	72.14%	Medium
	Q35	4.13	0.60	1.82%	4.17%	94.01%	High
RES	Q36	4.07	0.61	2.60%	3.91%	93.49%	High
	Q37	3.76	0.72	2.86%	27.08%	70.05%	Medium
	Q38	4.02	0.55	3.39%	0.78%	95.83%	High
	Q39	3.83	0.67	7.29%	8.07%	84.64%	Medium
A	Q40	4.04	0.46	2.08%	0.00%	97.92%	High
	Q41	4.15	0.55	1.82%	0.00%	98.18%	High
	Q42	4.16	0.54	1.82%	0.26%	97.92%	High
	Q43	4.15	0.54	1.82%	0.26%	97.92%	High
E	Q44	3.96	0.84	7.55%	3.13%	89.32%	Medium
	Q45	4.16	0.84	6.51%	4.43%	89.06%	High
	Q46	4.06	0.71	4.69%	0.78%	94.53%	High
	Q47	3.89	0.70	8.07%	0.52%	91.41%	Medium
	Q48	3.97	0.58	3.39%	3.91%	92.71%	Medium

Customer Value (CV)

As shown in Table 4.9, the results provide a detailed view of customer value dimensions, indicating generally high levels of agreement among respondents. Information Seeking (Inf-SE) scored a mean of 3.84 with a medium level of agreement, showing 7.73% neutral and 7.9% negative responses, indicating room for improvement in this area. Information Sharing (Inf-SH), Responsible Behavior (RB), and Personal Interaction (PE-I) received high ratings, with mean scores of 4.13, 4.17, and 4.24, respectively, and positive response rates of over 97%, highlighting strong customer value practices in transparency, accountability, and interpersonal relations. Feedback (FB) and Helping (H) also reflected high satisfaction, with means of 4.07 and 4.14, respectively, showing effective customer support and willingness to

assist. Finally, Tolerance (TOL) achieved a high level of agreement with a mean of 4.06, though a slightly higher positive rate of 94.97%.

Table (4.9) Mean, Standard Deviation, and Percentage of Customer Value Dimension

Construct	Mean	Std.	% of Negative response	% of Neutral	% of Positive response	Level of Agreement
Inf-SE	3.84	0.75	7.90%	7.73%	84.38%	Medium
Inf-SH	4.13	0.52	2.02%	0.72%	97.27%	High
RB	4.17	0.38	0.07%	0.07%	99.87%	High
PE-I	4.24	0.43	0.00%	0.10%	99.90%	High
FB	4.07	0.55	2.78%	0.87%	96.35%	High
H	4.14	0.51	1.95%	0.26%	97.79%	High
TOL	4.06	0.49	1.39%	3.65%	94.97%	High

The survey results in Table 4.10 provide a comprehensive analysis of customer value dimensions, revealing varying levels of agreement across the items. In the Information-seeking (Inf-SE) dimension, mean scores for Q49, Q50, and Q51 ranged from 3.78 to 3.92, indicating moderate engagement in Inf-SE. Although respondents generally agreed on the importance of Inf-SE behaviors, the neutral responses suggest variability in how actively individuals engage in this behavior. In contrast, the Information Sharing (Inf-SH) dimension received particularly high ratings, with means ranging from 4.04 to 4.24, and Q53 and Q54 achieved 98.44% positive responses, reflecting a strong consensus on the value of Inf-SH and openness in communication.

The Responsible Behavior (RB) dimension showed all questions scoring above 4.10, with means ranging from 4.11 to 4.20, indicating a strong commitment to responsibility, accountability, and trust in communication practices, with minimal neutral or negative responses. Similarly, the Personal Interaction (PE-I) dimension demonstrated excellent interpersonal relations, with means ranging from 4.17 to 4.30, and nearly all responses being positive, highlighting the importance of personal engagement and interpersonal connections in communication.

In the Feedback (FB) dimension, mean scores ranged from 4.05 to 4.08, with overwhelmingly positive responses, suggesting a strong attitude toward providing and receiving feedback to improve communication and practices. The Helping (H) dimension showed strong agreement, with means from 4.08 to 4.17, and high positive responses (ranging from 96.09% to 98.70%), reflecting a shared belief in the importance of support and cooperation in teamwork. Finally, the TOL dimension, with means ranging from 4.02 to 4.10, received strong positive responses, though Q73 (mean 4.02) had a higher positive response rate (91.93%).

Table (4.10) Mean, Standard Deviation, and Percentage of Customer Value Indicators

Construct	Q.#	Mean	Std.	% of Negative response	% of Neutral	% of Positive response	Level of Agreement
Inf-SE	Q49	3.78	0.63	5.21%	10.42%	84.38%	Medium
	Q50	3.80	0.84	11.20%	7.29%	81.51%	Medium
	Q51	3.92	0.77	7.29%	5.47%	87.24%	Medium
Inf-SH	Q52	4.04	0.57	3.65%	2.34%	94.01%	High
	Q53	4.09	0.44	1.30%	0.26%	98.44%	High
	Q54	4.24	0.57	1.56%	0.00%	98.44%	High
	Q55	4.15	0.51	1.56%	0.26%	98.18%	High
RB	Q56	4.19	0.40	0.00%	0.26%	99.74%	High
	Q57	4.20	0.40	0.00%	0.00%	100.00%	High
	Q58	4.19	0.41	0.26%	0.00%	99.74%	High
	Q59	4.11	0.32	0.00%	0.00%	100.00%	High
PE-I	Q60	4.17	0.38	0.00%	0.26%	99.74%	High
	Q61	4.17	0.38	0.00%	0.00%	100.00%	High
	Q62	4.29	0.46	0.00%	0.00%	100.00%	High
	Q63	4.30	0.46	0.00%	0.00%	100.00%	High
	Q64	4.29	0.46	0.00%	0.26%	99.74%	High
FB	Q65	4.08	0.63	3.91%	1.82%	94.27%	High
	Q66	4.05	0.49	2.34%	0.26%	97.40%	High
	Q67	4.07	0.53	2.08%	0.52%	97.40%	High

H	Q68	4.08	0.58	3.91%	0.00%	96.09%	High
	Q69	4.14	0.50	1.30%	0.00%	98.70%	High
	Q70	4.17	0.50	1.30%	0.26%	98.44%	High
	Q71	4.16	0.48	1.30%	0.78%	97.92%	High
TOL	Q72	4.06	0.50	1.56%	2.60%	95.83%	High
	Q73	4.02	0.49	1.04%	7.03%	91.93%	High
	Q74	4.10	0.48	1.56%	1.30%	97.14%	High

Sustainable Competitive Advantage (SCA)

The results presented in Table 4.11 for the Sustainable Competitive Advantage dimension highlight varying levels of agreement across different survey items. Word-of-mouth (WOM) achieved the highest score, with a mean of 4.10, reflecting strong positive responses (97.53%) and very low neutral (0.52%) and negative (1.95%) responses. This indicates a high level of consensus on the importance of word-of-mouth in driving sustainable competitive advantage. Similarly, Purchase Intentions (PU-I) scored highly, with a mean of 4.01, indicating 91.49% positive responses, although there were slightly higher neutral responses (3.91%) and some negative responses (4.60%).

On the other hand, Price Sensitivity (PS) and Complaining Behavior (CB) showed medium levels of agreement, with mean scores of 3.76 and 3.83, respectively. These dimensions received 82.29% and 86.20% positive responses, but they also had relatively higher neutral responses (9.98% for PS and 7.16% for CB), suggesting some ambivalence toward these factors. The Overall Score for the Sustainable Competitive Advantage dimension was 3.93, with 89.38% positive responses, reflecting moderate agreement on the overall impact of these factors on sustainable competitive advantage as shown in Table 4.2.

Table (4.11) Mean, Standard Deviation, and Percentage of SCA Dimension

Construct	Mean	Std.	% of Negative response	% of Neutral	% of Positive response	Level of Agreement
WOM	4.10	0.52	1.95%	0.52%	97.53%	High

PU-I	4.01	0.67	4.60%	3.91%	91.49%	High
PS	3.76	0.69	7.73%	9.98%	82.29%	Medium
CB	3.83	0.62	6.64%	7.16%	86.20%	Medium

The results presented in Table 4.12 provide a comprehensive analysis of various dimensions related to Sustainable Competitive Advantage, highlighting differing levels of agreement across the survey items. The Word-of-mouth dimension consistently scores highly, with Q75 achieving a mean of 4.13 and Q76 scoring 4.08, reflecting nearly universal positive responses (97.4% and 97.66%, respectively). These results indicate a strong consensus on the significant role of word-of-mouth in fostering sustainable competitive advantage. Purchase Intentions (PU-I) also show strong scores, with Q77 achieving a mean of 4.18 and Q78 at 4.07, with 94.01% positive responses. However, Q79 (mean 3.78) indicates medium agreement, with a higher percentage of neutral (5.47%) and negative (8.07%) responses, suggesting some variability in perceptions related to purchase intentions.

The Price Sensitivity (PS) dimension shows moderate agreement, with mean scores ranging from 3.74 to 3.78 for Q80, Q81, and Q82, reflecting some neutrality (6.77% to 12.24%) and negative responses (6.25% to 8.85%), suggesting mixed perceptions regarding price sensitivity's role in competitive advantage. Similarly, Complaining Behavior (CB) demonstrates medium agreement, with mean scores ranging from 3.78 to 3.85 across Q83 to Q86. This indicates moderate support for the role of complaining behavior in influencing competitive advantage, with a mix of positive (84.9% to 88.28%) and neutral (4.43% to 10.68%) responses, alongside a small percentage of negative responses (3.13% to 10.16%).

Table (4.12) Mean, Standard Deviation, and Percentage of SCA Indicators

Construct	Q.#	Mean	Std.	% of Negative response	% of Neutral	% of Positive response	Level of Agreement
WOM	Q75	4.13	0.54	1.82%	0.78%	97.40%	High
	Q76	4.08	0.50	2.08%	0.26%	97.66%	High

PU-I	Q77	4.18	0.69	2.86%	3.13%	94.01%	High
	Q78	4.07	0.60	2.86%	3.13%	94.01%	High
	Q79	3.78	0.72	8.07%	5.47%	86.46%	Medium
PS	Q80	3.76	0.75	8.85%	6.77%	84.38%	Medium
	Q81	3.74	0.69	8.07%	12.24%	79.69%	Medium
	Q82	3.78	0.63	6.25%	10.94%	82.81%	Medium
CB	Q83	3.84	0.60	6.25%	5.47%	88.28%	Medium
	Q84	3.78	0.68	10.16%	4.43%	85.42%	Medium
	Q85	3.85	0.54	3.13%	10.68%	86.20%	Medium
	Q86	3.84	0.67	7.03%	8.07%	84.90%	Medium

4.7 Evaluation of the Study Model

The researcher assessed the study model through two main analytical steps: evaluating the measurement model and the structural model (to test the research hypotheses). The measurement model evaluation involves three key stages: examining Internal Consistency Reliability, Convergent Validity, and Discriminant Validity. The structural model involves four key stages: Indicator Collinearity, coefficient of determination (R^2), predictive relevance (Q^2), and effect size (f^2) tests.

4.7.1 Internal Consistency Reliability

The results in Table 4.13 demonstrate the reliability of the constructs based on Cronbach's Alpha (α) coefficient and Composite Reliability (CR) values. Cronbach's alpha was utilized in this study, with values of 0.70 or higher deemed acceptable for research purposes and values of 0.90 or above considered excellent, and composite reliability values should be above 0.70, although 0.60 is acceptable for exploratory research (Hair Jr et al., 2010). The Cronbach's alpha values for both first- and second-order constructs ranged from 0.318 to 0.932,

indicating overall strong internal consistency. These values suggest that the constructs are reliably measured, with indicators within each construct showing strong correlations.

Work Ethics (WE): Internal consistency reliability is strong for Professionalism and Integrity (PI) ($\alpha = 0.733$, CR = 0.882), Commitment to Quality and Safety (CQS) ($\alpha = 0.755$, CR = 0.890), Teamwork and Responsibility (TR) ($\alpha = 0.728$, CR = 0.880), and Communication and Transparency (CT) ($\alpha = 0.753$, CR = 0.888), indicating robust internal consistency reliability across these dimensions.

Information Systems (IS): This construct displays good reliability across its indicators. Patient's Perception and Satisfaction with HIS (PPS-HIS) ($\alpha = 0.916$, CR = 0.937), HIS Communication Influence on Patient's Attitude and Perception (CI-PAP) ($\alpha = 0.868$, CR = 0.903), and Benefits of HIS in Health Care Delivery, Patient's Assessment (B-HCD) ($\alpha = 0.913$, CR = 0.939) show strong internal consistency, suggesting these dimensions are measured reliably.

Service Quality (SQ): The Tangible (T) dimension ($\alpha = 0.805$, CR = 0.841), Reliability (R) ($\alpha = 0.894$, CR = 0.922), and Responsiveness (RES) ($\alpha = 0.867$, CR = 0.910) show moderate to strong reliability, while Assurance (A) ($\alpha = 0.950$, CR = 0.963) and Empathy (E) ($\alpha = 0.902$, CR = 0.927) demonstrate excellent consistency, with Empathy showing particularly strong results.

Customer Value (CV): The Information Seeking (Inf-SE) ($\alpha = 0.868$, CR = 0.898) and Helping (H) ($\alpha = 0.836$, CR = 0.888) dimensions show strong internal consistency. Personal Interaction (PE-I) ($\alpha = 0.932$, CR = 0.948) and Responsible Behavior (RB) ($\alpha = 0.830$, CR = 0.887) also display strong reliability, though Information Sharing (Inf-SH) ($\alpha = 0.847$, CR = 0.896) and Tolerance (TOL) ($\alpha = 0.759$, CR = 0.860) indicate moderate to strong reliability.

Sustainable Competitive Advantage: The Word-of-Mouth ($\alpha = 0.926$, CR = 0.961) and Complaining Behavior (CB) ($\alpha = 0.889$, CR = 0.925) dimensions show strong reliability,

whereas Purchase Intentions (PU-I) ($\alpha = 0.849$, CR = 0.909) and Price Sensitivity (PS) ($\alpha = 0.859$, CR = 0.914) demonstrate moderate to strong internal consistency reliability.

In the second order, For the constructs evaluated, Cronbach's alpha values ranged from 0.318 to 0.745, and CR values ranged from 0.680 to 0.829. Specifically, WE reported $\alpha = 0.573$ and CR = 0.758, IS had $\alpha = 0.318$ and CR = 0.680, SQ achieved $\alpha = 0.739$ and CR = 0.829, CV had $\alpha = 0.745$ and CR = 0.822, and SCA reported $\alpha = 0.680$ and CR = 0.811. These results indicate moderate to strong internal consistency reliability for most constructs,

Table (4.13) Construct Reliability Analysis

Construct and Indicators	α	CR
→ First Order		
WE		
PI	0.733	0.882
CQS	0.755	0.890
TR	0.728	0.880
CT	0.753	0.888
IS		
PPS-HIS	0.916	0.937
CI-PAP	0.868	0.903
B-HCD	0.913	0.939
SQ		
T	0.805	0.841
R	0.894	0.922
RES	0.867	0.91
A	0.950	0.963
E	0.902	0.927
CV		
Inf-SE	0.868	0.898
Inf-SH	0.847	0.896
RB	0.830	0.887
PE-I	0.932	0.948
FB	0.870	0.920
H	0.836	0.888
TOL	0.759	0.860
SCA		
WOM	0.926	0.961
PU-I	0.849	0.909
PS	0.859	0.914
CB	0.889	0.925
→ Second Order		

WE	0.573	0.758
IS	0.318	0.680
SQ	0.739	0.829
CV	0.745	0.822
SCA	0.680	0.811

4.7.2 Convergent Validity

Hair Jr et al. (2014) defined convergent validity as "the degree to which a measure positively correlates with alternative measures of the same construct." The researcher employed two tests to assess convergent validity: outer loading and average variance extracted (AVE).

4.7.2.1 Outer Loading

The outer loadings in Table 4.14 represent the relationship between the constructs and their respective indicators. These loadings, also known as reliability indicators, measure the strength of each indicator's association with its corresponding construct. A loading above 0.60 is generally considered acceptable for convergent validity (Hair Jr et al., 2017).

Work Ethics (WE): Most indicators show strong loadings, especially for Professionalism and Integrity (PI), with values of 0.898 for Q1 and 0.878 for Q2, and Commitment to Quality and Safety (CQS), with loadings of 0.878 for Q3 and 0.913 for Q4. However, Teamwork and Responsibility (TR) indicators such as Q5 (0.867) and Q6 (0.905) show acceptable values, while Communication and Transparency (CT) indicators, such as Q7 (0.861) and Q8 (0.926), exhibit strong loadings. Nonetheless, the second-order Work Ethics (WE) construct has moderate loadings: PI (0.592), CQS (0.754), TR (0.721), and CT (0.575), with Communication and Transparency being the weakest.

Information Systems (IS): The loadings for most indicators are strong. Patient's Perception and Satisfaction with HIS (PPS-HIS) show values of 0.876 for Q9, 0.799 for Q10, and 0.859 for Q11, all indicating strong associations. Other indicators such as HIS

Communication Influence on Patient's Attitude and Perception (CI-PAP) (Q14: 0.893) and Benefits of HIS in Health Care Delivery, Patient's Assessment (B-HCD) (Q18: 0.861, Q19: 0.935) also show solid loadings. However, Q16 (0.599) has relatively lower loadings, suggesting weaker associations with the construct. The second-order Information Systems (IS) construct shows variable loadings: PPS-HIS (0.791), CI-PAP (0.277), and B-HCD (0.804).

Service Quality (SQ): Indicators for Tangible (T) (Q22: 0.572, Q23: 0.600, Q24: 0.688) and Reliability (R) (Q31: 0.802, Q32: 0.877) have acceptable loadings, but some values are lower, such as Q26 (0.386) and Q28 (0.377), indicating weaker relationships with the construct. Responsiveness (RES) indicators such as Q36 (0.876), Q37 (0.838), and Q38 (0.934) show strong associations, while Assurance (A) (Q40: 0.862, Q41: 0.973) and Empathy (E) (Q44: 0.811, Q45: 0.897) demonstrate strong loadings. However, the second-order Service Quality (SQ) construct has moderate loadings: T (0.867), R (0.784), RES (0.628), A (0.579), and E (0.629), with Assurance showing the weakest association.

Customer Value (CV): Most indicators have strong loadings. Information Seeking (Inf-SE) has loadings of 0.867 for Q49 and 0.757 for Q50, while Information Sharing (Inf-SH) shows values of 0.600 for Q52 and 0.873 for Q53, with Q54 achieving an excellent value of 0.948. Responsible Behavior (RB) and Personal Interaction (PE-I) also exhibit strong loadings (Q56: 0.884, Q57: 0.885, Q60: 0.880). Helping (H) (Q68: 0.576, Q69: 0.785, Q70: 0.953) and Tolerance (TOL) (Q72: 0.889, Q73: 0.774) show solid associations but suggest further investigation, especially for Helping, which has a lower loading (Q68: 0.576). The second-order Customer Value (CV) construct has mixed loadings: Inf-SE (0.173), Inf-SH (0.590), RB (0.823), PI (0.758), FB (0.592), H (0.723), and TOL (0.667).

Sustainable Competitive Advantage: For the Word-of-Mouth dimension, Q75 (0.938) and Q76 (0.985) show excellent loadings, but Purchase Intentions (PU-I) indicators such as Q77 (0.910) and Q78 (0.904) display strong values, while Q79 (0.815) shows a slightly lower

loading. Price Sensitivity (PS) indicators such as Q80 (0.904), Q81 (0.831), and Q82 (0.913) are strong, as is Complaining Behavior (CB) (Q83: 0.907, Q84: 0.925). The second-order SCA construct shows better loadings for Purchase Intentions (PU-I) (0.830), Price Sensitivity (PS) (0.853), and Complaining Behavior (CB) (0.802), but Word-of-Mouth (WOM) (0.322) remains relatively weak.

In Summary, while many indicators for the first-order constructs show strong loadings (above 0.60), The second order several indicators, especially in Information Seeking (Inf-SE) and Word-of-Mouth, exhibit low or weak loadings.

