



ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF MANAGEMENT

**THE EFFECT OF SUPPLY CHAIN MANAGEMENT PRACTICE ON
ORGANIZATIONAL PERFORMANCES**

A case study in BGI Ethiopia (Addis Ababa, Kombolcha and Hawasa)

A research paper submitted to Business and Economics College in the partial fulfillment of the requirement for the art of master degree in quality management and Organizational Excellence

By: Tekalign Teshome

Advisor: Demeke. (PhD)

May, 2025

Addis Ababa, Ethiopia

Declaration

I hereby assert that the research titled “The Effect of Supply Chain Management Practices on Organizational Performance: A Case Study of BGI Ethiopia (Addis Ababa, Kombolcha, and Hawassa)” submitted to the Business and Economics College is my original work.

Tekalign Teshome

Certificate

We certify that the research report titled “The Effect of Supply Chain Management Practices on Organizational Performance: A Case Study of BGI Ethiopia (Addis Ababa, Kombolcha, and Hawassa)” was conducted by Tekalign Teshome as part of the requirements for the Master’s degree under our supervision.

	Name	Signature
Main advisor	Demeke Chimdesa (PhD)	

	Name	Signature
Co-Advisor		

	Name	Signature
External examiner	Doctor Baymot	

Internal examiner	Doctor Zelalem	
-------------------	----------------	---

Name

Signature

ACRONYMS

BGI - Brasseries Glaciers Internationals

SCM – Supply chain management

SCMP - Supply chain management practices

SPSS-Statistical Package and service solution

ACKNOWLEDGMENT

First and foremost, I want to express my gratitude to God for His many gifts throughout my life and academic achievements.

I would like to thank my Advisor Demeke (PhD) since; he is giving consistent support and guidance. Additionally, I want to thank the staff at BGI Ethiopia, they will give real information and collaborative during data collection.

I would want to thank my parents, who love and support me regardless of what I do. For me, they are the best examples of role models.

Contents

ACRONYMS	i
ACKNOWLEDGMENT.....	ii
List of table	vi
List of figure	vii
ABSTRACT.....	viii
CHAPTER ONE	1
Introduction.....	1
1.1.Background of the study	1
1.2.Statement of the problem	4
1.3.Objective of the study	5
1.3.1.Main objective	5
1.3.2.Specific objective.....	6
1.4.Significance of the study.....	6
1.5.Definition of Some terms.....	6
1.6.Limitation of the study.....	7
1.7.Scope of the Study	7
1.8.Organization of the Paper	7
CHAPTER TWO	8
LITERATURE REVIEW	8
2. Theoretical Review	8
2.1. The Concept of Supply Chain.....	8
2.2. Supply chain management overviews.....	8
2.3. Supply Chain Management Practice	9
2.4. Customer relationship	10
2.5. Strategic supplier partnership	11
2.6. Information sharing.....	11
2.7. Quality of information	12
2.8. Competitive advantage.....	13
2.9. Organizational performance.....	13
2.10. Empirical Studies	13
2.11. Conceptual framework.....	16
2.12. Research Hypothesis.....	16

CHAPTER THREE	18
Research methods	18
3.1. Research Design.....	18
3.2. Target population	18
3.3. Sample size determination	19
3.5. Data source and instruments	20
3.6. Method of data analysis	21
3.6.1. Multiple Linear regression model.....	21
3.7. Ethical consideration.....	22
CHAPTER FOUR.....	23
RESULT AND DISCUSSION	23
4.1. Demographic Profile of the Respondents	23
4.2. Reliability and Validity Analysis	25
4.3. Descriptive Statistics for Aggregated Variables.....	26
4.4. Description of the Explanatory Variables	26
4.5. Descriptive Analysis of Competitive Advantages.....	32
4.6. Descriptive Analysis on Organizational Performance	34
4.7. Correlation and Regression Analysis	35
4.7.1. Correlation analysis	35
4.7.2. Regression Analysis	35
4.7.2.1. Assumption of multiple linear regression model	35
4.8. Model Summary.....	39
4.9. ANOVA between Organizational Performance and Independent Variables	40
4.10. Coefficient of the regression Model	40
4.11 Hypothesis testing	42
CHAPTER FIVE	46
Summary, Conclusion, and Recommendations	46
5.1. Summary of Major Findings.....	46
5.2. Conclusion	47
5.3. Recommendation	47
5.4. Implication for future research.....	48
References.....	49