Table (4.14) Outer Loading of Indicators

Construct and Indicators	Question	Outer Loading
→ First Order		
WE		
PI	Q1	0.898
	Q2	0.878
CQS	Q3	0.878
	Q4	0.913
TR	Q5	0.867
	Q6	0.905
CT	Q7	0.861
	Q8	0.926
IS		
PPS-HIS	Q9	0.876
	Q10	0.799
	Q11	0.859
	Q12	0.903
	Q13	0.890
CI-PAP	Q14	0.893
	Q15	0.900
	Q16	0.599
	Q17	0.922
B-HCD	Q18	0.861
	Q19	0.935
	Q20	0.925
	Q21	0.839
SQ		
T	Q22	0.572
	Q23	0.600
	Q24	0.688
	Q25	0.775

	Q26	0.386
	Q27	0.622
	Q28	0.377
	Q29	0.663
	Q30	0.749
R	Q31	0.802
	Q32	0.877
	Q33	0.907
	Q34	0.822
	Q35	0.781
RES	Q36	0.876
	Q37	0.838
	Q38	0.934
	Q39	0.727
A	Q40	0.862
	Q41	0.973
	Q42	0.959
	Q43	0.929
E	Q44	0.811
	Q45	0.897
	Q46	0.785
	Q47	0.855
	Q48	0.881
CV		
Inf-SE	Q49	0.867
	Q50	0.757
	Q51	0.959
Inf-SH	Q52	0.600
	Q53	0.873
	Q54	0.948
	Q55	0.857
RB	Q56	0.884
	Q57	0.885
	Q58	0.755
	Q59	0.721
PI	Q60	0.880
	Q61	0.890
	Q62	0.909
	Q63	0.862
	Q64	0.891
FB	Q65	0.903
	Q66	0.885
	Q67	0.883
H	Q68	0.576
	Q69	0.785
	Q70	0.953

	Q71	0.914
TOL	Q72	0.889
	Q73	0.774
	Q74	0.794
SCA		
WOM	Q75	0.938
	Q76	0.985
PU-I	Q77	0.910
	Q78	0.904
	Q79	0.815
PS	Q80	0.904
	Q81	0.831
	Q82	0.913
CB	Q83	0.907
	Q84	0.925
	Q85	0.918
	Q86	0.710
→ Second Order		
WE		
	PI	0.592
	CQS	0.754
	TR	0.721
	CT	0.575
IS		
	PPS-HIS	0.791
	CI-PAP	0.277
	B-HCD	0.804
SQ		
	T	0.867
	R	0.784
	RES	0.628
	A	0.579
	E	0.629
CV		
	Inf-SE	0.173
	Inf-SH	0.590
	RB	0.823
	PE-I	0.758
	FB	0.592
	H	0.723
	TOL	0.667
SCA		
	WOM	0.322
	PU-I	0.830
	PS	0.853
	CB	0.802

4.7.2.2 Average Variance Extracted (AVE)

AVE is a widely used indicator of convergent validity, calculated by summing the squared outer loadings of all indicators for a construct and dividing by the number of indicators (Fornell & Larcker, 1981). As presented in Table 4.15, most constructs demonstrate strong convergent validity, with AVE values exceeding the 0.50 threshold, except for the Tangible.

The Work Ethics (WE), all first-order dimensions exhibit strong convergent validity, with Professionalism and Integrity (AVE = 0.789), Commitment to Quality and Safety (AVE = 0.802), Teamwork and Responsibility (AVE = 0.785), and Communication and Transparency (AVE = 0.799) exceeding the 0.50 threshold.

In the Information System (IS) construct, all first-order dimensions demonstrate acceptable convergent validity: Patient's Perceptions and Satisfaction with HIS (AVE = 0.750), HIS Communication Influence on Patient's Attitude and Perception (AVE = 0.704), and Benefits of HIS (AVE = 0.794).

The Service Quality (SQ) construct shows mixed results. While Reliability (AVE = 0.704), Responsiveness (AVE = 0.718), Assurance (AVE = 0.868), and Empathy (AVE = 0.717) meet or exceed the threshold, Tangibles (AVE = 0.382) requires significant improvement.

For Customer Value (CV), most dimensions perform well, with high AVE values for Information Seeking (AVE = 0.748), Information Sharing (AVE = 0.689), Responsible Behavior (AVE = 0.664), Personal interaction (AVE = 0.786), and Feedback (AVE = 0.793). Dimensions such as Helping (AVE = 0.673) and Tolerance (AVE = 0.673) also meet the threshold.

Sustainable Competitive Advantage demonstrates strong performance for first-order dimensions. Word-of-mouth (AVE = 0.924), Purchase Intentions (AVE = 0.769), Price Sensitivity (AVE = 0.780), and Complaining Behavior (AVE = 0.756) all exceed the threshold.

The second-order AVE values reveal areas requiring improvement for several constructs. Work Ethics (AVE = 0.443), Information System (AVE = 0.449), Service Quality (AVE = 0.498), and Customer Value (AVE = 0.421) fall below the recommended threshold, indicating the need for refinement. The Sustainable Competitive Advantage (AVE = 0.541) exceeds the threshold, demonstrating good overall validity for this construct.

Table (4.15) Result of Average Variance Extracted (AVE)

Construct and Indicators	AVE
→ First Order	
WE	
PI	0.789
CQS	0.802
TR	0.785
CT	0.799
IS	
PPS-HIS	0.750
CI-PAP	0.704
B-HCD	0.794
SQ	
T	0.382
R	0.704
RES	0.718
A	0.868
E	0.717
CV	
Inf-SE	0.748
Inf-SH	0.689
RB	0.664
PE-I	0.786
FB	0.793
H	0.673
TOL	0.673
SCA	
WOM	0.924
PU-I	0.769
PS	0.780
CB	0.756
→ Second Order	
WE	0.443
IS	0.449
SQ	0.498
CV	0.421
SCA	0.541

4.7.3 Discriminant Validity

4.7.3.1 Discriminant Validity 1st Order

To assess discriminant validity, three methods were applied: The Fornell-Larcker criterion, the Heterotrait-Monotrait ratio of correlations (HTMT), and cross-loading analysis.

The Fornell-Larcker criterion evaluates the square root of the Average Variance Extracted (AVE) for each construct. For discriminant validity to be confirmed, the square root of the AVE for a construct must be greater than its correlations with other constructs (Fornell & Larcker, 1981). In general, the Fornell-Larcker criterion results suggest good discriminant validity for most constructs. These results are presented in Table 4.16.

The Heterotrait-Monotrait (HTMT) ratio assesses the discriminant validity by evaluating the correlation between different constructs. For discriminant validity to hold, the HTMT ratio should be below a threshold value of 0.85 (Fornell & Larcker, 1981). The results from Table 4.17 show that the HTMT ratios between the constructs generally remain below this threshold, which indicates that the constructs are distinct and not overly correlated.

The cross-loading matrix shows how each question or indicator loads onto various dimensions (Chin, 1998). Ideally, each indicator should have a higher loading on its intended dimension than on any other, indicating it is more strongly associated with that specific construct. Overall, the matrix supports the construct validity of each indicator loads highest on its respective dimension and has low cross-loadings on other dimensions (see Appendix B).

Table (4.16) Fornell-Larcker criterion (1st Order)

PI	0.888																							
RES	0.117	0.847																						
A	0.129	0.199	0.932																					
E	0.029	0.253	0.213	0.847																				
Inf-SE	-0.091	0.082	-0.207	0.252	0.865																			
Inf-SH	0.218	0.189	0.199	0.156	0.062	0.830																		
RB	0.268	0.121	0.359	0.218	-0.047	0.419	0.815																	
PE-I	0.255	0.254	0.350	0.179	-0.166	0.517	0.683	0.886																
FB	0.154	0.06	0.258	0.138	0.178	0.179	0.365	0.281	0.890															
H	0.188	0.164	0.031	0.207	0.208	0.251	0.525	0.430	0.235	0.820														
TOL	0.134	0.033	0.218	0.129	0.265	0.171	0.386	0.253	0.498	0.482	0.821													
CQS	0.322	0.340	0.172	0.122	0.165	0.333	0.384	0.419	0.304	0.303	0.210	0.896												
WOM	0.203	0.277	0.354	0.259	-0.090	0.218	0.361	0.432	0.164	0.224	0.166	0.274	0.961											
PU-I	-0.028	0.280	0.093	0.428	0.315	0.118	0.187	0.168	0.210	0.395	0.292	0.157	0.289	0.877										
PS	-0.093	0.079	-0.013	0.341	0.541	-0.052	-0.048	-0.203	0.245	0.228	0.275	0.050	0.040	0.586	0.883									
CB	-0.161	0.077	0.088	0.325	0.385	-0.020	-0.023	-0.073	0.099	0.212	0.203	-0.032	0.074	0.456	0.635	0.870								
TR	0.259	0.436	0.196	0.160	0.044	0.296	0.203	0.230	0.115	0.205	0.112	0.354	0.260	0.134	0.062	-0.014	0.886							
CT	0.079	0.204	0.192	0.232	0.086	0.298	0.46	0.397	0.255	0.328	0.222	0.227	0.217	0.381	0.111	0.110	0.266	0.894						
PPS-HIS	0.021	0.244	0.321	0.081	0.105	0.121	0.135	0.143	0.216	0.047	0.168	0.158	0.167	0.109	0.164	0.109	0.090	0.098	0.866					
CI-PAP	0.220	0.098	-0.086	0.261	0.229	0.248	0.309	0.122	0.028	0.444	0.240	0.219	0.177	0.324	0.218	0.152	0.199	0.172	0.013	0.839				
B-HCD	-0.101	0.206	0.225	0.134	0.157	0.069	0.131	0.094	0.089	0.064	0.120	0.209	0.117	0.144	0.175	0.277	0.105	0.062	0.355	0.036	0.891			
T	0.135	0.499	0.374	0.434	0.227	0.325	0.404	0.347	0.192	0.399	0.243	0.430	0.426	0.554	0.311	0.289	0.483	0.326	0.149	0.228	0.322	0.618		
R	0.162	0.316	0.371	0.343	0.116	0.275	0.510	0.457	0.291	0.340	0.313	0.394	0.322	0.313	0.106	0.157	0.340	0.364	0.139	0.182	0.221	0.618	0.839	
PI	Professionalism and Integrity					RB	Responsible behavior					WOM	Word-of-mouth					PPS-HIS	Patients Perception and Satisfaction with HIS					
RES	Responsiveness					PE-I	Personal interaction					PU-I	Purchase Intentions					CI-PAP	Communication Influence on Patient's Attitude and Perception					
A	Assurance					FB	Feedback					PS	Price Sensitivity					B-HCD	Benefits of HIS in Health Care Delivery					
E	Empathy					H	Helping					CB	Complaining Behavior					T	Tangible					
Inf-SE	Information seeking					TOL	Tolerance					TR	Teamwork and Responsibility					R	Reliability					
Inf-SH	Information Sharing					CQS	Commitment to Quality and Safety					CT	Communication and Transparency											

Table (4.17) Heterotrait-Monotrait ratio (1st Order)

	PI	RES	A	E	Inf-SE	Inf-SH	RB	PI	FB	H	TOL	CQS	WOM	PU-I	PS	CB	TR	CT	PPS-HIS	CI-PAP	B-HCD	T	R
PI																							
RES	0.184																						
A	0.191	0.202																					
E	0.145	0.274	0.217																				
Inf-SE	0.291	0.137	0.165	0.284																			
Inf-SH	0.288	0.245	0.254	0.17	0.162																		
RB	0.364	0.218	0.416	0.246	0.26	0.466																	
PE-I	0.314	0.313	0.36	0.209	0.199	0.540	0.775																
FB	0.196	0.154	0.283	0.16	0.217	0.216	0.415	0.292															
H	0.300	0.179	0.154	0.245	0.227	0.281	0.604	0.416	0.280														
TOL	0.277	0.161	0.259	0.189	0.36	0.185	0.476	0.307	0.622	0.606													
CQS	0.423	0.406	0.195	0.143	0.143	0.392	0.483	0.504	0.357	0.351	0.264												
WOM	0.241	0.284	0.379	0.259	0.141	0.247	0.440	0.482	0.204	0.235	0.213	0.313											
PU-I	0.236	0.338	0.153	0.475	0.319	0.203	0.295	0.288	0.253	0.503	0.398	0.317	0.309										
PS	0.221	0.174	0.123	0.379	0.600	0.143	0.239	0.225	0.288	0.297	0.409	0.090	0.073	0.677									
CB	0.219	0.167	0.121	0.348	0.433	0.093	0.190	0.090	0.121	0.264	0.256	0.047	0.086	0.516	0.728								
TR	0.356	0.553	0.227	0.192	0.118	0.402	0.254	0.287	0.166	0.239	0.155	0.472	0.307	0.264	0.128	0.153							
CT	0.103	0.267	0.217	0.286	0.100	0.341	0.568	0.456	0.320	0.334	0.308	0.284	0.274	0.486	0.181	0.169	0.324						
PPS-HIS	0.085	0.265	0.343	0.117	0.127	0.152	0.158	0.167	0.246	0.15	0.202	0.184	0.184	0.141	0.189	0.137	0.127	0.125					
CI-PAP	0.232	0.146	0.175	0.291	0.176	0.291	0.316	0.176	0.141	0.515	0.293	0.225	0.153	0.342	0.271	0.176	0.227	0.178	0.112				
B-HCD	0.129	0.231	0.240	0.198	0.198	0.092	0.192	0.124	0.149	0.113	0.165	0.252	0.123	0.181	0.200	0.312	0.126	0.138	0.381	0.110			
T	0.337	0.602	0.409	0.461	0.331	0.395	0.569	0.448	0.422	0.487	0.418	0.501	0.442	0.652	0.407	0.371	0.576	0.395	0.204	0.321	0.394		
R	0.208	0.342	0.386	0.363	0.154	0.298	0.582	0.511	0.328	0.393	0.381	0.472	0.352	0.361	0.167	0.177	0.401	0.432	0.151	0.214	0.251	0.627	

PI	Professionalism and Integrity	RB	Responsible behavior	WOM	Word-of-mouth	PPS-HIS	Patients Perception and Satisfaction with HIS
RES	Responsiveness	PE-I	Personal interaction	PU-I	Purchase Intentions	CI-PAP	Communication Influence on Patient's Attitude and Perception
A	Assurance	FB	Feedback	PS	Price Sensitivity	B-HCD	Benefits of HIS in Health Care Delivery
E	Empathy	H	Helping	CB	Complaining Behavior	T	Tangible
Inf-SE	Information seeking	TOL	Tolerance	TR	Teamwork and Responsibility	R	Reliability
Inf-SH	Information Sharing	CQS	Commitment to Quality and Safety	CT	Communication and Transparency		

4.7.3.2 Discriminant Validity 2nd Order

The square root of the AVE for each construct (diagonal values) is higher than the inter-construct correlations (off-diagonal values). Exceptions are minor, with Service Quality (SQ) and Work Ethics (WE) having relatively high correlations (0.556) that approach but do not exceed their AVE square roots. This indicates adequate discriminant validity for the second-order constructs as shown in Table 4.18.

Table 4.19 presents the HTMT result, most values remain below the threshold of 0.85, affirming discriminant validity and there is no overlap between these constructs.

Table (4.18) Fornell-Larcker criterion (2nd Order)

	CV	SCA	SQ	WE	IS
CV	0.649				
SCA	0.289	0.735			
SQ	0.527	0.466	0.706		
WE	0.572	0.163	0.556	0.665	
IS	0.288	0.318	0.385	0.230	0.670

Table (4.19) Heterotrait-Monotrait ratio (2nd Order)

	CV	SCA	SQ	WE	IS
CV					
SCA	0.644				
SQ	0.698	0.719			
WE	0.849	0.485	0.823		
IS	0.758	0.823	0.876	0.75	

4.7.4 Structural Model Assessment

Once the constructs' reliability and validity were confirmed, the following step involved assessing the structural model to estimate the hypothesized relationships among constructs. The researcher conducted four tests to evaluate the structural model: the collinearity test, coefficient of determination (R^2), predictive relevance (Q^2), and effect size (f^2) tests.

4.7.4.1 Indicator Collinearity

Variance Inflation Factor (VIF) statistics is utilized to assess collinearity in indicators (Fornell & Bookstein, 1982). A VIF value above 5 (or in stricter cases, above 3) can indicate collinearity. High collinearity suggests that indicators within a construct are highly correlated, which can reduce the reliability of the construct. In Table 4.20, VIF values are provided for each dimension, across several constructs to assess collinearity. Results show no collinearity in the structural model since all VIF of all constructs were below 5.

Table (4.20) Result of Collinearity Statistics (VIF) for Indicators

Construct and Indicators	VIF
WE	
PI	1.147
CQS	1.251
TR	1.227
CT	1.101
IS	
PPS-HIS	1.144
CI-PAP	1.001
B-HCD	1.145
SQ	
T	2.134
R	1.694
RES	1.335
A	1.209
E	1.251
CV	
Inf-SE	1.266
Inf-SH	1.425
RB	2.306
PE-I	2.357
FB	1.448
H	1.726
TOL	1.692
SCA	
WOM	1.123
PU-I	1.731
PS	2.107
CB	1.706

4.7.4.2 Coefficient of Determination (R^2)

The coefficient of determination (R^2) is a commonly used measure for evaluating the structural model, indicating the proportion of variance in the endogenous construct explained by all exogenous constructs. The R^2 value ranges from zero to one, with higher values suggesting greater predictive accuracy. An R^2 below 0.0 is deemed unacceptable. According to Cohen (2013), R^2 values of 0.02, 0.15, and 0.35 are generally interpreted as weak, moderate, and strong levels of explanatory power, respectively. Table 4.21 interprets the result of the R^2 value.

In terms of individual dimensions, Work Ethics (WE) demonstrates high R^2 values across most dimensions, such as Commitment to Quality and Safety (0.569), Teamwork and Responsibility (0.520), and Professionalism and Integrity (0.351), except Communication and Transparency (0.330), which shows a moderate level of explanatory power.

For the Information System (SI), most dimensions show strong explanatory power, with high levels of Patient Perceptions and Satisfaction with HIS (PPS-HIS) (0.625) and Benefits of HIS (B-HCD) (0.646). However, HIS Communication Influence on Patient Attitude and Perception (CI-PAP) (0.077) reflects weak explanatory power.

The Service Quality (SQ) construct also demonstrates strong explanatory power, with Tangibles (T) (0.752) showing the highest, followed by Responsiveness (R) (0.615), Assurance (A) (0.335), and Empathy (E) (0.395). While Assurance and Empathy are moderate, the other dimensions have high R^2 values, indicating the model's good predictive accuracy for these indicators.

For Customer Value, while Responsible Behavior (RB) (0.678) and Personal interaction (PE-I) (0.574) show high explanatory power, some dimensions such as Information Seeking (Inf-SE) (0.030) and Information Sharing (Inf-SH) (0.349) show weak and moderate levels of predictive accuracy, respectively.

Similarly, Sustainable Competitive Advantage shows high levels of explanatory power across several dimensions, such as Price Sensitivity (PS) (0.727), Purchase Intentions (PU-I) (0.690), and Complaining Behavior (CB) (0.643), while Word-of-Mouth (0.103) exhibits weak explanatory power.

Table (4.21) Results of R2

Construct and Indicators	R²	Degree
WE		
PI	0.351	High
CQS	0.569	High
TR	0.520	High
CT	0.330	Moderate
IS		
PPS-HIS	0.625	High
CI-PAP	0.077	Weak
B-HCD	0.646	High
SQ		
T	0.752	High
R	0.615	High
RES	0.395	High
A	0.335	Moderate
E	0.395	High
CV		
Inf-SE	0.030	Weak
Inf-SH	0.349	Moderate
RB	0.678	High
PE-I	0.574	High
FB	0.350	High
H	0.522	High
TOL	0.445	High
SCA		
WOM	0.103	Weak
PU-I	0.690	High
PS	0.727	High
CB	0.643	High

4.7.4.3 Predictive Relevance (Q²)

Predictive relevance (Q²) is the second test used in structural model assessment, introduced by Stone (1974) to gauge the model's relevance, particularly in complex models through the blindfolding procedure. When a PLS-SEM model shows predictive relevance, it

accurately forecasts indicator data points. A Q^2 value greater than zero for an endogenous latent variable suggests that the PLS path model is capable of predicting that construct (Hair Jr et al., 2017).