Appendix one : Questionnaire	53
Appendix two.....	59

List of table

Table 3.1 total employees for each department across the branches	19
Table 3.2 Determination of sample for each stratum	20
Table 4.1 Respondent's age and sex	23
Table 4.2 Description of job position and year of experience	24
Table 4.3 Estimation of Cronbach Alpha	25
Table 4.4 Description of variables	26
Table 4.5 description on measure of Customer Relationship	27
Table 4.6 Description on strategic supplier Partnership	28
Table 4.7 Description of information sharing	29
Table 4.8 Description on information Quality	30
Table 4.9 Description of Lean Practice	30
Table 4.10 Descriptive Statistics on price/cost	32
Table 4.11 Quality of product as Competitive advantage of the company	32
Table 4.12 Delivery Dependability as Competitive advantage	33
Table 4.13 Time to market as competitive advantage	33
Table 4.14 Overall performance of BGI Ethiopia	34
Table 4.15 Multicollinearity diagnosis	37
Table 4.16 Summary of Regression Model	39
Table 4.17 ANOVA table for the regression model	40
Table 4.18 Parameters estimation of the model	41
Table 4.19 Result of Hypothesis testing	45

List of figure

Figure 4.1 Bar chart for level of education of the respondents.....	24
Figuer 4.2 Histogram of the error terms	36
Figure 4.3 Normal P-P plots of Regression Standardized Residuals.....	37
Figure 4.4 scatter plot of Residual versus Predicted Value.....	39

ABSTRACT

The study is titled “The Effect of Supply Chain Management Practices on Organizational Performance: A Case Study of BGI Ethiopia (Addis Ababa, Kombolcha, and Hawassa).” To enhance the long-term performance of individual organizations and the overall supply chain, supply chain management involves the systematic and strategic coordination of all parties involved both directly and indirectly in meeting customer requests. This research paper explores the relationship between the company's organizational success and supply chain management practices. It assesses how competitive advantages influence BGI Ethiopia's performance and examines the implementation of supply chain management within the organization. Data for the study was gathered from the company's employees and various distributor agents through questionnaires, as well as from both primary and secondary sources. The sample respondents were selected with the help of probability random sampling particularly the stratified random sampling technique by applying proportional allocation to randomly selected branches (the strata). The questionnaire was developed based on the key variables identified as essential for achieving the study's objectives and was subsequently entered into SPSS analysis software for evaluation. The correlation Analysis indicated that supply chain management practices (customer relationship, strategic supplier partnership, level of information sharing, quality of information sharing) have significant and positive Relation with organizational performance and also the competitive advantage of product quality and competitive advantage of delivery dependability had a positive relationship with performance of the organization. The regression model analysis indicated that customer relationship, strategic partnerships with suppliers, of information sharing, and competitive advantages related to price/cost, product quality, and delivery dependability significantly impact the organizational performance of BGI Ethiopia. Based on these findings, the researcher recommends that BGI Ethiopia collaborate with suppliers in areas such as new product development, planning, goal-setting activities, problem-solving, and product improvement to enhance performance and gain a competitive edge. Material flow is closely dependent on information flow, so it is better to share the information timely and accurately. Since only production will not lead to good performance the company should produce the kind of product needed and delivering it to end user timely.

Key words: Competitive advantage, Customer relationship, Organization performance, supply chain management practice

CHAPTER ONE

Introduction

1.1. Background of the study

In the 1990s, the challenge of delivering products or services to the right location at the right time and the lowest cost intensified due to the globalization of markets and increased competition. Businesses started to understand that increasing internal efficiencies alone was insufficient; they also needed to make their entire supply chain competitive. According to Tan et al. (2002), maintaining competitiveness in the global race and increasing profitability now require knowledge of and practice with supply chain management.

According to the Council of Logistics Management (CLM) (2000), the process of synchronizing traditional business operations and plans amongst enterprises in the supply chain as well as inside a particular organization is referred to as supply chain management. It recognizes the strategic nature of trading partner coordination in order to explain its dual goal of enhancing the performance of a single organization and the overall supply chain management practice. This process is systematic and strategic in nature. As a powerful tool for competitive advantage, supply chain management aims to smoothly integrate material and information flows throughout the supply chain (Feldmann & Muller, 2003).