According to the results in Table 4.22, all Q^2 values are more than zero, which means that the exogenous constructs are predictively relevant to endogenous constructs.

Table (4.22) Results of Q^2

Construct and Indicators	Q^2
WE	
PI	0.343
CQS	0.563
TR	0.514
CT	0.328
IS	
PPS-HIS	0.620
CI-PAP	0.062
B-HCD	0.645
SQ	
T	0.743
R	0.609
RES	0.390
A	0.332
E	0.391
CV	
Inf-SE	0.017
Inf-SH	0.169
RB	0.284
PE-I	0.269
FB	0.107
H	0.162
TOL	0.075
SCA	
WOM	0.100
PU-I	0.204
PS	0.053
CB	0.099

4.7.4.4 Effect Size (f^2) tests

Effect size determines the impact of individual exogenous constructs on changes in an endogenous construct if they are removed from the structural model (Chin, 1998). The numerator of f^2 represents the unique portion of variance explained by the focal variable, beyond what other factors present in the regression. Effect sizes are classified as small, medium, and large with values of 0.02, 0.15, and 0.35, respectively (Cohen, 1992). Based on the f^2 values provided in Table 4.23, the results indicate significant variation in effect sizes across the model.

Work Ethics (WE) exhibits high effect sizes for several relationships: WE \rightarrow PI (0.541), WE \rightarrow CQS (1.319), and WE \rightarrow TR (1.084), all suggesting that Work Ethics has a strong impact on Purchase Intentions, Commitment to Quality and Safety, and Teamwork and Responsibility. However, WE \rightarrow CT (0.493) shows a moderate effect, indicating a more moderate influence on Collaboration and Trust.

For Information System, IS \rightarrow PPS-HIS (1.669) and IS \rightarrow B-HCD (1.823) display high effect sizes, showing a strong impact of Information System on Patient's Perceptions and Satisfaction with HIS and Benefits of HIS. In contrast, IS \rightarrow CI-PAP (0.083) is a weak effect, suggesting minimal influence on HIS Communication Influence on Patient's Attitude and Perception.

The Service Quality (SQ) construct has several high effect sizes, notably SQ \rightarrow T (3.031), SQ \rightarrow R (1.6), SQ \rightarrow RES (0.652), SQ \rightarrow A (0.504), and SQ \rightarrow E (0.653), indicating strong impacts of Service Quality on Tangibles, Responsiveness, Reliability, Assurance, and Empathy, respectively.

Customer Value (CV) also demonstrates considerable influence, with high effect sizes for relationships such as CV \rightarrow Inf-SH (0.535), CV \rightarrow RB (2.101), CV \rightarrow PE-I (1.347), CV \rightarrow FB (0.539), CV \rightarrow H (1.093), and CV \rightarrow TOL (0.803), suggesting a strong impact of

Customer Value on Information Sharing, Responsible Behavior, Purchase Intentions, Feedback, Hedonic Value, and Tolerance. However, $CV \rightarrow Inf-SE$ (0.031) has a weak effect, reflecting the minimal impact on Information Seeking.

Finally, Sustainable Competitive Advantage shows high effect sizes in $SCA \rightarrow PU-I$ (2.221), $SCA \rightarrow PS$ (2.668), and $SCA \rightarrow CB$ (1.801), signifying that SCA has a substantial influence on Purchase Intentions, Price Sensitivity, and Complaining Behavior. However, $SCA \rightarrow WOM$ (0.115) represents a weak effect, indicating minimal impact on Word-of-Mouth. These results illustrate the varying degrees of influence different constructs have on the endogenous variables in the model, with some relationships showing strong and substantial effects, while others exhibit more moderate or weak influences.

Table (4.23) Results of f^2

Construct and Indicators	f^2	Degree
WE		
WE \rightarrow PI	0.541	High
WE \rightarrow CQS	1.319	High
WE \rightarrow TR	1.084	High
WE \rightarrow CT	0.493	Moderate
IS		
IS \rightarrow PPS-HIS	1.669	High
IS \rightarrow CI-PAP	0.083	Weak
IS \rightarrow B-HCD	1.823	High
SQ		
SQ \rightarrow T	3.031	High
SQ \rightarrow R	1.600	High
SQ \rightarrow RES	0.652	High
SQ \rightarrow A	0.504	High
SQ \rightarrow E	0.653	High
CV		
CV \rightarrow Inf-SE	0.031	Weak
CV \rightarrow Inf-SH	0.535	High
CV \rightarrow RB	2.101	High
CV \rightarrow PE-I	1.347	High
CV \rightarrow FB	0.539	High
CV \rightarrow H	1.093	High
CV \rightarrow TOL	0.803	High
SCA		
SCA \rightarrow WOM	0.115	Weak

SCA → PU-I	2.221	High
SCA → PS	2.668	High
SCA → CB	1.801	High

4.7.5 Research Hypotheses Assessment

The last step in evaluating the structural model is to assess the hypothesized relationships through the path coefficient test. Following Hair Jr et al. (2017), we applied bootstrapping techniques with 5,000 subsamples to test the study hypotheses.

Figure 4.1 presents the results for the study hypotheses. In the path analysis, values shown in the inner model represent the path coefficient (β -value), while values in the outer model indicate the p-value.

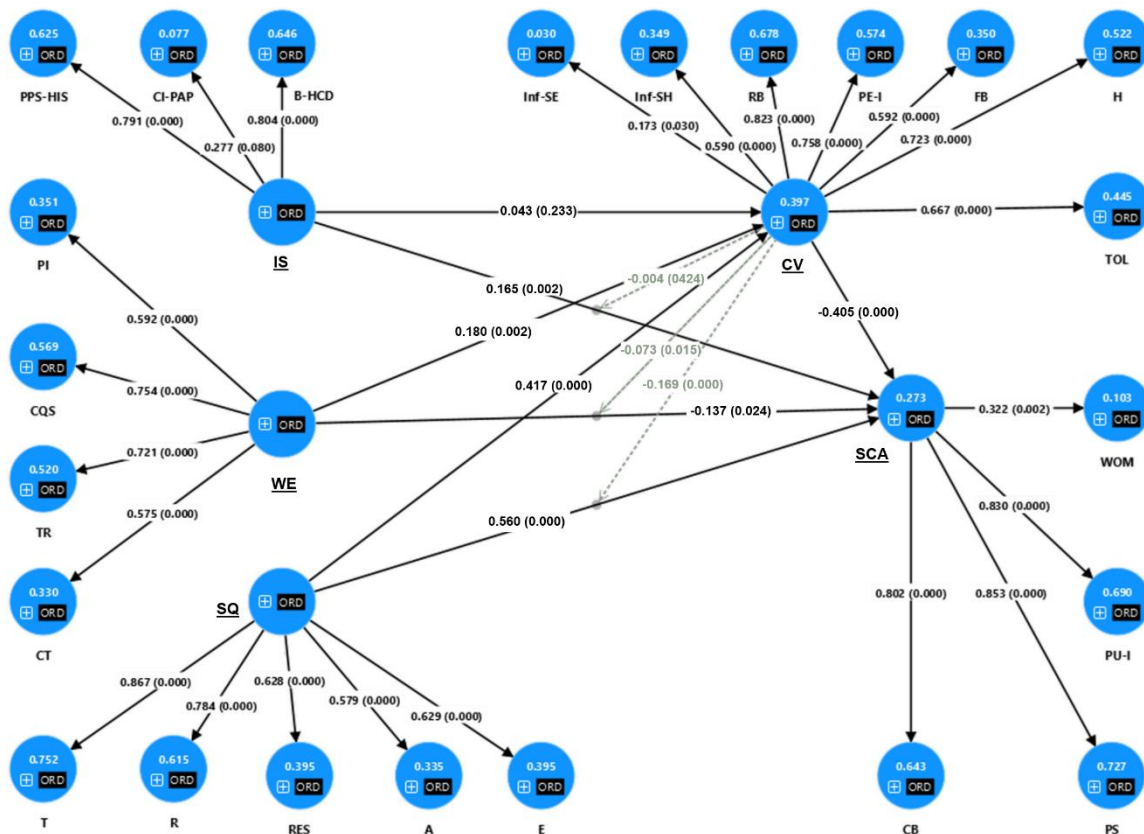


Figure (4.1) Results of Path Analysis

*Values in the inner model represent the path coefficient (β -value); values in the outer model represent the p-value.

4.7.6 Results of the Hypothesis

4.7.6.1 Work Ethics & Customer Value Hypothesis

The first hypothesis examines the relationship between Work Ethics and Customer Value. “**H1**: Work Ethics (WE) has a positive effect on Customer Value (CV).” As shown in Table 4.24, there is a significant positive direct relationship between Work Ethics and Customer Value ($\beta = 0.180$, $t = 2.968$), which supports H1, as the p-value (0.000) is below the significance level of 0.05. This indicates that if Work Ethics increase by one unit, Customer Value will increase by 0.180 units.

Additionally, the results of the first sub-hypothesis, which examines the indirect effects of Work Ethics on the dimensions of Customer Value, are presented in Table 4.25. The findings reveal that Work Ethics has a significant positive relationship with Information Sharing (Inf-SH) ($\beta = 0.126$, $t = 2.539$, $p = 0.006$), Responsible Behavior (RB) ($\beta = 0.176$, $t = 3.513$, $p = 0.000$), Personal Interaction (PE-I) ($\beta = 0.161$, $t = 3.357$, $p = 0.000$), Feedback (FB) ($\beta = 0.127$, $t = 3.328$, $p = 0.000$), Helping (H) ($\beta = 0.155$, $t = 3.366$, $p = 0.000$), and Tolerance (TOL) ($\beta = 0.143$, $t = 3.550$, $p = 0.000$), supporting these sub-hypotheses. However, the relationship between Work Ethics and Information Seeking (Inf-SE) was not significant ($\beta = 0.038$, $t = 1.606$, $p = 0.054$), as the p-value exceeded the 0.05 threshold, rendering this sub-hypothesis unsupported.

Overall, these findings suggest that Work Ethics significantly enhance various dimensions of Customer Value, including Information Sharing, Responsible Behavior, Personal Interaction, Feedback, Helping, and Tolerance, but not Information Seeking. This highlights the critical role of Work Ethics in improving customer value across multiple aspects.

Table (4.24) Results of the First Hypothesis

Hypothesis	β coefficient	Std.	t values	p values	Result
WE \rightarrow CV	0.180	0.061	2.968**	0.002	Supported

Note. $**P < 0.05$

Table (4.25) Results of the First Sub-Hypothesis

Hypothesis	β coefficient	Std.	t values	p values	Result
WE → CV → Inf-SE	0.038	0.024	1.606	0.054	Not Supported
WE → CV → Inf-SH	0.126	0.049	2.539**	0.006	Supported
WE → CV → RB	0.176	0.050	3.513**	0.000	Supported
WE → CV → PE-I	0.161	0.048	3.357**	0.000	Supported
WE → CV → FB	0.127	0.038	3.328**	0.000	Supported
WE → CV → H	0.155	0.046	3.366**	0.000	Supported
WE → CV → TOL	0.143	0.040	3.550**	0.000	Supported

Note. $**P < 0.05$

4.7.6.2 Service Quality & Customer Value Hypothesis

The second hypothesis explores the connection between Service Quality and Customer Value: “**H2**: Service Quality (SQ) has a positive effect on Customer Value (CV).” As shown in Table 4.26, there is a significant positive direct relationship between Service Quality and Customer Value ($\beta = 0.417$, $t = 7.099$), which supports H2, as the p-value (0.000) is below the significance level of 0.05. This indicates that if Service Quality increases by one unit, Customer Value will increase by 0.417 units.

Additionally, the results of the second sub-hypothesis, which examines the indirect effects of Service Quality on the dimensions of Customer Value, are presented in Table 4.27. The findings show that Service Quality has a significant positive relationship with Information Seeking (Inf-SE) ($\beta = 0.076$, $t = 1.916$, $p = 0.028$), Information Sharing (Inf-SH) ($\beta = 0.252$, $t = 4.130$, $p = 0.000$), Responsible Behavior (RB) ($\beta = 0.352$, $t = 6.737$, $p = 0.000$), Personal Interaction (PE-I) ($\beta = 0.324$, $t = 6.623$, $p = 0.000$), Feedback (FB) ($\beta = 0.254$, $t = 5.207$, $p = 0.000$), Helping (H) ($\beta = 0.311$, $t = 5.813$, $p = 0.000$), and Tolerance (TOL) ($\beta = 0.287$, $t =$

5.685, $p = 0.000$). These results support all sub-hypotheses, indicating that Service Quality not only directly enhances Customer Value but also positively influences its various dimensions.

Overall, these findings highlight the critical role of Service Quality in driving comprehensive customer-centered outcomes. Service Quality significantly contributes to improving Customer Value both directly and indirectly through its positive effects on key dimensions such as Information Seeking, Information Sharing, Responsible Behavior, Personal Interaction, Feedback, Helping, and Tolerance.

Table (4.26) Results of the Second Hypothesis

Hypothesis	β coefficient	Std.	t values	p values	Result
SQ \rightarrow CV	0.417	0.059	7.099**	0.000	Supported

Note. ** $P < 0.05$

Table (4.27) Results of the Second Sub-Hypothesis

Hypothesis	β coefficient	Std.	t values	p values	Result
SQ \rightarrow CV \rightarrow Inf-SE	0.076	0.040	1.916**	0.028	Supported
SQ \rightarrow CV \rightarrow Inf-SH	0.252	0.061	4.130**	0.000	Supported
SQ \rightarrow CV \rightarrow RB	0.352	0.052	6.737**	0.000	Supported
SQ \rightarrow CV \rightarrow PE-I	0.324	0.049	6.623**	0.000	Supported
SQ \rightarrow CV \rightarrow FB	0.254	0.049	5.207**	0.000	Supported
SQ \rightarrow CV \rightarrow H	0.311	0.053	5.813**	0.000	Supported
SQ \rightarrow CV \rightarrow TOL	0.287	0.051	5.685**	0.000	Supported

Note. ** $P < 0.05$

4.7.6.3 Information Systems & Customer Value Hypothesis

The third hypothesis examines how Information Systems affect Customer Value: “**H3**: Information System (IS) has a positive effect on Customer Value (CV).” As shown in Table 4.28, there is no significant relationship between Information System and Customer Value ($\beta = 0.043$, $t = 0.729$, $p = 0.233$), which does not support H3, as the p-value exceeds the

significance level of 0.05. This indicates that variations in Information Systems do not have a measurable effect on Customer Value.

Additionally, the results of the third sub-hypothesis, as shown in Table 4.29, demonstrate that the Information System does not significantly influence the various dimensions of Customer Value. Specifically, the relationships between Information System and Information Seeking (Inf-SE) ($\beta = 0.008$, $t = 0.608$, $p = 0.272$), Information Sharing (Inf-SH) ($\beta = 0.025$, $t = 0.708$, $p = 0.239$), Responsible Behavior (RB) ($\beta = 0.036$, $t = 0.730$, $p = 0.233$), Personal Interaction (PE-I) ($\beta = 0.033$, $t = 0.728$, $p = 0.233$), Feedback (FB) ($\beta = 0.026$, $t = 0.723$, $p = 0.235$), Helping (H) ($\beta = 0.031$, $t = 0.727$, $p = 0.234$), and Tolerance (TOL) ($\beta = 0.029$, $t = 0.727$, $p = 0.234$) were all found to be non-significant.

These findings suggest that the Information System does not exert a significant direct or indirect impact on Customer Value or its dimensions. This highlights the limited role of IS in influencing customer-related outcomes within this context.

Table (4.28) Results of the Third Hypothesis

Hypothesis	β coefficient	Std.	t values	p values	Result
IS \rightarrow CV	0.043	0.059	0.729	0.233	Not Supported

Note. $**P < 0.05$

Table (4.29) Results of the Third Sub-Hypothesis

Hypothesis	β coefficient	Std.	t values	p values	Result
IS \rightarrow CV \rightarrow Inf-SE	0.008	0.013	0.608	0.272	Not Supported
IS \rightarrow CV \rightarrow Inf-SH	0.025	0.036	0.708	0.239	Not Supported
IS \rightarrow CV \rightarrow RB	0.036	0.049	0.730	0.233	Not Supported
IS \rightarrow CV \rightarrow PE-I	0.033	0.045	0.728	0.233	Not Supported
IS \rightarrow CV \rightarrow FB	0.026	0.035	0.723	0.235	Not Supported
IS \rightarrow CV \rightarrow H	0.031	0.043	0.727	0.234	Not Supported
IS \rightarrow CV \rightarrow TOL	0.029	0.040	0.727	0.234	Not Supported

Note. $**P < 0.05$

4.7.6.4 Customer Value & Sustainable Competitive Advantage Hypothesis

The fourth hypothesis examines the relationship between Customer Value and Sustainable Competitive Advantage: “**H4**: Customer Value (CV) has a positive effect on Sustainable Competitive Advantage.” As shown in Table 4.30, there is a significant negative relationship between Customer Value and Sustainable Competitive Advantage ($\beta = -0.405$, $t = 4.371$, $p = 0.000$), which supports H4 due to the significant p-value below 0.05. However, the negative coefficient indicates that an increase in Customer Value is associated with a decrease in Sustainable Competitive Advantage.

Moreover, the results of the fourth sub-hypothesis, displayed in Table 4.31, indicate that Customer Value significantly influences Sustainable Competitive Advantage and its related dimensions negatively. Specifically, the relationships between Customer Value and Word-of-Mouth ($\beta = -0.122$, $t = 2.452$, $p = 0.007$), Purchase Intentions (PU-I) ($\beta = -0.335$, $t = 4.312$, $p = 0.000$), Price Sensitivity (PS) ($\beta = -0.348$, $t = 4.098$, $p = 0.000$), and Complaining Behavior (CB) ($\beta = -0.326$, $t = 3.929$, $p = 0.000$) were all significant, but with negative coefficients.

These results suggest that while Customer Value Impacts Sustainable Competitive Advantage and its dimensions, the relationship is inversely proportional. This unexpected finding highlights the complexity of the interaction between Customer Value and Sustainable Competitive Advantage, suggesting that higher Customer Value might not always lead to favorable competitive outcomes within this framework.

Table (4.30) Results of the Fourth Hypothesis

Hypothesis	β coefficient	Std.	t values	p values	Result
CV → SCA	-0.405	0.093	4.371**	0.000	Supported

Note. ** $P < 0.05$

Table (4.31) Results of the Fourth Sub-Hypothesis

Hypothesis	β coefficient	Std.	t values	p values	Result
CV → SCA → WOM	-0.122	0.050	2.452**	0.007	Supported
CV → SCA → PU-I	-0.335	0.078	4.312**	0.000	Supported
CV → SCA → PS	-0.348	0.085	4.098**	0.000	Supported
CV → SCA → CB	-0.326	0.083	3.929**	0.000	Supported

Note. ** $P < 0.05$

4.7.6.5 Mediated Effects via Customer Value

The following analysis explores how Work Ethics (WE), Service Quality (SQ), and Information Systems (IS) impact Sustainable Competitive Advantage through the mediation of Customer Value (CV), as proposed in “**H5**: Customer Value significantly mediates the relationship between information systems, service quality, work ethics, and sustainable competitive advantage in the healthcare sector”.

Table 4.32 shows that Customer Value significantly mediates the relationship between Work Ethics and Sustainable Competitive Advantage ($\beta = -0.073$, $t = 2.159$, $p = 0.015$). This supports H5 for this pathway, as the p-value is below the significance level of 0.05.

Further analysis of the sub-hypotheses, presented in Table 4.33, reveals that the indirect effects of Work Ethics on the dimensions of Sustainable Competitive Advantage are also significant. Specifically, the relationships between Work Ethics and Word-of-Mouth ($\beta = -0.022$, $t = 1.745$, $p = 0.041$), Purchase Intentions (PU-I) ($\beta = -0.060$, $t = 2.150$, $p = 0.016$), Price Sensitivity (PS) ($\beta = -0.063$, $t = 2.113$, $p = 0.017$), and Complaining Behavior (CB) ($\beta = -0.059$, $t = 2.101$, $p = 0.018$) are statistically significant, with all p-values below 0.05.