All of the individuals that make up a supply chain who are directly or indirectly involved in fulfilling a customer request. The supply chain also includes retailers, warehouses, transporters, and even the customers themselves, in addition to manufacturers and suppliers. All of the processes that go into receiving and completing a customer request within a particular company, like a manufacturer, are included in the supply chain. Marketing, operations, distribution, finance, customer service, and new product development are a few of these (Chopra & Meindl, 2001).

As businesses strive to meet rising customer expectations while managing costs, in the current competitive environment, supply chain management has grown in importance and merits significant research attention. To achieve this, companies must identify the non-competitive aspects of their supply chain process, comprehend the unmet customer needs, set improvement

objectives, and swiftly execute the required changes. In the past, manufacturers controlled the supply chain by controlling the rate at which goods were produced and delivered. Customers now make the decisions, and manufacturers are rushing to satisfy their demands for quick order fulfillment, quick delivery, and options, styles, and features (Aziz and Sherzod 2014).

Companies in the manufacturing and food processing industries are dynamic in the sense that they work together with their suppliers; build customers relationship, Make strategic relationships with competitors in the market, knowledge sharing with a focus on building an effective supply chain, and in order to increase production while simultaneously supporting company ability to compete in the manufacturing sector (Prabusankar, 2017). An integrated supply chain makes it possible to take advantage of the data generated by cooperative processes, which leads to reduced expenses, higher value, and early demand change detection. Collaboration in the manufacturing supply chain enhances customer satisfaction, financial returns, supplier relationships globally, and the timeliness of the delivery of goods and services (Oshodina & Omoregbe, 2021). A business must attain a respectably high degree of integration, encompassing coordination, cooperation, and integration across businesses and throughout the supply chain, to successfully implement supply chain management (SCM) (Banerjee & Mishra, 2015).

Previous studies have demonstrated that an organization's overall marketing and financial success are directly impacted by efficient supply chain management (SCM) practices (Shin et al., 2000). SCM methods are expected to improve an organization's overall competitive position, market share, and return on investment. For example, Tan et al. (1998) noted that customer interactions and buying behaviors influence the effectiveness of supply chain management (SCM) strategies, ultimately affecting financial and market performance. However, Froehlich and Westbrook (2001) found that companies with more extensive supply chain connections with suppliers and customers tend to experience the greatest improvements in business performance. Supply chain management practices significantly influence an organization's overall performance and competitive advantage. It is anticipated that they will increase a company's competitive edge through price/cost, quality,

The brewery industry in Ethiopia is in a growth phase, attracting multinational companies through various entry modes. This has led to an increase in the number of beer manufacturing

companies, driven by the rising demand for beer in the country. Companies are entering the market by acquiring state-owned breweries and making significant investments in new facilities. Currently, the industry primarily supplies the local market, but there is substantial potential for expansion into exports. Some companies have already started exporting, while others are planning to do so. State-of-the-art supply chain management is crucial in this competitive and growing industry, significantly impacting the performance of all parties concerned. Despite its importance, the operational excellence of supply chain management in Ethiopian breweries is under-researched, leading to a knowledge gap regarding its performance.

This thesis investigates the supply chain management practices of brewing companies in Addis Ababa, focusing on collaboration and integration with suppliers and consumers, as well as stability, responsiveness, flexibility, and operational costs. Recent years have seen several notable changes in the beer industry, including consolidation among larger breweries and new competitors entering the premium beer market. BGI, Dashen, Heineken, Meta, Raya, Habesha, and Zebidar are the seven beer firms that collectively run 11 plants in Ethiopia. Ethiopia's expanding beverage industry also includes two vineyards and four significant liquor makers. Effective supply chain management is crucial for cutting expenses, raising customer satisfaction, making better use of assets, and creating new revenue streams in light of the fierce competition.

Background of the company

The story began in 1922 when Mussie Hal, a Belgian of Ethiopian heritage, founded St. George Brewery after securing an agreement with the monarchy. He obtained 20,000 square meters of land near what is now known as Mexico Square in Addis Ababa. Using outdated machinery, 137 employees, and imported raw materials, the brewery commenced production of St. George Beer, initially bottling only 200-300 bottles each day. In 1936, following the occupation of Addis Ababa, the Italians took over St. George Brewery. They installed new machinery, expanded production facilities, and increased the workforce, allowing the brewery to meet the growing demand for "modern" beer. Under Italian management, production surged to three to four thousand bottles of beer daily, and the brewery launched its first draft beer, which was packaged in wooden casks.