These results suggest that Customer Value plays a mediating role in the relationship between Work Ethics and Sustainable Competitive Advantage and its associated dimensions. This highlights the indirect pathway through which Work Ethics contribute to competitive

outcomes, emphasizing the importance of Customer Value as a critical mediator in this framework.

Table (4.32) Results of the Fifth Hypothesis Part 1

Hypothesis	β coefficient	Std.	t values	p values	Result
WE → CV → SCA	-0.073	0.034	2.159**	0.015	Supported

Note. ** $P < 0.05$

Table (4.33) Results of the Fifth Sub-Hypothesis Part 1

Hypothesis	β coefficient	Std.	t values	p values	Result
WE → CV → WOM	-0.022	0.013	1.745**	0.041	Supported
WE → CV → PU-I	-0.060	0.028	2.150**	0.016	Supported
WE → CV → PS	-0.063	0.030	2.113**	0.017	Supported
WE → CV → CB	-0.059	0.028	2.101**	0.018	Supported

Note. ** $P < 0.05$

The results, as shown in Table 4.34, demonstrate that Customer Value significantly mediates the relationship between Service Quality and Sustainable Competitive Advantage ($\beta = -0.169$, $t = 4.259$, $p = 0.000$). This finding supports H5 for this pathway, as the p-value is below 0.05. The negative coefficient indicates that higher Service Quality indirectly relates to lower Sustainable Competitive Advantage through Customer Value.

Further analysis of the sub-hypotheses, presented in Table 4.35, reveals that the indirect effects of Service Quality on the dimensions of Sustainable Competitive Advantage are also significant. Specifically, the relationships between Service Quality and Word-of-Mouth ($\beta = -0.051$, $t = 2.413$, $p = 0.008$), Purchase Intentions (PU-I) ($\beta = -0.140$, $t = 4.228$, $p = 0.000$), Price Sensitivity (PS) ($\beta = -0.145$, $t = 4.054$, $p = 0.000$), and Complaining Behavior (CB) ($\beta = -0.136$, $t = 3.880$, $p = 0.000$) are all statistically significant, with p-values below 0.05.

These findings suggest that Customer Value mediates the relationship between Service Quality and Sustainable Competitive Advantage and its related dimensions, with significant

but negative indirect effects. This highlights the complexity of these relationships, emphasizing that while Service Quality influences competitive outcomes, the mediation by Customer Value introduces nuances that may detract from the overall advantage.

Table (4.34) Results of the Fifth Hypothesis Part 2

Hypothesis	β coefficient	Std.	t values	p values	Result
SQ \rightarrow CV \rightarrow SCA	-0.169	0.040	4.259**	0.000	Supported

Note. ** $P < 0.05$

Table (4.35) Results of the Fifth Sub-Hypothesis Part 2

Hypothesis	β coefficient	Std.	t values	p values	Result
SQ \rightarrow CV \rightarrow WOM	-0.051	0.021	2.413**	0.008	Supported
SQ \rightarrow CV \rightarrow PU-I	-0.140	0.033	4.228**	0.000	Supported
SQ \rightarrow CV \rightarrow PS	-0.145	0.036	4.054**	0.000	Supported
SQ \rightarrow CV \rightarrow CB	-0.136	0.035	3.880**	0.000	Supported

Note. ** $P < 0.05$

As shown in Table 4.36, the mediation effect of Customer Value in the relationship between Information Systems and Sustainable Competitive Advantage is not significant ($\beta = -0.004$, $t = 0.191$, $p = 0.424$). Consequently, this aspect of H5 is not supported. These findings indicate that Customer Value does not mediate the relationship between Information Systems and Sustainable Competitive Advantage.

Further analysis of the sub-hypotheses in Table 4.37 reveals that the indirect effects of Information Systems on the dimensions of Sustainable Competitive Advantage are also not significant. Specifically: Complaining Behavior (CB): The mediation effect is not significant ($\beta = -0.004$, $t = 0.189$, $p = 0.425$), and this sub-hypothesis is not supported. Price Sensitivity (PS): The mediation effect is not significant ($\beta = -0.004$, $t = 0.189$, $p = 0.425$), and this sub-hypothesis is not supported. Purchase Intentions (PU-I): The mediation effect is not significant ($\beta = -0.004$, $t = 0.191$, $p = 0.424$), and this sub-hypothesis is not supported. Word-of-Mouth:

The mediation effect is not significant ($\beta = -0.001$, $t = 0.189$, $p = 0.425$), and this sub-hypothesis is not supported.

These findings suggest that Customer Value does not mediate the relationship between Information Systems and Sustainable Competitive Advantage or its related dimensions. The lack of significant mediation effects highlights the limited role of Customer Value as a linking mechanism between Information Systems and competitive outcomes, underscoring the need to consider other factors or pathways that might explain the impact of Information Systems on Sustainable Competitive Advantage.

Table (4.36) Results of the Fifth Hypothesis Part 3

Hypothesis	β coefficient	Std.	t values	p values	Result
IS \rightarrow CV \rightarrow SCA	-0.004	0.023	0.191	0.424	Not Supported

Note. ** $P < 0.05$

Table (4.37) Results of the Fifth Sub-Hypothesis Part 3

Hypothesis	β coefficient	Std.	t values	p values	Result
IS \rightarrow CV \rightarrow WOM	-0.001	0.007	0.189	0.425	Not Supported
IS \rightarrow CV \rightarrow PU-I	-0.004	0.019	0.191	0.424	Not Supported
IS \rightarrow CV \rightarrow PS	-0.004	0.020	0.189	0.425	Not Supported
IS \rightarrow CV \rightarrow CB	-0.004	0.019	0.189	0.425	Not Supported

Note. ** $P < 0.05$

4.7.6.6 Independent Variables Direct Effect

This section explores the direct effect of Work Ethics (WE), Service Quality (SQ), and Information Systems on Sustainable Competitive Advantage and related dimensions.

Work Ethics & Sustainable Competitive Advantage:

As shown in Table 4.38, Work Ethics has a significant negative direct relationship with Sustainable Competitive Advantage ($\beta = -0.137$, $t = 1.983$, $p = 0.024$), indicating that higher levels of Work Ethics are associated with a decrease in Sustainable Competitive Advantage.

Further analysis in Table 4.39 reveals mixed findings for the dimensions of Sustainable Competitive Advantage: Complaining Behavior (CB): Significant negative relationship ($\beta = -0.110$, $t = 1.926$, $p = 0.027$). Price Sensitivity (PS): Significant negative relationship ($\beta = -0.118$, $t = 1.985$, $p = 0.024$). Purchase Intentions (PU-I): Significant negative relationship ($\beta = -0.113$, $t = 1.984$, $p = 0.024$). Word-of-Mouth: Non-significant relationship ($\beta = -0.041$, $t = 1.592$, $p = 0.056$).

These results suggest that higher Work Ethics directly reduces SCA and most of its dimensions, except Word-of-Mouth, which does not show a statistically significant impact.

Table (4.38) Results of the Direct Effect Hypothesis – Work Ethics

Hypothesis	β coefficient	Std.	t values	p values	Result
WE → SCA	-0.137	0.069	1.983	0.024	Supported

Note. $**P < 0.05$

Table (4.39) Results of the Direct Effect Sub-Hypothesis – Work Ethics

Hypothesis	β coefficient	Std.	t values	p values	Result
WE → WOM	-0.041	0.026	1.592	0.056	Not Supported
WE → PU-I	-0.113	0.057	1.984**	0.024	Supported
WE → PS	-0.118	0.059	1.985**	0.024	Supported
WE → CB	-0.110	0.057	1.926**	0.027	Supported

Note. $**P < 0.05$

Service Quality & Sustainable Competitive Advantage:

Table 4.40 demonstrates a significant positive direct relationship between Service Quality and Sustainable Competitive Advantage ($\beta = 0.560$, $t = 9.687$, $p < 0.001$). This underscores the critical role of Service Quality in enhancing Sustainable Competitive Advantage.

The results from Table 4.41 show that Service Quality also positively influences the following dimensions: Complaining Behavior (CB): Significant positive relationship ($\beta =$

0.452, $t = 7.907$, $p < 0.001$). Price Sensitivity (PS): Significant positive relationship ($\beta = 0.482$, $t = 9.335$, $p < 0.001$). Purchase Intentions (PU-I): Significant positive relationship ($\beta = 0.464$, $t = 8.718$, $p < 0.001$). Word-of-Mouth: Significant positive relationship ($\beta = 0.169$, $t = 2.384$, $p = 0.009$). These findings highlight the importance of Service Quality in improving customer behaviors and fostering competitive advantage through enhanced customer engagement.

Table (4.40) Results of the Direct Effect Hypothesis – Service Quality

Hypothesis	β coefficient	Std.	t values	p values	Result
SQ \rightarrow SCA	0.560	0.058	9.687**	0.000	Supported

Note. ** $P < 0.05$

Table (4.41) Results of the Direct Effect Sub-Hypothesis – Service Quality

Hypothesis	β coefficient	Std.	t values	p values	Result
SQ \rightarrow WOM	0.169	0.071	2.384**	0.009	Supported
SQ \rightarrow PU-I	0.464	0.053	8.718**	0.000	Supported
SQ \rightarrow PS	0.482	0.052	9.335**	0.000	Supported
SQ \rightarrow CB	0.452	0.057	7.907**	0.000	Supported

Note. ** $P < 0.05$

Information Systems & Sustainable Competitive Advantage:

As indicated in Table 4.42, Information Systems exhibit a significant positive direct effect on Sustainable Competitive Advantage ($\beta = 0.165$, $t = 2.928$, $p = 0.002$). This emphasizes the value of Information Systems in strengthening organizational competitiveness.

Table 4.43 reveals significant positive relationships between Information Systems and all dimensions of Sustainable Competitive Advantage: Complaining Behavior (CB): Significant positive relationship ($\beta = 0.133$, $t = 2.861$, $p = 0.002$). Price Sensitivity (PS): Significant positive relationship ($\beta = 0.142$, $t = 2.957$, $p = 0.002$). Purchase Intentions (PU-I): Significant positive relationship ($\beta = 0.136$, $t = 2.972$, $p = 0.001$). Word-of-Mouth: Significant positive relationship ($\beta = 0.050$, $t = 1.831$, $p = 0.034$).

These results underscore the critical role of Information Systems in influencing customer behaviors and driving competitive outcomes.

Table (4.42) Results of the Direct Effect Hypothesis – Information System

Hypothesis	β coefficient	Std.	t values	p values	Result
IS → SCA	0.165	0.056	2.928**	0.002	Supported

Note. ** $P < 0.05$

Table (4.43) Results of the Direct Effect Sub-Hypothesis – Information System

Hypothesis	β coefficient	Std.	t values	p values	Result
IS → WOM	0.050	0.027	1.831**	0.034	Supported
IS → PU-I	0.136	0.046	2.972**	0.001	Supported
IS → PS	0.142	0.048	2.957**	0.002	Supported
IS → CB	0.133	0.046	2.861**	0.002	Supported

Note. ** $P < 0.05$

Chapter Five

Discussion of Findings

5.1 Introduction

Chapter Five builds upon the empirical findings presented in Chapter Four by comprehensively interpreting the results. It begins by reviewing the outcomes derived from the descriptive analysis, assessing the PLS-SEM model, and evaluating both the measurement and structural models. By contextualizing these findings, we aim to highlight their significance and alignment with the study objectives. The chapter further explores the implications of the findings, offering practical insights for stakeholders and addressing the broader impact on theory and practice. Finally, we highlight limitations and propose recommendations for future research.

5.2 Descriptive Analysis Discussion

The descriptive statistics of this study provide valuable insights into the participants' perceptions of the key variables. The results revealed a high level of agreement on work ethics (WE), with a mean score of 4.06, aligning with the findings of Hijal-Moghrabi et al. (2017), who highlighted the critical role of ethical practices in enhancing organizational performance. The analysis of WE revealed varied levels of agreement across its dimensions, reflecting organizational strengths and areas for improvement. Professionalism and Integrity (PI) received a high mean score of 4.18, highlighting strong adherence to ethical and professional standards. This result aligns with Al-Abrow et al. (2019), who emphasized the critical role of ethical behavior and professional integrity in fostering trust and improving organizational performance. Similarly, Commitment to Quality and Safety (CQS) emerged as the highest-rated dimension, with a mean score of 4.27. These findings resonate with the work of Mashhi et

al. (2020), who argued that a focus on quality and safety is integral to organizational success, particularly in healthcare settings. Conversely, Teamwork and Responsibility (TR) scored the lowest among the constructs, with a mean of 3.87. The relatively lower agreement suggests challenges in fostering effective collaboration and accountability. This result partially contrasts with previous studies, such as those by Salas et al. (2005), which emphasize that teamwork is a critical driver of organizational effectiveness. Similarly, Communication and Transparency (CT) showed moderate agreement, with a mean of 3.90 and 82.42% positive responses, indicating gaps in openness and clarity. This finding is consistent with Gilley et al. (2009), who highlighted that transparent communication is often challenging in hierarchical or resource-constrained environments, such as healthcare.

Similarly, the high satisfaction ratings for service quality (SQ) (mean = 4.05) support Parasuraman et al. (1988) SERVQUAL model, which emphasizes the significance of service quality in achieving customer satisfaction and loyalty. The evaluation of SQ dimensions demonstrates strong performance across most constructs, with the Tangible (T) dimension receiving a mean score of 4.11, indicating high satisfaction with the physical facilities and equipment. This result aligns with the SERVQUAL model proposed by Parasuraman et al. (1988), which emphasizes the importance of the physical environment in shaping customer perceptions of service quality. Similarly, Reliability (R) scored well with a mean of 4.11, reflecting the organization's consistent ability to deliver dependable services. These findings are consistent with studies like (Zeithaml et al., 1996), which underscore reliability as a critical driver of trust and loyalty in service delivery. The Responsiveness (RES) dimension, however, received a slightly lower mean score of 3.92, suggesting that while patients generally appreciate the service, there is room for improvement in addressing patient needs promptly. This aligns with the findings of Lee et al. (2000), who highlight that responsiveness is often challenging for service providers, particularly in high-pressure environments such as healthcare. The

Assurance (A) dimension scored the highest, with a mean of 4.12, indicating strong patient confidence in the staff's competence and courtesy. This aligns with the emphasis on assurance in the SERVQUAL framework, which links staff expertise and behavior to enhanced customer satisfaction (Parasuraman et al., 1988). Finally, Empathy (E) achieved a mean score of 4.01, reflecting general satisfaction with personalized care. This finding supports research by Bitner et al. (1990), which associates empathy with higher patient loyalty and satisfaction.

On the other hand, information systems (IS) received a moderate level of acceptance (mean = 3.95), suggesting room for improvement in their effectiveness and integration. This finding contrasts with studies like Bharadwaj (2000), which underscore the strategic importance of robust information systems in creating competitive advantage. The evaluation of the information systems dimension reveals varied performance across its constructs, reflecting both strengths and areas for improvement. The construct Patient Perception and Satisfaction with HIS (PPS-HIS) achieved a moderate mean score of 3.98, suggesting that while patients generally perceive the health information system (HIS) favorably, there remains potential to enhance satisfaction levels. This finding aligns with the study by Aggelidis and Chatzoglou (2009), which highlights the importance of user-friendly HIS features in fostering patient satisfaction. However, the construct HIS Communication Influence on Patient's Attitude and Perception (CI-PAP) revealed a mean score of 3.92, this suggests a significant gap in the system's ability to effectively influence patient attitudes and perceptions. These results are consistent with findings from Yusof et al. (2007), who emphasize that communication challenges within HIS can undermine its perceived value and impact. Addressing these communication gaps is critical for enhancing the HIS's role in shaping patient attitudes positively. In contrast, the construct Benefits of HIS in Health Care Delivery and Patient Assessment (B-HCD) performed strongly, with a mean score of 4.07. This highlights the system's effectiveness in improving healthcare delivery and supporting patient assessment.

Such outcomes resonate with research by Kim (2017), which underscores the transformative potential of HIS in enhancing operational efficiency and patient outcomes in healthcare settings.

The high score for customer value (CV) with a mean = 4.09, aligns with Zeithaml (1988) work, which suggested that perceived value is a crucial factor in customer satisfaction and a predictor of future loyalty. The evaluation of customer value dimensions reveals generally high levels of agreement among respondents, with some areas showing stronger results than others. The construct Information Seeking (Inf-SE) received a mean score of 3.84, indicating a medium level of agreement. This suggests room for improvement in how information is sought or accessed. These findings align with research by (Rejikumar, 2017), which suggests that effective information-seeking behaviors are critical in enhancing customer value but often require more targeted strategies to meet customer needs effectively. In contrast, the constructs Information Sharing (Inf-SH), Responsible Behavior (RB), and Personal Interaction (PE-I) performed strongly, with mean scores of 4.13, 4.17, and 4.24, respectively. These high ratings highlight strong customer value practices in transparency, accountability, and interpersonal relations. This result is consistent with the work of Vargo and Lusch (2004), who emphasize the importance of relational exchange and collaborative behaviors in creating superior customer value. High levels of agreement in these areas suggest that the organization is excelling in maintaining open communication, ethical responsibility, and fostering positive interactions with customers. Additionally, the constructs Feedback (FB) and Helping (H) also reflected high satisfaction, with mean scores of 4.07 and 4.14, respectively. This indicates that the organization is performing well in terms of offering effective customer support and a willingness to assist. These findings support the research by Lemon and Verhoef (2016), who argue that timely and meaningful customer support is essential for building long-term value and loyalty. Finally, the Tolerance (TOL) dimension achieved a high mean score of 4.06, with

a slightly higher positive response rate of 94.97%, indicating strong customer value in terms of patience and understanding in interactions. This result is in line with studies by Oliver (2014), which highlight tolerance as a key factor in ensuring customer satisfaction, especially in diverse and challenging service contexts.

Similarly, sustainable competitive advantage scored a moderate mean of 3.90, suggesting partial alignment with Barney (1991) resource-based view, which posits that sustainable competitive advantage arises from leveraging unique organizational resources effectively. The SCA dimension highlights varying levels of agreement across the different survey items, with some factors showing stronger consensus than others. Word-of-mouth emerged as the most strongly agreed-upon factor, achieving a high mean of 4.10. This result indicates widespread agreement on the significance of WOM in fostering SCA. These findings align with the research of Liu et al. (2022), who emphasize that positive word-of-mouth can play a crucial role in enhancing a firm's reputation and, in turn, its competitive position. Similarly, Purchase Intentions (PU-I) scored well, with a mean of 4.01, suggesting some variability in respondents' views on the role of PU-I in driving long-term competitive advantage. This outcome supports the conclusions of Grewal et al. (2017), who suggest that while purchase intentions can be a strong indicator of future behavior, their influence on sustainable competitive advantage may vary depending on contextual factors. On the other hand, Price Sensitivity (PS) and Complaining Behavior (CB) exhibited moderate levels of agreement, with mean scores of 3.76 and 3.83, respectively. This suggests that respondents were somewhat ambivalent about the impact of price sensitivity and complaining behavior on sustainable competitive advantage. These findings are consistent with the work of Santonen (2007), who notes that while price sensitivity and customer complaints can influence competitive positioning, their effects are often context-dependent and may be mitigated by other factors, such as customer satisfaction and loyalty.

The findings of this study hold significant relevance to the Palestinian context, where the healthcare sector operates within a challenging socio-political and economic environment characterized by limited resources, ongoing conflicts, and a pressing need for quality healthcare services (Alkababji, 2023; Buchanan, 2020; Kheir-Mataria, 2019). These challenges emphasize the critical role of work ethics, service quality, and information systems as determinants of organizational performance and patient satisfaction. The strong agreement on work ethics in this study aligns with the importance of ethical behavior and professionalism in Palestinian healthcare settings, where trust and integrity are essential for maintaining patient confidence (Allinson & Chaar, 2016). Research by Kınık et al. (2024) highlights that ethical practices are vital in conflict-affected regions like Palestine, where healthcare providers often face moral and professional dilemmas. Similarly, the high ratings for service quality reflect the aspirations of Palestinian healthcare institutions to meet patient needs despite resource limitations. For example, the dimensions of Assurance and Empathy resonate with findings by Odeh et al. (2024), who noted that personalized care and patient confidence are critical in addressing the unique challenges faced by Palestinian patients. The study's identification of gaps in information systems performance highlights a key area for development in Palestine. Effective health information systems (HIS) are integral to improving healthcare delivery, yet research by Mujahed et al. (2022) indicates that many Palestinian institutions face challenges in system integration and user adoption. Addressing these gaps could enhance not only operational efficiency but also patient perceptions of care quality, as suggested by Aggelidis and Chatzoglou (2009). Moreover, the relatively moderate scores for teamwork and transparency suggest opportunities for fostering collaboration and open communication in Palestinian healthcare organizations. Such improvements align with recommendations by Giacaman et al. (2009), who emphasized that strengthening organizational dynamics is crucial for enhancing service delivery in resource-constrained and hierarchical environments. Overall,

these findings underscore the need for targeted strategies to address systemic challenges in Palestine's healthcare sector while leveraging strengths in ethical practices and service quality. By focusing on areas such as teamwork, information systems, and patient-centered care, policymakers and healthcare practitioners can work toward a more resilient and equitable healthcare system in Palestine.

5.2.1 Work Ethics and Customer Value

The results of the first hypothesis, "**H1**: Work Ethics (WE) has a positive effect on Customer Value (CV)", indicate a significant positive direct relationship, with $\beta = 0.180$ and a t-value of 2.968 ($p = 0.000$). This aligns with previous research by Aldulaimi et al. (2024), who emphasized the role of ethical practices in fostering trust and long-term customer relationships, thereby increasing perceived value. The analysis of the first sub-hypothesis further substantiates this relationship by demonstrating significant positive effects of Work Ethics on most dimensions of Customer Value. For example, significant positive relationships were found with Information Sharing (Inf-SH) ($\beta = 0.126$, $t = 2.539$, $p = 0.006$), Responsible Behavior (RB) ($\beta = 0.176$, $t = 3.513$, $p = 0.000$), Personal Interaction (PE-I) ($\beta = 0.161$, $t = 3.357$, $p = 0.000$), Feedback (FB) ($\beta = 0.127$, $t = 3.328$, $p = 0.000$), Helping (H) ($\beta = 0.155$, $t = 3.366$, $p = 0.000$), and Tolerance (TOL) ($\beta = 0.143$, $t = 3.550$, $p = 0.000$). These findings highlight the multifaceted influence of Work Ethics on behaviors that enhance customer satisfaction and loyalty. For instance, ethical work environments promote responsible and collaborative practices, which customers perceive as added value (Dinh et al., 2022; Hassan et al., 2008; Riana, 2021; Román, 2003). Interestingly, the relationship between Work Ethics and Information Seeking (Inf-SE) was not significant ($\beta = 0.038$, $t = 1.606$, $p = 0.054$). This could be attributed to the possibility that Information Seeking is influenced more by external factors, such as customer initiative or organizational communication strategies, than by internal ethical

practices (Morsing & Schultz, 2006). This observation echoes the findings of Paparoidamis et al. (2019), who suggested that while ethical environments positively impact many customer-related outcomes, the effect on proactive information-seeking behaviors may be limited.

The findings of the first hypothesis hold significant relevance to the Palestinian healthcare and service sectors, where work ethics play a critical role in shaping customer perceptions and experiences (Buchanan, 2020). In a context marked by socio-political challenges, resource constraints, and high demand for trust and reliability in services, the positive relationship between Work Ethics and Customer Value aligns with the fundamental needs of Palestinian institutions and communities (Abuznaid, 2018). Interestingly, the lack of a significant relationship between Work Ethics and Information Seeking is particularly relevant to Palestine, where information systems and communication strategies are still evolving. Studies by Ahmad (2015) have identified gaps in information accessibility and system integration as persistent challenges in Palestinian institutions. This highlights the need for external interventions, such as improved communication strategies and technological advancements, to complement ethical practices in driving proactive information-seeking behaviors. Overall, these findings underscore the importance of embedding work ethics as a strategic priority in Palestinian organizations. By addressing gaps in communication and leveraging cultural strengths in interpersonal relations and accountability, institutions can enhance customer satisfaction and build more resilient and trustworthy service ecosystems.

5.2.2 Service Quality and Customer Value

The results for the second hypothesis, "**H2: Service Quality (SQ) has a positive effect on Customer Value (CV)**", demonstrate a strong positive direct relationship, with $\beta = 0.417$, $t = 7.099$, and a p-value of 0.000. These findings confirm that an increase in Service Quality leads to a notable enhancement in Customer Value. This supports the hypothesis and aligns

with existing literature, such as Parasuraman et al. (1988), who established a robust link between high-quality service and increased customer satisfaction and perceived value. The analysis of the sub-hypotheses further reveals that Service Quality significantly affects multiple dimensions of Customer Value. Significant positive relationships were observed with Information Seeking (Inf-SE) ($\beta = 0.076$, $t = 1.916$, $p = 0.028$), Information Sharing (Inf-SH) ($\beta = 0.252$, $t = 4.130$, $p = 0.000$), Responsible Behavior (RB) ($\beta = 0.352$, $t = 6.737$, $p = 0.000$), Personal Interaction (PE-I) ($\beta = 0.324$, $t = 6.623$, $p = 0.000$), Feedback (FB) ($\beta = 0.254$, $t = 5.207$, $p = 0.000$), Helping (H) ($\beta = 0.311$, $t = 5.813$, $p = 0.000$), and Tolerance (TOL) ($\beta = 0.287$, $t = 5.685$, $p = 0.000$). These findings indicate that Service Quality not only directly enhances Customer Value but also plays a pivotal role in fostering key customer behaviors and attitudes, such as increased transparency, accountability, and collaboration. These results are consistent with studies like those by Zeithaml (1988), which highlight Service Quality as a cornerstone of customer loyalty and value creation. The high impact of Service Quality on Personal Interaction (PE-I) and Responsible Behavior (RB) reflects the importance of interpersonal and ethical dimensions in shaping positive customer experiences (Alhouti et al., 2021). Furthermore, the significant relationship between Information Sharing (Inf-SH) and Feedback (FB) aligns with research by Grönroos (2007), emphasizing that effective communication and responsiveness are critical to perceived service quality and customer satisfaction.

The findings of the second hypothesis, which confirm the significant positive impact of Service Quality (SQ) on Customer Value (CV), hold substantial contextual relevance to Palestine, where the quality of services, particularly in healthcare and other critical sectors, is paramount (Al-Worafi, 2024). In a region characterized by socio-economic and infrastructural challenges, the role of Service Quality in enhancing customer trust, satisfaction, and value creation is especially critical (Hussein, 2024). The strong positive effects of Service Quality on

dimensions like Responsible Behavior, Personal Interaction, and Helping reflect the importance of interpersonal and ethical practices in Palestinian society. Cultural norms in Palestine emphasize solidarity, hospitality, and mutual respect, which are key drivers of customer satisfaction and loyalty. These dimensions resonate with studies such as those by Suryadana (2017), which emphasize the importance of fostering trust and ethical accountability in service delivery, especially in challenging environments. Moreover, the significant relationships between Service Quality and dimensions like Information Sharing and Feedback highlight the critical need for effective communication and responsiveness in Palestinian institutions (Dahleez, 2016). The relationship between Service Quality and Tolerance is also particularly relevant in Palestine, where patience and understanding are often required in interactions due to systemic delays and constraints (Morrar & Gallouj, 2016). The ability of service providers to demonstrate empathy and maintain high-quality interactions under such circumstances is critical to building long-term customer trust and loyalty.

5.2.3 Information Systems and Customer Value

The third hypothesis, "**H3**: Information System (IS) has a positive effect on Customer Value (CV)", was not supported, as the results indicate no significant relationship between Information System and Customer Value ($\beta = 0.043$, $t = 0.729$, $p = 0.233$). This finding suggests that variations in the use or quality of Information Systems do not have a measurable impact on Customer Value in the context of this study. These results challenge expectations based on prior research, which often emphasizes the transformative role of Information Systems in enhancing customer experience and value (Davis, 1989; DeLone & McLean, 2003). Moreover, the results for the sub-hypotheses reveal no significant influence of Information Systems on the individual dimensions of Customer Value, including Information Seeking (Inf-SE) ($\beta = 0.008$, $t = 0.608$, $p = 0.272$), Information Sharing (Inf-SH) ($\beta = 0.025$, $t = 0.708$, $p =$

0.239), Responsible Behavior (RB) ($\beta = 0.036$, $t = 0.730$, $p = 0.233$), Personal Interaction (PE-I) ($\beta = 0.033$, $t = 0.728$, $p = 0.233$), Feedback (FB) ($\beta = 0.026$, $t = 0.723$, $p = 0.235$), Helping (H) ($\beta = 0.031$, $t = 0.727$, $p = 0.234$), and Tolerance (TOL) ($\beta = 0.029$, $t = 0.727$, $p = 0.234$). These findings indicate that Information Systems, in their current implementation, do not significantly contribute to improving these aspects of Customer Value. The lack of significance might be attributable to various factors, such as limited user engagement with the Information Systems, inadequacies in the system's design or functionality, or a misalignment between system capabilities and customer needs (Ferney & Sobrepez, 2006; He & King, 2008; Hsu, 2022; Saldanha et al., 2017). Prior studies, such as those by Bharadwaj (2000), have emphasized that Information Systems' ability to create value is contingent on their strategic alignment with organizational goals and customer expectations. If these systems are underutilized or poorly integrated, their impact on customer value can be negligible (Chen, 2012).

The lack of a significant relationship between Information Systems (IS) and Customer Value (CV) in this study holds notable implications for Palestine, a region where digital transformation and technological integration face unique challenges. This finding may reflect broader issues in the adoption and utilization of IS within Palestinian organizations, particularly in the healthcare and service sectors (Shalash et al., 2024). One possible explanation for this result is the underdeveloped infrastructure and resource limitations that constrain the effective implementation of Information Systems in Palestine (Ziara et al., 2002). According to Abu Mansour (2022), many Palestinian institutions struggle with fragmented systems, limited technical expertise, and inconsistent access to digital resources. Such barriers can hinder the ability of IS to deliver measurable benefits, including improved customer engagement, transparency, and satisfaction. Moreover, in contexts like Palestine, where technology adoption often lags due to socio-economic and cultural factors, ensuring that systems are user-friendly

and well-aligned with the expectations of end-users is critical (Shalash et al., 2024). Without these considerations, IS may fail to generate value, as reflected in the findings. Another critical factor is the alignment of IS with organizational and sector-specific goals. The absence of a significant effect on a CV might indicate that IS in Palestine is primarily used for administrative or operational purposes, with a limited focus on enhancing customer-facing processes (Saldanha, 2017). Addressing these challenges requires a multi-faceted approach. Palestinian organizations should prioritize investments in infrastructure, employee training, and user engagement to improve IS utilization. Furthermore, aligning IS functionalities with customer-centric objectives such as improved communication, personalized services, and feedback mechanisms can help bridge the gap between system capabilities and customer expectations.

5.2.4 Customer Value and Sustainable Competitive Advantage

The fourth hypothesis, "**H4**: Customer Value (CV) has a positive effect on Sustainable Competitive Advantage", presents unexpected findings. While the results indicate a statistically significant relationship between Customer Value and Sustainable Competitive Advantage ($\beta = -0.405$, $t = 4.371$, $p = 0.000$), the negative coefficient suggests that an increase in Customer Value is associated with a decrease in Sustainable Competitive Advantage. This finding challenges conventional wisdom and prior studies that emphasize a positive correlation between customer value and competitive advantage, such as those by Zeithaml (1988) and Barney (1991).

Further examination of the sub-hypotheses highlights that Customer Value significantly but negatively impacts the dimensions of Sustainable Competitive Advantage, including Word-of-Mouth ($\beta = -0.122$, $t = 2.452$, $p = 0.007$), Purchase Intentions (PU-I) ($\beta = -0.335$, $t = 4.312$, $p = 0.000$), Price Sensitivity (PS) ($\beta = -0.348$, $t = 4.098$, $p = 0.000$), and Complaining Behavior (CB) ($\beta = -0.326$, $t = 3.929$, $p = 0.000$). These results suggest that higher Customer Value is

paradoxically associated with reduced competitive advantage metrics, a finding that warrants further investigation. The negative relationship may arise from potential trade-offs between creating customer value and sustaining competitive advantage (Santalainen, 2019). For instance, excessive focus on meeting customer expectations or offering value might lead to increased costs, price reductions, or dependency on customer loyalty programs, ultimately undermining profit margins and long-term strategic advantage. Previous studies, such as Porter (1996), highlight that a company's efforts to enhance customer satisfaction may conflict with cost leadership or differentiation strategies if not managed carefully. Alternatively, these results may indicate challenges in aligning customer value initiatives with competitive strategies. Organizations might be prioritizing customer value at the expense of innovation, operational efficiency, or market positioning, which are critical for maintaining sustainable competitive advantage.

The finding that Customer Value (CV) negatively impacts Sustainable Competitive Advantage holds nuanced implications in the Palestinian context. This counterintuitive relationship suggests a need to explore the unique challenges faced by businesses in Palestine when attempting to balance customer-centric strategies with long-term competitive positioning. In Palestine, businesses often operate in an environment of economic volatility and limited resources (Alkababji, 2023). Prioritizing customer value might require significant investments in areas such as discounts, loyalty programs, or enhanced customer service, which could strain profit margins and operational capacity (Rane et al., 2023). The constrained economic and logistical conditions in Palestine could make it difficult for businesses to achieve both high customer value and sustainable competitive advantage simultaneously (Abualrob & Kang, 2016). For example, companies may lack the financial resources or operational flexibility to innovate while also meeting customer demands for affordability and quality. This could lead to compromises in areas critical to sustaining a competitive edge, such as research

and development or market differentiation. The negative relationship may also reflect a misalignment between customer value initiatives and broader competitive strategies (Hogan & Evans, 2015). Palestinian organizations may be focusing on immediate customer satisfaction without adequately integrating these efforts into long-term goals, such as innovation or market expansion. This misalignment may explain why efforts to enhance CV inadvertently undermine SCA.

5.2.5 Mediated Effects of Customer Value

The findings for **H5** highlight the mediating role of Customer Value (CV) in the relationships between Work Ethics (WE), Service Quality (SQ), Information Systems (IS), and Sustainable Competitive Advantage. The results suggest that Customer Value significantly mediates the relationship between Work Ethics and Sustainable Competitive Advantage, with a path coefficient of $\beta = -0.073$ ($t = 2.159$, $p = 0.015$). This supports H5 for the Work Ethics and Sustainable Competitive Advantage pathway, confirming that WE influence SCA indirectly via CV. However, the negative coefficient underscores an unexpected direction, indicating that improvements in Work Ethics may paradoxically reduce Sustainable Competitive Advantage when mediated through Customer Value. Analysis of the sub-hypotheses provides further insight into this mediated relationship. Customer Value significantly mediates the effects of Work Ethics on specific dimensions of Sustainable Competitive Advantage, such as Word-of-Mouth ($\beta = -0.022$, $t = 1.745$, $p = 0.041$), Purchase Intentions ($\beta = -0.060$, $t = 2.150$, $p = 0.016$), Price Sensitivity ($\beta = -0.063$, $t = 2.113$, $p = 0.017$), and Complaining Behavior ($\beta = -0.059$, $t = 2.101$, $p = 0.018$). These results indicate statistically significant indirect effects, but the negative coefficients suggest that these mediated effects lead to reductions in the dimensions of Sustainable Competitive Advantage. This unexpected negative mediation can be interpreted in the context of resource allocation and operational

trade-offs. Organizations focusing heavily on enhancing customer value, possibly through ethics-driven practices like transparency, accountability, or personalized services, might incur higher operational costs or overlook strategic investments that are essential for maintaining a competitive edge (Butz Jr & Goodstein, 1996). Supporting this perspective, studies like Parasuraman et al. (1991) emphasize that while customer-centric approaches are crucial, they must align with broader strategic goals to avoid undermining long-term sustainability. Moreover, the findings align with the broader discussion on the interplay between customer satisfaction and competitive positioning. Heskett (1994) highlights the "service-profit chain," suggesting that while customer satisfaction drives loyalty and value creation, disproportionate emphasis on customer satisfaction may lead to inefficiencies that erode competitive advantage.

The findings related to the mediating role of CV in the relationship between WE, SQ, IS, and SCA offer significant insights for businesses in Palestine. The negative mediation effect of CV raises critical questions about balancing ethical practices, customer satisfaction, and long-term strategic goals in a resource-constrained environment. Palestinian organizations often emphasize ethical practices, such as transparency and accountability, to build trust and foster relationships in the local market (Awashreh, 2018). However, the negative mediation effect observed in the study suggests that prioritizing ethics-driven customer value initiatives may inadvertently increase operational costs or reduce resources available for innovation and strategic investments, which is discussed by Von Wallis and Klein (2015). For instance, a healthcare provider in Palestine might focus on patient-centered care driven by ethical principles but struggle to maintain profitability and competitive differentiation due to the high cost of sustaining these practices (Mataria et al., 2006). The limited financial and infrastructural resources in Palestine's healthcare sector intensify the challenges of aligning customer-centric approaches with competitive strategies (Dwikat et al., 2023). Organizations may invest in ethical practices to enhance CV, but without sufficient resources to innovate or scale

operations, these efforts could hinder their ability to sustain a competitive edge. In the Palestinian market, cultural expectations often prioritize fairness, trust, and community-oriented values (Argo, 2009). While these align with ethical practices, they may also amplify the trade-offs discussed. For example, businesses might feel compelled to overextend themselves to meet ethical standards, potentially neglecting other aspects of strategic competitiveness, such as differentiation or cost leadership (Amoako-Gyampah & Acquaaah, 2008).

5.2.6 Work Ethics, Information Systems, Service Quality and Sustainable Competitive Advantage

The direct effects of Work Ethics (WE), Service Quality (SQ), and Information Systems (IS) on Sustainable Competitive Advantage reveal varying impacts, emphasizing the nuanced relationships between these constructs and organizational competitiveness. The findings indicate a significant negative direct relationship between Work Ethics and SCA ($\beta = -0.137$, $t = 1.983$, $p = 0.024$). This counterintuitive result suggests that while Work Ethics are traditionally viewed as drivers of organizational success, their direct influence on competitive advantage might involve complexities, such as resource allocation for ethical practices potentially reducing operational agility or customer perception of excessive moralization affecting loyalty (Jayaseelan & Mazumder, 2015). The significant negative relationships with dimensions such as Complaining Behavior (CB), Price Sensitivity (PS), and Purchase Intentions (PU-I) support this perspective, while the non-significant impact on Word-of-Mouth highlights the need for further exploration of this dynamic. These findings align partially with literature that suggests ethical practices can sometimes impose constraints on competitive flexibility (Kramer & Porter, 2011). Service Quality demonstrates a robust positive relationship with SCA ($\beta = 0.560$, $t = 9.687$, $p < 0.001$), emphasizing its pivotal role in fostering

competitive advantage. The positive impact extends across all dimensions, including CB ($\beta = 0.452$), PS ($\beta = 0.482$), PU-I ($\beta = 0.464$), and WOM ($\beta = 0.169$). This underscores the importance of high-quality service in enhancing customer satisfaction, loyalty, and engagement, as supported by Parasuraman et al. (1988), who identified Service Quality as a cornerstone of competitive differentiation. The alignment with existing literature highlights the consistent value of delivering reliable, responsive, and empathetic service in achieving sustained market leadership. Information Systems exhibit a significant positive effect on SCA ($\beta = 0.165$, $t = 2.928$, $p = 0.002$), reinforcing their role as enablers of competitive advantage. Positive effects are observed across all SCA dimensions, including CB ($\beta = 0.133$), PS ($\beta = 0.142$), PU-I ($\beta = 0.136$), and WOM ($\beta = 0.050$). These findings align with the growing body of research emphasizing the strategic importance of digital transformation and information systems in enhancing operational efficiency, customer relationship management, and decision-making (Bharadwaj, 2000). The positive impact on customer behavior dimensions underscores the ability of IS to create value-added experiences and foster customer loyalty.

The analysis of the direct effects of WE, SQ, and IS on SCA highlights several implications for the Palestinian context, reflecting the specific challenges and opportunities businesses face in this unique economic and socio-political environment. The significant negative direct relationship between WE and SCA suggests that ethical practices, while essential for building trust and credibility, may strain resources in Palestine (Jamal, 2016). Businesses often operate with limited budgets and infrastructure, and the costs associated with implementing ethical practices, such as ensuring transparency and accountability, could divert resources from innovation or strategic initiatives (Vargo & Lusch, 2004). The Palestinian market places high value on ethical behavior, reflecting cultural and societal norms that prioritize trust, fairness, and community-oriented values. However, customers might perceive overly moralized messaging as disingenuous or feel that it detracts from value-oriented service

delivery, impacting loyalty and purchase intentions (Lu et al., 2015). The robust positive relationship between SQ and SCA underscores the importance of delivering high-quality services in Palestine, where competition is often service-driven due to the small market size (Lynn et al., 2000). Superior service quality fosters customer loyalty, reduces price sensitivity, and enhances positive word-of-mouth, all of which are critical for sustaining competitiveness (Wieseke et al., 2014). The significant positive impact of IS on SCA highlights the growing importance of digital transformation in Palestine. Based on Rahman (2024) the information systems can enhance operational efficiency, support data-driven decision-making, and enable businesses to deliver value-added customer experiences.

Conclusion

This study investigated the relationships between Work Ethics, Service Quality, Information Systems, Customer Value, and Sustainable Competitive Advantage. The findings reveal the pivotal role of Work Ethics and Service Quality in positively influencing Customer Value, highlighting their importance in shaping customer satisfaction, loyalty, and perceived value. However, the insignificant impact of Information Systems on CV underscores the need for strategic alignment and enhanced implementation to maximize their potential benefits. A particularly intriguing result is the negative relationship between CV and SCA, suggesting potential trade-offs between immediate customer-centric strategies and long-term organizational competitiveness. This finding challenges conventional paradigms, emphasizing the importance of strategic balance to avoid resource strains or misaligned investments that could undermine competitive positioning. Similarly, the mediating role of CV in the relationships between WE, SQ, IS, and SCA highlights the complex interplay between ethics-driven practices, customer value creation, and sustainable outcomes.

These findings are especially relevant in the Palestinian context, where socio-economic challenges, limited resources, and cultural dynamics shape organizational practices. They underscore the importance of integrating ethical values and high-quality services with innovative strategies and resource optimization to enhance customer experiences without compromising competitive advantages. Moving forward, organizations in Palestine and similar contexts should prioritize investments in communication, infrastructure, and strategic alignment to address systemic challenges and foster sustainable growth.

Contribution

The contributions of this study are significant in both theoretical and practical contexts. **Theoretically**, this research advances the understanding of the relationships between work ethics, service quality, information systems, customer value, and sustainable competitive advantage. By testing these constructs in a Palestinian context, the study provides new insights into how these variables interact in environments characterized by socio-economic challenges and cultural factors. The negative relationship between customer value and sustainable competitive advantage, in particular, offers a novel perspective that challenges traditional views on the role of customer satisfaction in driving long-term organizational success. Furthermore, the mediating role of customer value in linking work ethics and service quality to competitive advantage provides a deeper understanding of how customer-centric strategies may indirectly impact organizational outcomes, highlighting the complexity of achieving both high customer value and sustainable competitive advantage simultaneously.

Practically, the findings offer actionable insights for businesses and institutions in Palestine and similar regions. The study underscores the importance of embedding strong ethical practices and delivering high service quality to enhance customer value, which can lead to improved customer loyalty and satisfaction. However, the unexpected negative relationship

between customer value and sustainable competitive advantage calls for a careful approach to balancing customer-centric strategies with long-term competitive goals. Organizations should be mindful of resource constraints and ensure that their investments in customer satisfaction, particularly through ethical practices, do not inadvertently undermine their ability to innovate and maintain a competitive edge. This research also highlights the need for improved integration of information systems and communication strategies to maximize their impact on customer behavior and organizational performance.

The results of this study were further discussed with several hospital managers, whose input reinforced the practical relevance of the findings. According to the managers, work ethics and service quality are crucial in shaping patient satisfaction and overall hospital performance. They emphasized that transparent and ethical practices play a significant role in building trust with patients, aligning with the study's finding that work ethics positively affect customer value. However, their feedback also highlighted challenges in balancing customer-centric strategies with financial sustainability, which echoes the study's unexpected negative relationship between customer value and sustainable competitive advantage. Hospital managers noted that while providing high value to patients is essential, it often requires significant resource allocation, which can strain long-term profitability and competitiveness.

Practical Implications and Recommendations for Future Studies

This study provides several practical implications for organizations, particularly in the healthcare sector and similar industries in regions like Palestine.

Emphasis on Ethical Practices: The study highlights the importance of integrating strong work ethics into organizational strategies. Healthcare institutions, for example, should ensure that ethical standards guide their daily operations, fostering a culture of transparency

and trust. This not only enhances patient satisfaction but also contributes to long-term organizational success by building a loyal customer base.

Focus on Service Quality: The study underscores the role of high service quality in shaping customer value. Hospitals and other service-oriented organizations should prioritize continuous staff training, investment in quality control processes, and patient-centered care practices to improve service delivery. High-quality services can differentiate institutions in competitive markets, contributing to customer retention and loyalty.

Balancing Customer-Centric Strategies with Financial Sustainability: A key finding is the tension between customer value and sustainable competitive advantage, where high customer satisfaction may come at the cost of long-term profitability. Organizations should carefully evaluate their resource allocation strategies to ensure that investments in customer satisfaction do not overburden their financial capacity. For instance, hospitals may need to find cost-effective ways to improve patient care without compromising profitability, such as through technological advancements, process efficiencies, or partnerships with other healthcare providers.

Improved Integration of Information Systems: The study emphasizes the need for enhanced integration of information systems. Healthcare organizations should adopt advanced technologies for patient management, data collection, and communication systems. These tools can facilitate better decision-making, streamline operations, and enhance patient care, which will ultimately lead to improved customer value and organizational performance.

Recommendations for Future Studies

Exploring Other Contexts and Industries: While this study focuses on the Palestinian context, future research could expand to other socio-economic and cultural environments. Exploring the relationships between work ethics, service quality, customer value, and

sustainable competitive advantage in different countries or industries can offer comparative insights and generalizability of the findings.

Longitudinal Studies: To better understand the long-term effects of work ethics and service quality on customer value and competitive advantage, future studies should consider longitudinal designs. This would help track how these variables evolve over time and their lasting impact on organizational performance and sustainability.

Examining the Role of Technology in Service Quality: Future research could further investigate how the integration of emerging technologies, such as AI, telemedicine, or automation, impacts service quality and customer value. Exploring the interplay between technological innovation and traditional service delivery could yield important insights for industries like healthcare, where balancing human touch with technological efficiency is crucial.

Investigating the Financial Implications of Customer-Centric Strategies: Given the unexpected negative relationship between customer value and sustainable competitive advantage in this study, future research could delve deeper into the financial dynamics of customer-centric strategies. Understanding how companies can maintain profitability while prioritizing customer satisfaction could provide valuable insights for both academics and practitioners.

The Role of Organizational Culture: Future studies could explore how different organizational cultures affect the implementation of ethical practices and service quality initiatives. Researching how cultural factors influence employee behavior, decision-making, and customer interactions can provide deeper insights into fostering ethical and high-performance environments.

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Appendices

Appendix (A) Result of Normality

Construct	Indicators	Questions	N	Missing	Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis	Kolmogorov-Smirnov	
									Statistic	Sig.
WE	PI	Q1	384	0	0.229	0.125	1.344	0.248	0.420	0.000
		Q2	384	0	0.409	0.125	1.151	0.248	0.435	0.000
	CQS	Q3	384	0	-0.525	0.125	3.566	0.248	0.382	0.000
		Q4	384	0	-0.621	0.125	2.297	0.248	0.339	0.000
	TR	Q5	384	0	-1.779	0.125	5.783	0.248	0.419	0.000
		Q6	384	0	-0.794	0.125	1.951	0.248	0.345	0.000
	CT	Q7	384	0	-2.041	0.125	8.227	0.248	0.430	0.000
		Q8	384	0	-0.895	0.125	1.999	0.248	0.324	0.000
IS	PPS-HIS	Q9	384	0	-1.809	0.125	6.794	0.248	0.409	0.000
		Q10	384	0	-1.700	0.125	4.601	0.248	0.433	0.000
		Q11	384	0	-1.463	0.125	3.904	0.248	0.404	0.000
		Q12	384	0	-1.612	0.125	5.355	0.248	0.410	0.000
		Q13	384	0	-2.116	0.125	9.020	0.248	0.438	0.000
	CI-PAP	Q14	384	0	-1.918	0.125	5.108	0.248	0.444	0.000
		Q15	384	0	-0.674	0.125	0.548	0.248	0.266	0.000
		Q16	384	0	-1.396	0.125	1.686	0.248	0.414	0.000
		Q17	384	0	-1.862	0.125	5.010	0.248	0.418	0.000
	B-HCD	Q18	384	0	-2.824	0.125	14.112	0.248	0.463	0.000
		Q19	384	0	-2.330	0.125	9.891	0.248	0.423	0.000
		Q20	384	0	-2.684	0.125	11.220	0.248	0.468	0.000
		Q21	384	0	-1.685	0.125	6.604	0.248	0.396	0.000
SQ	T	Q22	384	0	-1.165	0.125	5.028	0.248	0.410	0.000
		Q23	384	0	0.778	0.125	1.897	0.248	0.459	0.000
		Q24	384	0	1.564	0.125	0.449	0.248	0.494	0.000
		Q25	384	0	0.403	0.125	-0.005	0.248	0.416	0.000
		Q26	384	0	-1.540	0.125	4.015	0.248	0.430	0.000
		Q27	384	0	0.437	0.125	1.140	0.248	0.429	0.000
		Q28	384	0	-0.767	0.125	1.629	0.248	0.352	0.000
		Q29	384	0	0.145	0.125	-0.135	0.248	0.384	0.000
		Q30	384	0	0.563	0.125	1.443	0.248	0.442	0.000
		R	Q31	384	0	-1.207	0.125	5.062	0.248	0.348

		Q32	384	0	-1.534	0.125	8.298	0.248	0.365	0.000
		Q33	384	0	-1.405	0.125	8.860	0.248	0.398	0.000
		Q34	384	0	-0.418	0.125	0.575	0.248	0.271	0.000
		Q35	384	0	-1.239	0.125	6.320	0.248	0.369	0.000
	RES	Q36	384	0	-1.755	0.125	8.355	0.248	0.393	0.000
		Q37	384	0	-0.860	0.125	2.309	0.248	0.332	0.000
		Q38	384	0	-2.385	0.125	12.356	0.248	0.445	0.000
		Q39	384	0	-1.703	0.125	3.957	0.248	0.444	0.000
	A	Q40	384	0	-2.685	0.125	19.725	0.248	0.447	0.000
		Q41	384	0	-1.742	0.125	11.572	0.248	0.411	0.000
		Q42	384	0	-1.486	0.125	10.033	0.248	0.410	0.000
		Q43	384	0	-1.505	0.125	10.269	0.248	0.412	0.000
	E	Q44	384	0	-1.875	0.125	4.618	0.248	0.413	0.000
		Q45	384	0	-1.443	0.125	2.832	0.248	0.316	0.000
		Q46	384	0	-2.109	0.125	7.847	0.248	0.410	0.000
		Q47	384	0	-2.281	0.125	6.490	0.248	0.477	0.000
		Q48	384	0	-2.449	0.125	11.149	0.248	0.450	0.000
	Inf-SE	Q49	384	0	-2.721	0.125	8.283	0.248	0.478	0.000
		Q50	384	0	-1.404	0.125	2.161	0.248	0.411	0.000
		Q51	384	0	-1.667	0.125	4.159	0.248	0.411	0.000
	Inf-SH	Q52	384	0	-1.472	0.125	6.471	0.248	0.413	0.000
		Q53	384	0	-1.613	0.125	16.194	0.248	0.458	0.000
		Q54	384	0	-1.317	0.125	8.182	0.248	0.385	0.000
		Q55	384	0	-1.209	0.125	9.858	0.248	0.428	0.000
	RB	Q56	384	0	1.442	0.125	0.478	0.248	0.489	0.000
		Q57	384	0	1.543	0.125	0.383	0.248	0.493	0.000
		Q58	384	0	1.006	0.125	2.001	0.248	0.481	0.000
		Q59	384	0	2.471	0.125	4.125	0.248	0.527	0.000
	PI	Q60	384	0	1.629	0.125	1.140	0.248	0.499	0.000
		Q61	384	0	1.771	0.125	1.142	0.248	0.505	0.000
		Q62	384	0	0.920	0.125	-1.159	0.248	0.448	0.000
		Q63	384	0	0.893	0.125	-1.209	0.248	0.445	0.000
		Q64	384	0	0.826	0.125	-1.097	0.248	0.441	0.000
	FB	Q65	384	0	-1.604	0.125	6.585	0.248	0.393	0.000
		Q66	384	0	-2.252	0.125	15.069	0.248	0.433	0.000
		Q67	384	0	-2.373	0.125	15.272	0.248	0.423	0.000
	H	Q68	384	0	-1.673	0.125	7.687	0.248	0.406	0.000
		Q69	384	0	-1.520	0.125	13.150	0.248	0.437	0.000

SCA	TOL	Q70	384	0	-1.074	0.125	9.561	0.248	0.429	0.000
		Q71	384	0	-0.295	0.125	4.786	0.248	0.439	0.000
		Q72	384	0	-1.747	0.125	12.383	0.248	0.422	0.000
		Q73	384	0	-0.908	0.125	6.481	0.248	0.404	0.000
	WOM	Q74	384	0	-1.001	0.125	8.862	0.248	0.435	0.000
		Q75	384	0	-1.527	0.125	10.327	0.248	0.413	0.000
		Q76	384	0	-2.017	0.125	14.217	0.248	0.433	0.000
	PU-I	Q77	384	0	-1.638	0.125	6.265	0.248	0.336	0.000
		Q78	384	0	-1.710	0.125	8.190	0.248	0.397	0.000
	PS	Q79	384	0	-2.466	0.125	6.284	0.248	0.482	0.000
		Q80	384	0	-2.259	0.125	5.150	0.248	0.471	0.000
		Q81	384	0	-1.778	0.125	3.535	0.248	0.443	0.000
	CB	Q82	384	0	-2.089	0.125	5.217	0.248	0.463	0.000
		Q83	384	0	-2.501	0.125	7.457	0.248	0.487	0.000
		Q84	384	0	-1.940	0.125	3.486	0.248	0.480	0.000
		Q85	384	0	-2.576	0.125	9.674	0.248	0.475	0.000
Q86		384	0	-1.679	0.125	4.019	0.248	0.441	0.000	

Appendix A. The normality results of the study indicators (items), show non-normality distribution.

Appendix (B) Cross Loading Result

Construct	Indicators	Q.	PI	CQS	TR	CT	PPS-HIS	CI-PAP	B-HCD	T	R	RES	A	E	Inf-SE	Inf-SH	RB	PI	FB	H	TOL	WOM	PU-I	PS	CB
WE	PI	Q1	0.898	0.143	0.031	0.071	0.042	0.166	0.151	0.135	0.134	0.225	0.136	0.298	0.186	0.104	0.069	-0.041	0.266	0.068	-0.014	0.260	-0.129	0.221	0.110
		Q2	0.878	0.061	0.205	-0.024	-0.215	0.223	0.333	0.327	0.140	0.104	0.102	0.102	0.274	0.174	-0.165	-0.247	-0.255	0.190	0.072	0.055	0.126	-0.047	0.010
	CQS	Q3	0.200	0.269	0.203	0.088	0.020	0.272	0.427	0.396	0.130	0.290	0.105	0.878	0.256	0.090	-0.025	-0.032	0.293	0.160	0.118	0.173	0.207	0.396	0.346
		Q4	0.365	0.336	0.114	0.128	0.258	0.321	0.275	0.359	0.394	0.256	0.258	0.913	0.236	0.184	0.105	-0.027	0.339	0.241	0.162	0.217	0.171	0.378	0.360
	TR	Q5	0.264	0.418	0.153	0.163	-0.051	0.291	0.158	0.209	0.014	0.134	0.021	0.278	0.260	0.034	-0.008	-0.041	0.867	0.108	0.109	0.157	0.052	0.374	0.157
		Q6	0.200	0.361	0.193	0.124	0.116	0.239	0.199	0.200	0.177	0.223	0.167	0.345	0.206	0.191	0.109	0.012	0.905	0.345	0.055	0.194	0.127	0.475	0.426
	CT	Q7	0.053	0.087	0.198	0.304	0.112	0.218	0.381	0.278	0.278	0.215	0.224	0.141	0.236	0.377	0.232	0.223	0.122	0.861	0.130	0.125	0.106	0.260	0.280
		Q8	0.084	0.254	0.154	0.138	0.051	0.304	0.437	0.415	0.193	0.353	0.180	0.251	0.164	0.316	0.002	0.007	0.326	0.926	0.057	0.176	0.018	0.318	0.362
IS	PPS-HIS	Q9	0.022	0.367	0.371	0.136	0.099	0.145	0.146	0.219	0.152	0.095	0.171	0.236	0.279	0.184	0.119	0.156	0.227	0.096	0.876	0.065	0.352	0.310	0.229
		Q10	-0.080	0.119	0.204	-0.058	0.101	0.068	0.074	0.050	0.234	0.000	0.143	0.056	0.022	0.035	0.183	0.089	-0.027	0.046	0.799	-0.142	0.292	0.004	0.049
		Q11	0.061	0.168	0.222	0.067	0.165	0.075	0.061	0.018	0.209	0.018	0.145	0.101	0.121	0.143	0.230	0.099	0.045	0.093	0.859	0.039	0.311	0.128	0.072
		Q12	0.023	0.164	0.324	0.051	0.014	0.127	0.086	0.129	0.159	-0.047	0.061	0.124	0.076	-0.041	0.048	0.000	0.036	0.100	0.903	-0.065	0.269	0.033	0.079
		Q13	0.054	0.223	0.260	0.138	0.075	0.103	0.208	0.187	0.188	0.125	0.203	0.156	0.205	0.136	0.135	0.122	0.091	0.088	0.890	0.134	0.309	0.147	0.158
	CI-PAP	Q14	0.161	0.042	-0.160	0.252	0.161	0.196	0.188	0.029	-0.096	0.391	0.162	0.100	0.193	0.335	0.213	0.153	0.106	0.047	-0.023	0.893	-0.021	0.178	0.037
		Q15	0.255	0.139	-0.006	0.198	0.212	0.327	0.396	0.273	0.120	0.457	0.260	0.304	0.167	0.252	0.124	0.082	0.246	0.271	0.045	0.900	0.049	0.232	0.276
		Q16	0.037	-0.129	-0.165	0.146	0.051	-0.055	0.135	-0.163	0.113	0.175	0.129	-0.043	-0.004	0.063	0.195	0.122	-0.015	-0.020	0.011	0.599	-0.113	-0.146	-0.081
		Q17	0.179	0.096	-0.089	0.271	0.245	0.164	0.214	0.020	-0.024	0.366	0.206	0.171	0.152	0.338	0.260	0.184	0.176	0.114	-0.006	0.922	0.071	0.246	0.152
	B-HCD	Q18	-0.123	0.126	0.002	-0.036	0.075	0.011	-0.034	0.019	-0.070	0.005	0.002	0.095	0.013	-0.006	0.011	0.154	-0.004	-0.038	0.318	0.006	0.861	0.091	0.013
		Q19	-0.014	0.241	0.342	0.207	0.100	0.118	0.294	0.179	0.150	0.127	0.156	0.286	0.225	0.205	0.209	0.280	0.147	0.154	0.385	0.100	0.935	0.410	0.295
		Q20	-0.154	0.194	0.198	0.031	0.190	0.056	-0.023	0.022	0.060	-0.036	0.068	0.150	0.036	0.055	0.137	0.214	0.102	-0.046	0.343	-0.072	0.925	0.237	0.112
		Q21	-0.076	0.166	0.247	0.287	0.205	0.051	0.223	0.107	0.178	0.134	0.208	0.208	0.134	0.267	0.273	0.348	0.123	0.152	0.199	0.099	0.839	0.411	0.377
SQ	T	Q22	0.180	0.374	0.339	0.385	0.045	0.293	0.252	0.204	0.393	0.226	0.318	0.300	0.348	0.308	0.293	0.238	0.440	0.202	0.206	0.184	0.110	0.572	0.358

	Q23	-0.002	0.378	0.135	0.038	0.072	0.309	0.127	0.181	-0.050	0.091	-0.152	0.251	0.218	0.213	0.008	-0.072	0.319	0.206	0.130	-0.031	0.206	0.600	0.219
	Q24	0.242	0.309	0.397	0.257	0.080	0.133	0.275	0.283	0.245	0.119	0.207	0.353	0.331	0.263	0.150	0.149	0.330	0.149	0.022	0.040	0.158	0.688	0.541
	Q25	0.288	0.376	0.447	0.333	0.153	0.316	0.524	0.302	0.443	0.279	0.324	0.444	0.391	0.395	0.231	0.149	0.395	0.373	0.174	0.162	0.240	0.775	0.562
	Q26	-0.144	0.334	-0.189	0.068	0.309	0.026	-0.246	-0.162	-0.393	0.080	-0.278	0.098	0.021	0.311	0.187	0.135	0.200	-0.048	-0.041	0.132	0.132	0.386	-0.041
	Q27	0.026	0.234	0.323	0.408	-0.067	0.245	0.421	0.522	-0.038	0.312	0.129	0.154	0.448	0.396	0.091	0.251	0.211	0.274	0.095	0.154	0.266	0.622	0.459
	Q28	-0.388	0.217	-0.115	0.101	0.348	0.131	-0.108	0.021	-0.210	0.153	-0.043	0.001	-0.075	0.269	0.184	0.232	0.099	0.070	0.042	-0.021	0.268	0.377	0.081
	Q29	0.022	0.348	0.050	0.342	0.315	0.231	0.261	0.280	-0.059	0.516	0.132	0.335	0.201	0.497	0.232	0.248	0.292	0.244	0.059	0.373	0.195	0.663	0.367
	Q30	-0.018	0.292	0.126	0.244	0.332	0.034	0.122	-0.076	0.036	0.337	0.191	0.215	0.119	0.461	0.372	0.290	0.294	0.117	0.041	0.193	0.285	0.749	0.417
R	Q31	0.118	0.308	0.271	0.397	0.209	0.182	0.423	0.186	0.281	0.377	0.276	0.318	0.339	0.444	0.304	0.255	0.324	0.306	0.132	0.235	0.201	0.682	0.802
	Q32	0.124	0.248	0.446	0.290	-0.042	0.366	0.632	0.581	0.289	0.323	0.242	0.368	0.322	0.188	-0.049	0.044	0.260	0.384	0.194	0.091	0.172	0.498	0.877
	Q33	0.079	0.219	0.256	0.306	0.217	0.192	0.415	0.380	0.242	0.344	0.278	0.382	0.208	0.279	0.150	0.191	0.251	0.265	0.102	0.230	0.197	0.474	0.907
	Q34	0.273	0.340	0.300	0.178	0.057	0.192	0.382	0.377	0.172	0.246	0.254	0.389	0.242	0.191	-0.015	0.016	0.422	0.338	0.049	0.193	0.152	0.531	0.822
	Q35	0.083	0.201	0.273	0.247	0.032	0.213	0.249	0.411	0.224	0.092	0.262	0.172	0.219	0.182	0.026	0.143	0.150	0.218	0.095	-0.014	0.205	0.365	0.781
RES	Q36	0.218	0.876	0.247	0.288	0.141	0.213	0.211	0.279	0.288	0.171	0.229	0.361	0.320	0.308	0.151	0.141	0.351	0.245	0.259	0.101	0.181	0.463	0.337
	Q37	0.145	0.838	0.205	0.123	-0.041	0.174	0.174	0.319	-0.029	0.162	-0.050	0.335	0.220	0.164	-0.089	-0.074	0.473	0.279	0.173	0.073	0.157	0.432	0.350
	Q38	0.053	0.934	0.152	0.209	0.018	0.154	0.090	0.228	-0.044	0.136	-0.066	0.252	0.245	0.246	0.003	0.030	0.327	0.157	0.223	0.047	0.188	0.397	0.231
	Q39	-0.080	0.727	0.029	0.236	0.176	0.074	-0.136	-0.030	-0.081	0.070	-0.051	0.169	0.120	0.221	0.228	0.182	0.322	-0.054	0.157	0.118	0.177	0.394	0.110
A	Q40	-0.044	0.150	0.862	0.089	-0.141	0.137	0.029	0.201	0.180	-0.181	0.156	0.053	0.160	-0.034	-0.071	0.019	0.114	0.049	0.308	-0.247	0.186	0.173	0.185
	Q41	0.183	0.219	0.973	0.251	-0.207	0.224	0.433	0.396	0.232	0.060	0.192	0.214	0.396	0.103	-0.041	0.089	0.212	0.232	0.324	-0.013	0.227	0.380	0.388
	Q42	0.187	0.239	0.959	0.252	-0.203	0.232	0.425	0.414	0.240	0.093	0.176	0.220	0.418	0.149	0.016	0.101	0.212	0.224	0.325	-0.022	0.234	0.403	0.382
	Q43	0.090	0.119	0.929	0.160	-0.206	0.130	0.346	0.247	0.299	0.067	0.285	0.113	0.283	0.086	0.027	0.099	0.171	0.165	0.245	-0.107	0.186	0.385	0.377
E	Q44	0.119	0.281	0.133	0.811	0.372	0.128	0.186	0.018	0.107	0.204	0.123	0.220	0.301	0.433	0.413	0.336	0.284	0.133	0.048	0.366	0.138	0.503	0.304
	Q45	-0.052	0.229	0.244	0.897	0.276	0.170	0.280	0.247	0.194	0.241	0.147	0.139	0.189	0.410	0.311	0.312	0.121	0.290	0.067	0.187	0.144	0.422	0.386
	Q46	0.089	0.080	0.074	0.785	0.114	0.021	0.115	0.107	0.085	0.149	0.125	0.037	0.144	0.220	0.184	0.127	0.001	0.064	0.051	0.202	-0.021	0.157	0.167

		Q47	-0.110	0.266	0.208	0.855	0.172	0.167	0.029	0.114	0.033	0.037	0.046	0.004	0.175	0.337	0.246	0.301	0.150	0.182	0.065	0.115	0.193	0.387	0.280
		Q48	0.114	0.162	0.204	0.881	0.076	0.133	0.292	0.267	0.151	0.236	0.106	0.084	0.271	0.361	0.247	0.242	0.063	0.268	0.114	0.230	0.058	0.278	0.262
CV	Inf-SE	Q49	-0.189	0.065	-0.084	0.306	0.867	0.041	-0.015	-0.153	0.121	0.095	0.186	0.044	0.011	0.270	0.467	0.352	-0.044	0.081	0.156	0.124	0.196	0.213	0.094
		Q50	-0.252	-0.064	-0.070	0.192	0.757	-0.038	-0.051	-0.179	0.224	0.071	0.150	0.030	-0.151	0.094	0.396	0.315	-0.077	0.031	0.058	0.002	0.143	0.103	0.113
Q51		-0.006	0.103	-0.257	0.202	0.959	0.080	-0.055	-0.147	0.171	0.253	0.283	0.221	-0.113	0.328	0.522	0.357	0.099	0.085	0.074	0.283	0.119	0.222	0.110	
Q52		0.199	0.268	-0.062	0.112	0.222	0.600	0.113	0.156	-0.029	0.095	0.063	0.162	0.059	0.107	0.115	0.081	0.269	0.096	0.147	0.258	0.060	0.222	0.088	
	Inf-SH	Q53	0.190	0.059	0.034	0.169	0.165	0.873	0.424	0.454	0.153	0.351	0.134	0.330	0.151	0.127	0.014	0.008	0.184	0.294	0.059	0.380	0.008	0.146	0.156
Q54		0.205	0.207	0.266	0.147	0.039	0.948	0.405	0.576	0.253	0.223	0.233	0.355	0.214	0.126	-0.064	-0.025	0.292	0.309	0.120	0.130	0.082	0.374	0.336	
Q55		0.152	0.177	0.339	0.083	-0.159	0.857	0.347	0.401	0.113	0.096	0.090	0.201	0.264	0.032	-0.179	-0.092	0.286	0.220	0.116	0.091	0.092	0.348	0.278	
Q56		0.158	0.103	0.210	0.237	0.141	0.371	0.884	0.537	0.356	0.600	0.396	0.387	0.258	0.307	0.137	0.104	0.197	0.439	0.085	0.349	0.117	0.435	0.455	
	RB	Q57	0.180	0.128	0.258	0.245	0.110	0.357	0.885	0.516	0.346	0.600	0.369	0.382	0.264	0.277	0.076	0.092	0.217	0.446	0.086	0.363	0.105	0.461	0.469
Q58		0.279	0.065	0.355	0.109	-0.145	0.264	0.755	0.484	0.190	0.236	0.249	0.238	0.254	-0.012	-0.157	-0.112	0.146	0.272	0.120	0.177	0.168	0.238	0.432	
Q59		0.292	0.091	0.391	0.090	-0.346	0.363	0.721	0.709	0.269	0.189	0.216	0.214	0.420	-0.039	-0.293	-0.222	0.087	0.311	0.163	0.072	0.045	0.129	0.301	
Q60		0.243	0.136	0.283	0.141	-0.126	0.451	0.734	0.880	0.352	0.410	0.231	0.357	0.347	0.083	-0.189	-0.116	0.119	0.427	0.165	0.172	0.039	0.143	0.342	
	PI	Q61	0.223	0.092	0.302	0.088	-0.187	0.466	0.734	0.890	0.386	0.386	0.253	0.330	0.357	0.057	-0.190	-0.139	0.099	0.413	0.186	0.123	0.038	0.125	0.319
Q62		0.236	0.333	0.348	0.179	-0.147	0.472	0.480	0.909	0.166	0.328	0.204	0.397	0.414	0.199	-0.189	-0.019	0.275	0.303	0.078	0.045	0.103	0.442	0.448	
Q63		0.211	0.281	0.303	0.200	-0.140	0.417	0.537	0.862	0.106	0.429	0.180	0.389	0.386	0.198	-0.186	-0.015	0.276	0.298	0.077	0.154	0.146	0.431	0.487	
Q64		0.216	0.314	0.322	0.200	-0.135	0.484	0.506	0.891	0.196	0.351	0.246	0.393	0.418	0.232	-0.144	-0.017	0.277	0.298	0.111	0.038	0.104	0.447	0.452	
	FB	Q65	0.092	0.046	0.322	0.141	0.122	0.208	0.388	0.319	0.903	0.152	0.427	0.281	0.145	0.110	0.207	0.048	0.117	0.279	0.189	-0.083	0.123	0.151	0.296
Q66		0.137	0.100	0.272	0.125	0.095	0.084	0.278	0.134	0.885	0.208	0.388	0.238	0.225	0.251	0.220	0.095	0.166	0.179	0.224	0.037	0.092	0.316	0.281	
Q67		0.184	0.023	0.104	0.103	0.247	0.168	0.298	0.271	0.883	0.268	0.503	0.287	0.085	0.215	0.228	0.122	0.036	0.214	0.170	0.125	0.024	0.076	0.205	
	H	Q68	0.022	0.082	-0.135	0.246	0.354	-0.019	0.244	0.071	-0.013	0.576	0.234	0.199	0.104	0.462	0.354	0.299	0.121	0.082	-0.139	0.466	0.001	0.367	0.215
Q69		0.146	0.061	-0.010	0.069	0.009	0.038	0.222	0.191	-0.018	0.785	0.331	0.049	0.080	0.198	0.066	0.102	0.082	0.085	-0.054	0.277	-0.026	0.255	0.217	
Q70		0.215	0.181	0.006	0.226	0.303	0.266	0.491	0.372	0.272	0.953	0.488	0.347	0.210	0.451	0.295	0.231	0.220	0.363	0.085	0.493	0.072	0.407	0.336	

		Q71	0.172	0.165	0.119	0.163	0.088	0.338	0.598	0.560	0.320	0.914	0.454	0.307	0.262	0.268	0.116	0.135	0.202	0.376	0.109	0.306	0.097	0.320	0.318
	TOL	Q72	0.084	0.020	0.155	0.107	0.351	0.212	0.326	0.340	0.415	0.432	0.889	0.244	0.117	0.219	0.227	0.229	0.076	0.174	0.128	0.210	0.102	0.153	0.248
		Q73	0.166	0.123	0.063	0.233	0.390	0.058	0.221	-0.043	0.498	0.404	0.774	0.206	0.182	0.450	0.457	0.248	0.173	0.222	0.117	0.301	0.044	0.386	0.251
		Q74	0.101	-0.038	0.303	0.008	-0.074	0.122	0.389	0.246	0.341	0.355	0.794	0.062	0.128	0.106	0.049	0.032	0.051	0.165	0.170	0.104	0.139	0.114	0.277
SCA	WOM	Q75	0.174	0.215	0.403	0.173	-0.187	0.256	0.412	0.468	0.208	0.178	0.180	0.210	0.938	0.193	-0.045	-0.004	0.206	0.234	0.175	0.057	0.105	0.378	0.316
		Q76	0.208	0.296	0.312	0.290	-0.037	0.188	0.319	0.393	0.134	0.237	0.151	0.293	0.985	0.324	0.081	0.109	0.275	0.198	0.156	0.229	0.118	0.430	0.309
	PU-I	Q77	0.105	0.343	0.098	0.393	0.338	0.238	0.295	0.344	0.282	0.488	0.369	0.332	0.290	0.910	0.451	0.380	0.247	0.436	0.089	0.380	0.134	0.584	0.413
		Q78	0.066	0.313	0.214	0.387	0.127	0.137	0.247	0.217	0.180	0.398	0.243	0.219	0.386	0.904	0.463	0.343	0.209	0.355	0.094	0.304	0.124	0.586	0.300
		Q79	-0.231	0.088	-0.058	0.345	0.354	-0.055	-0.037	-0.104	0.093	0.163	0.160	-0.122	0.094	0.815	0.616	0.468	-0.092	0.215	0.102	0.173	0.119	0.295	0.119
	PS	Q80	-0.066	0.084	-0.053	0.276	0.518	-0.049	0.007	-0.158	0.213	0.279	0.236	0.088	0.097	0.631	0.904	0.522	0.063	0.149	0.132	0.242	0.173	0.337	0.113
		Q81	-0.012	0.072	0.127	0.358	0.381	0.016	0.012	-0.114	0.323	0.174	0.384	0.041	0.027	0.376	0.831	0.597	0.092	0.086	0.186	0.174	0.147	0.216	0.131
		Q82	-0.162	0.053	-0.096	0.276	0.528	-0.100	-0.144	-0.262	0.123	0.149	0.121	0.002	-0.021	0.531	0.913	0.569	0.013	0.059	0.120	0.160	0.142	0.266	0.040
	CB	Q83	-0.168	-0.012	0.151	0.230	0.246	-0.020	0.022	-0.023	0.123	0.110	0.145	-0.066	0.062	0.307	0.487	0.907	-0.112	0.123	0.092	0.048	0.223	0.164	0.143
		Q84	-0.167	0.044	0.008	0.319	0.474	-0.068	-0.037	-0.129	0.076	0.240	0.196	-0.030	0.036	0.480	0.630	0.925	-0.063	0.113	0.041	0.188	0.205	0.283	0.133
		Q85	-0.077	0.059	0.055	0.300	0.324	-0.029	0.036	-0.024	0.116	0.273	0.235	-0.004	0.083	0.458	0.591	0.918	-0.036	0.137	0.127	0.193	0.303	0.227	0.132
		Q86	-0.159	0.197	0.113	0.277	0.272	0.067	-0.118	-0.075	0.019	0.084	0.115	-0.014	0.080	0.316	0.484	0.710	0.200	-0.008	0.131	0.077	0.231	0.344	0.143

Appendix B. Cross-loading indicates that every outer loading of any indicator is the highest for its assigned construct compared with the others

Appendix (C) AAUP - IRB

Arab American University
Institutional Review Board - Ramallah



الجامعة العربية الأمريكية
مجلس أخلاقيات البحث العلمي - رام الله

IRB Approval Letter

Study Title: "A Structural Model of Sustainable Competitive Advantage in Palestinian Private Hospitals: An Examination of the Interactions Among Work Ethics, Information System, Service Quality, and Customer Value".

Submitted by: Samer Naim Atiyeh

Date received: 7th October 2024

Date reviewed: 12th October 2024

Date approved: 15th October 2024

Your Study titled "A Structural Model of Sustainable Competitive Advantage in Palestinian Private Hospitals: An Examination of the Interactions Among Work Ethics, Information System, Service Quality, and Customer Value" with the code number "R-2024/A/152/N" was reviewed by the Arab American University Institutional Review Board - Ramallah and it was approved on the 13th of October 2024.

Sajed Ghawadra, PhD
IRB-R Chairman
Arab American University of Palestine



General Conditions:

1. Valid for 6 months from the date of approval.
2. It is important to inform the IRB-R with any modification of the approved study protocol.
3. The Bord appreciates a copy of the research when accomplished.

رام الله - فلسطين

Tel: 02-294-1999

E-Mail: IRB-R@aaup.edu

Website: www.aaup.edu

Appendix (D) Questionnaire – English Version**Questionnaire**

Dear Participants,

In your hands is a questionnaire distributed by a Ph.D. student in the Strategic Management program at the School of College of Graduate Studies - Arab American University of Palestine. The study topic is “A Structural Model of Sustainable Competitive Advantage in Palestinian Private Hospitals: An Examination of the Interactions among Work Ethics, Information System, Service Quality, and Customer Value”.

Completing the questionnaire is expected to consume approximately 10-15 minutes of your time, and the gathered information will contribute to academic research. Your participation is entirely anonymous, and there is no need to provide your name. The compiled data will be presented solely as summary statistics. Your involvement in this survey is optional, and you can refrain from answering any questions.

Your participation is greatly valued, as your input will significantly contribute to the study's findings.

If you have any inquiries concerning the research or the questionnaire, please don't hesitate to reach out to the researcher at the provided mobile number:

00972-599671891.

Samer Atiyeh

Arab American University

Thanks for your cooperation and time

Part One (Demographics Data). Please fill in the following*1. Hospital Name**

- Istishari Arab Hospital
- Ibn Sina Specialized Hospital
- Arab Specialized Hospital

2. Age:

- Less Than 25 years old
- From 26 to 35 years old
- From 36 to 45 years old
- More Than 46 years old

3. Gender: -

- Male
- Female

4. What is your highest educational degree?

- Diploma Degree
- Bachelor's Degree
- Higher Diploma
- Master's Degree
- Others, please specify _____

5. Length of Stay

- Less Than 2 days
- From 3 to 5 days
- From 6 to 7 days
- More Than 8 days

*Part Two (Questionnaires)

Please indicate the extent to which you agree or disagree that the statement characterizes your satisfaction. Use the (X) symbol for the appropriate response (Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree).

Dimension	Item #	Questions	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
Work Ethics Indicators							
Professionalism and Integrity	1.	Hospital staff always do what is ethically right for patient care, even when it's challenging					
	2.	Hospital staff consistently follow healthcare policies and procedures for patient care					
Commitment to Quality and Safety	3.	Hospital staff prioritize doing tasks correctly the first time to ensure patient safety					
	4.	The hospital makes significant efforts to maintain a clean and safe environment for patients					
Teamwork and Responsibility	5.	Hospital staff often work together to overcome challenges in patient care					
	6.	I have observed hospital staff going above and beyond their duties to assist a patient or report unsafe conditions immediately					
Communication and Transparency	7.	Hospital staff communicate policies and procedures clearly and admit mistakes when they happen					
	8.	Hospital staff openly discuss health concerns and treatment options with patients					
Information system Indicators							
Patients Perception and Satisfaction with HIS	9.	HIS plays a role in health care delivery at the Hospital					
	10.	The elderly are not comfortable with the use of HIS					
	11.	The use of HIS only suits educated clients					
	12.	HIS usage pose a negative effect on your health					
	13.	HIS aids doctors to examine you well for treatment					
HIS Communication Influence on Patient's Attitude and Perception	14.	HIS aids the doctor in giving you complete information about your illness					
	15.	Care providers communicate understanding of the results of HIS					
	16.	Failure to communication about your illness makes you unsatisfied					
Benefits of HIS in Health Care Delivery, Patients Assessment	17.	The care provider's communication facilitates your acceptance and adherence to treatment					
	18.	HIS reduces the cost and facilitates speedy treatment					
	19.	HIS ensure the privacy and safety of clients' records					
	20.	HIS reduces waiting time before seeing the doctor					
	21.	Clients can obtain all health records at spot-on-demand access					
Service Quality Indicators							
Tangible	22.	Medical instruments and physical facilities are visually appealing					
	23.	Employees' uniforms are clean, nice, and neat					
	24.	Clean, adequate supplies, and well-maintained rooms					
	25.	Good lighting in every room					

	26.	Suitable temperature in the rooms of the patients						
	27.	Meals served are clean and hygienic						
	28.	Meals served are delicious						
	29.	The atmosphere of every room is cozy						
	30.	The scent in every room is refreshing						
Reliability	31.	When the hospital staff promises to do something by a certain time, do they fulfill that promise						
	32.	When you have problems, do you find the hospital staff concerned and supportive						
	33.	Do you find the hospital service dependable						
	34.	Does the hospital provide its services at the time it promises to do so						
	35.	Does the hospital keep its records accurately						
Responsiveness	36.	Does the hospital tell you exactly when services will be performed						
	37.	Do you receive prompt service from the hospital service staff						
	38.	Are the services provided by the hospital staff always willing to help						
	39.	Are the hospital staff too busy to respond to requests quickly						
Assurance	40.	I can trust the service provided by the hospital staff						
	41.	I feel safe in my transactions with hospital staff						
	42.	Hospital staff are polite						
	43.	Do the staff get adequate support from the hospital to do their job well						
Empathy	44.	The hospital staff does not give me individual attention						
	45.	Hospital staff do not give me personal attention						
	46.	Hospital staff do not know what my needs are						
	47.	Does the hospital have your best interests at heart						
	48.	Does the hospital have operating hours convenient to all its customers						
Customer Value indicators								
Information seeking	49.	I have asked others for information on what this service offers.						
	50.	I have searched for information on where this service is located.						
	51.	I have paid attention to how others behave to use this service well.						
Information sharing	52.	I clearly explained what I wanted the employee to do.						
	53.	I gave the employee proper information.						
	54.	I provided necessary information so that the employee could perform his or her duties.						
	55.	I answered all the employee's service-related questions.						
Responsible behavior	56.	I performed all the tasks that are required.						
	57.	I adequately completed all the expected behaviors.						
	58.	I fulfilled responsibilities to the business.						
	59.	I followed the employee's directives or orders.						
Personal interaction	60.	I was friendly to the employee.						
	61.	I was kind to the employee.						
	62.	I was polite to the employee.						
	63.	I was courteous to the employee.						
	64.	I didn't act rudely to the employee.						
Feedback	65.	If I have a useful idea on how to improve service, I let the employee know.						
	66.	When I receive good service from the employee, I comment about it.						
	67.	When I experience a problem, I let the employee know about it.						
Helping	68.	I assist other customers if they need my help.						
	69.	I help other customers if they seem to have problems.						
	70.	I teach other customers to use the service correctly.						

	71.	I give advice to other customers.					
Tolerance	72.	If service is not delivered as expected, I would be willing to put up with it.					
	73.	If the employee makes a mistake during service delivery, I would be willing to be patient.					
	74.	If I have to wait longer than I normally expected to receive the service, I would be willing to adapt.					
Sustainable Competitive Advantage Indicators							
Word-of-mouth	75.	Would you recommend our hospital to someone seeking your advice on healthcare services					
	76.	I encourage my friends and relatives to use our hospital's services					
Purchase Intentions	77.	Is our hospital your first choice when you need healthcare services					
	78.	Do you intend to use more of our hospital's services in the next few months					
	79.	Do you intend to use fewer of our hospital's services in the next few months					
Price Sensitivity	80.	I intend to take some of my usage to a competitor that offers better prices					
	81.	Would you continue using our hospital's services even if the prices increase to some extent					
	82.	Do you feel that you pay higher prices at our hospital compared to competitors for the benefits you receive					
Complaining Behavior	83.	Would you switch to a competitor if you experience a problem with our services					
	84.	Would you share your complaints with other patients if you experience a problem with our services					
	85.	Would you file a complaint to external agencies, such as healthcare oversight bodies, if you experience a problem with our services					
	86.	Would you address your complaints to our customer service or patient care staff if you experience a problem with our services					

Appendix (E) Questionnaire – Arabic Version

الاستبيان

المشاركين الأعزاء،

بين أيديكم استبيان يتم توزيعه من قبل طالب دكتوراه سامر عطية في برنامج الإدارة الاستراتيجية بكلية الدراسات العليا - الجامعة العربية الأمريكية في فلسطين.

موضوع الدراسة هو "نموذج هيكلية للميزة التنافسية المستدامة في المستشفيات الخاصة الفلسطينية: دراسة التفاعلات بين أخلاقيات العمل، نظام المعلومات، جودة الخدمة، وقيمة الزبائن."

من المتوقع أن يستغرق إكمال الاستبيان حوالي 10-15 دقيقة من وقتكم، وستساهم المعلومات التي سيتم جمعها في البحث الأكاديمي. مشاركتكم ستكون سرية بشكل كامل، ولا حاجة لذكر اسمكم أو مكان عملكم. سيتم تقديم البيانات المجمعة في صورة إحصاءات ملخصة فقط. إن مشاركتكم في هذا الاستبيان اختيارية، ويمكنكم الامتناع عن الإجابة على أي من الأسئلة.

إن مشاركتكم ذات قيمة كبيرة، حيث أن مدخلاتكم ستساهم بشكل كبير في نتائج الدراسة.

إذا كانت لديكم أي استفسارات بخصوص البحث أو الاستبيان، فلا تترددوا في التواصل مع الباحث على الرقم المحمول:

0599671891

سامر عطية

الجامعة العربية الأمريكية

شكرًا لتعاونكم ووقتكم.

الجزء الأول (البيانات الديموغرافية). الرجاء تعبئة ما يلي:

1. اسم المستشفى

[] مستشفى الاستشاري العربي

[] مستشفى ابن سينا التخصصي

[] المستشفى العربي التخصصي

2. العمر :

[] أقل من 25 سنة

[] من 26 إلى 35 سنة

[] من 36 إلى 45 سنة

[] أكثر من 46 سنة

3. الجنس :

[] ذكر

[] أنثى

4. ما هو أعلى مؤهل تعليمي حصلت عليه؟

[] لا يوجد

[] ثانوية عامة

[] دبلوم

[] درجة البكالوريوس

[] دبلوم عالي

[] درجة الماجستير فأكثر

5. مدة الإقامة

[] أقل من يومين

[] من 3 إلى 5 أيام

[] من 6 إلى 7 أيام

[] أكثر من 8 أيام

الجزء الثاني (الاستبيانات)

يرجى الإشارة إلى مدى اتفاقك أو عدم اتفاقك مع البيان الذي يصف مدى رضاك. استخدم الرمز (X) للإجابة المناسبة (أعارض بشدة، أعارض، محايد، أوافق، أوافق بشدة).

الإبعاد	#	الاسئلة	أعارض بشدة	أعارض	محايد	أوافق	أوافق بشدة
مؤشرات أخلاقيات العمل							
الاحترافية والنزاهة	1.	يقوم موظفو المستشفى دائمًا بما هو صحيح أخلاقيًا في رعاية المرضى، حتى عندما يكون الأمر صعبًا؟					
	2.	يتبع موظفو المستشفى باستمرار السياسات والإجراءات الصحية لرعاية المرضى؟					
الالتزام بالجودة والسلامة	3.	يولي موظفو المستشفى الأولوية لإنجاز المهام بشكل صحيح من المرة الأولى لضمان سلامة المرضى؟					
	4.	يبذل المستشفى جهودًا كبيرة للحفاظ على بيئة نظيفة وأمنة للمرضى؟					
العمل الجماعي والمسؤولية	5.	غالبًا ما يعمل موظفو المستشفى معًا للتغلب على التحديات في رعاية المرضى؟					
	6.	لقد لاحظت أن موظفي المستشفى يتجاوزون واجباتهم لمساعدة مريض أو للإبلاغ فورًا عن الحالات غير الآمنة؟					
التواصل والشفافية	7.	يوضح موظفو المستشفى السياسات والإجراءات بوضوح ويعترفون بالأخطاء عند حدوثها؟					
	8.	يناقش موظفو المستشفى بشكل مفتوح المخاوف الصحية وخيارات العلاج مع المرضى؟					
مؤشرات نظام المعلومات							
تصور المرضى ورضاهم عن نظام المعلومات الصحي (HIS)	9.	نظام المعلومات الصحي يلعب دورًا مهمًا في تحسين تقديم الرعاية الصحية بالمستشفى؟					
	10.	كبار السن غير مرتاحين لاستخدام نظام المعلومات الصحي؟					
	11.	استخدام نظام المعلومات الصحي يناسب فقط العملاء المتعلمي؟					
	12.	استخدام نظام المعلومات الصحي يؤثر سلبيًا على صحتك؟					
	13.	يساعد نظام المعلومات الصحي الأطباء في فحصك جيدًا لتقديم العلاج المناسب؟					
تأثير تواصل نظام المعلومات الصحي (HIS) على موقف وتصور المريض	14.	يساعد نظام المعلومات الصحي الطبيب في تزويدك بمعلومات كاملة حول مرضك؟					
	15.	مقدمو الرعاية الصحية يشرحون لك نتائج نظام المعلومات الصحي بطريقة مفهومة؟					
	16.	عدم التواصل بشأن حالتك الصحية يجعلك غير راضٍ؟					
	17.	التواصل من قبل مقدم الرعاية الصحية يسهل قبولك والالتزام بالعلاج؟					
فوائد نظام المعلومات الصحي (HIS) في تقديم الرعاية الصحية وتقييم المرضى	18.	نظام المعلومات الصحي يقلل التكاليف ويسرع عملية العلاج؟					
	19.	نظام المعلومات الصحي يضمن الخصوصية وسلامة سجلات المرضى؟					
	20.	نظام المعلومات الصحي يقلل من وقت الانتظار قبل رؤية الطبيب؟					
	21.	يمكن للمرضى الحصول على جميع سجلاتهم الصحية فورًا عند الطلب؟					
مؤشرات جودة الخدمة							
المحسوسات	22.	الأدوات الطبية والمرافق المادية جذابة بصريًا؟					
	23.	زي الموظفين نظيف، أنيق، ومرتب؟					
	24.	إضاءة جيدة في كل غرفة؟					
	25.	العرف نظيفة، والمستلزمات كافية، ويتم صيانتها بشكل جيد؟					
	26.	درجة حرارة مناسبة في غرف المرضى؟					
	27.	الوجبات المقدمة نظيفة وملائمة صحيًا؟					
	28.	الوجبات المقدمة لذيذة؟					

					أجواء كل غرفة مريحة؟	29.	
					رائحة كل غرفة منعشة؟	30.	
					عندما يعد موظفو المستشفى بعمل شيء في وقت محدد، هل يوفرون بهذا الوعد؟	31.	الموثوقية
					عندما تواجه مشاكل، هل تجد موظفي المستشفى مهتمين وداعمين؟	32.	
					هل تجد خدمات المستشفى موثوقة؟	33.	
					هل يقدم المستشفى خدماته في الوقت الذي يعد به؟	34.	
					هل يحتفظ المستشفى بسجلاته بدقة؟	35.	
					هل يخبرك المستشفى بالضبط متى سيتم تقديم الخدمات؟	36.	الاستجابة
					هل تتلقى خدمة فورية من موظفي المستشفى؟	37.	
					هل موظفو المستشفى دائمًا مستعدون للمساعدة؟	38.	
					هل موظفو المستشفى مشغولون جدًا بحيث لا يستجيبون بسرعة للطلبات؟	39.	
					أثق في الخدمة التي يقدمها موظفو المستشفى؟	40.	الضمان
					أشعر بالأمان في تعاملاتي مع موظفي المستشفى؟	41.	
					موظفو المستشفى مهذبون؟	42.	
					هل يحصل الموظفون على دعم كافٍ من المستشفى لأداء وظائفهم بشكل جيد؟	43.	
					موظفو المستشفى لا يمنحونني اهتمامًا فرديًا؟	44.	التعاطف
					موظفو المستشفى لا يقدمون لي اهتمامًا شخصيًا؟	45.	
					موظفو المستشفى لا يعرفون ما هي احتياجاتي؟	46.	
					هل المستشفى يهتم بمصلحتك الشخصية؟	47.	
					هل ساعات العمل في المستشفى مريحة لجميع العملاء؟	48.	
مؤشرات قيمة العملاء							
					لقد طلبت من الآخرين معلومات حول ما يقدمه هذا الخدمة؟	49.	البحث عن المعلومات
					لقد بحثت عن معلومات حول مكان تواجد هذه الخدمة؟	50.	
					لقد أوليت اهتمامًا لكيفية تصرف الآخرين لاستخدام هذه الخدمة بشكل جيد؟	51.	
					شرحت بوضوح ما أردت من الموظف القيام به؟	52.	مشاركة المعلومات
					قدمت للموظف المعلومات اللازمة؟	53.	
					وفرت المعلومات الضرورية حتى يتمكن الموظف من أداء مهامه؟	54.	
					أجبت على جميع الأسئلة المتعلقة بالخدمة التي طرحها الموظف؟	55.	السلوك المسؤول
					قمت بجميع المهام المطلوبة؟	56.	
					أكملت السلوكيات المتوقعة بشكل كافٍ؟	57.	
					وفيت بالتزاماتي تجاه العمل؟	58.	
					اتبعت توجيهات أو أوامر الموظف؟	59.	التفاعل الشخصي
					كنت ودودًا مع الموظف؟	60.	
					كنت لطيفًا مع الموظف؟	61.	
					كنت مهذبًا مع الموظف؟	62.	
					تعاملت مع الموظف بلباقة؟	63.	

					لم أتصرف بوقاحة تجاه الموظف؟	.64	
					إذا كان لدي فكرة مفيدة لتحسين الخدمة، أخبرت الموظف بها؟	.65	التغذية الراجعة
					عندما أحصل على خدمة جيدة من الموظف، أعبر عن رأيي بشأنها؟	.66	
					عندما أواجه مشكلة، أخبر الموظف عنها؟	.67	
					أساعد العملاء الآخرين إذا كانوا بحاجة إلى مساعدتي؟	.68	المساعدة
					أساعد العملاء الآخرين إذا بدأ أنهم يواجهون مشاكل؟	.69	
					أعلم العملاء الآخرين كيفية استخدام الخدمة بشكل صحيح؟	.70	
					أقدم نصائح للعملاء الآخرين؟	.71	التسامح
					إذا لم يتم تقديم الخدمة كما هو متوقع، سأكون مستعدًا لتحمل ذلك؟	.72	
					إذا ارتكب الموظف خطأ أثناء تقديم الخدمة، سأكون مستعدًا للتحلي بالصبر؟	.73	
					إذا اضطررت للانتظار لفترة أطول مما كنت أتوقع عادة لتلقي الخدمة، سأكون مستعدًا للتكيف؟	.74	
مؤشرات الميزة التنافسية المستدامة							
					هل ستوصي مستشفانا لشخص يبحث عن نصيحتك بشأن خدمات الرعاية الصحية؟	.75	التوصية الشفوية
					أشجع أصدقائي وأقاربي على استخدام خدمات مستشفانا؟	.76	
					هل يعتبر مستشفانا خيارك الأول عندما تحتاج إلى خدمات الرعاية الصحية؟	.77	نوايا الشراء
					هل تنوي استخدام المزيد من خدمات مستشفانا في الأشهر المقبلة؟	.78	
					هل تنوي استخدام عدد أقل من خدمات مستشفانا في الأشهر المقبلة؟	.79	
					أنوي تحويل بعض استخدامي إلى منافس يقدم أسعارًا أفضل؟	.80	حساسية الأسعار
					هل ستستمر في استخدام خدمات مستشفانا حتى إذا زادت الأسعار إلى حد ما؟	.81	
					هل تشعر أنك تدفع أسعارًا أعلى في مستشفانا مقارنة بالمنافسين مقابل الفوائد التي تتلقاها؟	.82	
					هل ستنتقل إلى منافس إذا واجهت مشكلة مع خدماتنا؟	.83	سلوك الشكوى
					هل ستشارك شكاواك مع مرضى آخرين إذا واجهت مشكلة مع خدماتنا؟	.84	
					هل ستقوم بتقديم شكوى إلى جهات خارجية، مثل هيئات الإشراف على الرعاية الصحية، إذا واجهت مشكلة مع خدماتنا؟	.85	
					هل ستوجه شكاواك إلى خدمة العملاء لدينا أو موظفي رعاية المرضى إذا واجهت مشكلة مع خدماتنا؟	.86	

الملخص

المقدمة: تهدف هذه الدراسة إلى دراسة التفاعل بين أخلاقيات العمل، جودة الخدمة، وأنظمة المعلومات في التأثير على قيمة العملاء وتعزيز الميزة التنافسية المستدامة في المستشفيات الخاصة الفلسطينية. تتناول الدراسة التحديات التي تواجه المؤسسات الصحية في المناطق المتأثرة بالنزاعات، مع التركيز على دور الممارسات الأخلاقية، التكامل التكنولوجي، وجودة الخدمة.

المنهجية: اعتمدت الدراسة تصميمًا كميًا مقطعيًا، حيث تم جمع البيانات من عينة عشوائية منتظمة مكونة من 384 مريضًا منومًا في ثلاثة مستشفيات خاصة في الضفة الغربية. تم بناء نموذج هيكلي وتحليله باستخدام برنامج Smart-PLS لفحص العلاقات المباشرة والوسيطية بين المتغيرات.

النتائج: أظهرت النتائج أن أخلاقيات العمل ($\beta = 0.180, p = 0.002$) وجودة الخدمة ($\beta = 0.417, p = 0.000$) تؤثران إيجابيًا على قيمة العملاء، مع كون جودة الخدمة العامل الأقوى. ومع ذلك، فإن أنظمة المعلومات ($\beta = 0.043, p = 0.233$) لا تؤثر بشكل مباشر على قيمة العملاء لكنها تساهم في تحقيق الميزة التنافسية المستدامة عند دمجها مع استراتيجيات أخرى. كما تبين أن قيمة العملاء تؤثر سلبًا على الميزة التنافسية المستدامة ($\beta = -0.405, p = 0.000$)، مما يشير إلى تحديات تشغيلية في تعزيز تصورات القيمة. ظهرت جودة الخدمة كعامل حاسم لتحقيق الميزة التنافسية المستدامة ($\beta = 0.560, p = 0.000$)، بينما أظهرت أخلاقيات العمل تأثيرات مختلطة ($\beta = -0.137, p = 0.024$)، حيث تعزز قيمة العملاء دون أن تترجم مباشرة إلى ميزة تنافسية. تدعم أنظمة المعلومات الميزة التنافسية المستدامة بشكل مباشر ($\beta = 0.165, p = 0.002$) لكنها تفتقر إلى التأثير الوسيط من خلال قيمة العملاء.

الخاتمة: تؤكد النتائج على أهمية موازنة الممارسات الأخلاقية وجودة الخدمة والتقدم التكنولوجي مع الأهداف الاستراتيجية لتعزيز قيمة العملاء وضمان النجاح التنافسي المستدام. تساهم هذه الدراسة في

الأدبيات من خلال تقديم نموذج هيكلي شامل يتناسب مع السياق الفريد للمستشفيات الخاصة الفلسطينية، مما يوفر رؤى عملية لتحسين الكفاءة التشغيلية ورضا المرضى في البيئات الصعبة.

الكلمات المفتاحية: أخلاقيات العمل، جودة الخدمة، أنظمة المعلومات، قيمة العملاء، الميزة التنافسية المستدامة، المستشفيات الخاصة، الرعاية الصحية الفلسطينية.