1.2. Statement of the problem

The system of people, information, activities and resources involved in producing a product and goods and delivering it to the consumer is known as a supply chain (Ketchen et al., 2008). It covers everyone who is directly or indirectly involved in meeting a customer's request. The brewery industry is characterized by intense competition, presenting both obstacles and opportunities. Evolving consumer preferences and demands require innovative strategies to keep current customers and draw in new ones. Many beer markets are experiencing a consistent trend toward premium brands that provide health benefits. As a result, brewers are increasingly prioritizing premium offerings to improve their growth potential. This trend highlights the importance of an efficient supply chain network to lower operating costs and facilitate this strategic shift.

The importance of supply chain management (SCM) implementation in manufacturing firms and major retail organizations has been highlighted in a number of studies (Sandberg & Abrahamsson, 2010). In a local setting, Kyengo (2012) discovered that Nation Media Group Ltd.'s overall performance is significantly influenced by its capacity to deliver goods on time to customers who are widely separated, pointing out that even a one-hour delay can have a detrimental effect on sales. This highlights the critical need for effective supply chain structures. Additionally, Mwingi and Andebe (2011) found that it is particularly beneficial for manufacturers and retailers to share promotional information in the global market. However, the impact of SCM practices on the performance organization has not been fully investigated in these studies.

Solomon's (2017) study focused on how supply chain management techniques affect Ethiopian Telecom's operational performance. The study found that all aspects of supply chain management, including method of lean, relationship with customer, sharing of information, quality of information and strategic supplier partnerships, had a major impact on Ethiopian Telecom's operational performance. However, supply chain management practices in the food liquor industries needs close coordination and communication between producers, distributors, retailers and suppliers.

In addition, Haftay (2019) investigated the effects of different supply chain management (SCM) practices including strategic partnership with supplier, customer relationship management, the

quality and sharing of information and internal lean method on a company's operational performance. The findings indicated a strong association between these SCM practices and overall operational effectiveness. Haftay assessed performance using metrics such as delivery reliability, quality of outputs, supply chain costs, and flexibility of the operation. However, the study did not address how lead time metrics related to these SCM practices affect the company's operational performance.

Additionally, Ololade (2019) discovered that techniques for supply chain management have a major and positive impact on an organization's performance. However, the results of this study are less immediately applicable because it was carried out in the service sector, which has distinct difficulties than the fast-moving consumer goods (FMCG) sector. Similarly, Waqas (2020) concluded that supply chain management variables positively and significantly impact organizational performance. Although this study focused on the manufacturing industry, it specifically examined textile manufacturing, where products do not have a short shelf life, unlike the FMCG subsector. In the food industry, establishing a safe supply chain management system is crucial, as the products are directly consumed by customers.

Because of this background, the researcher is interested to study how supply chain management practice affects organizational performance in the case of BGI Ethiopia. In addition to this, the products of BGI have short shelf life so frequent research is needed for the company to reach excellent supply chain management.

Research questions

How is the relationship between supply chain management practice and the performance of BGI Ethiopia?

What are the impacts of competitive advantage on the performance of BGI Ethiopia?

What are the supply chain management practices in BGI Ethiopia?

1.3. Objective of the study

1.3.1. Main objective

The primary objective of this research is to identify the influence of supply chain management practices on organizational performance within BGI Ethiopia.

1.3.2. Specific objective

- To analyse the correlation between supply chain management practices and the organizational success of BGI Ethiopia
- To evaluate how competitive advantages affect the overall performance of BGI Ethiopia.
- To systematically investigate the current Supply chain management strategy implemented by BGI Ethiopia.
- To assess the extent to which supply chain management practice contribute to the operational and strategic performance of BGI Ethiopia.

1.4. Significance of the study

The survival of a business is contingent upon achieving optimal profits. This study intends to assist BGI Ethiopia in comprehending how supply chain management affects organizational performance, emphasizing how important it is to the business's profitability. Enhancing profitability and maintaining competitiveness in the global market require an understanding of and commitment to effective supply chain management (Childhouse et al., 2003). The findings of the research will help to the small amount of literature already available on how supply chain management practice affect organizational performance, according to academics and scholars. Other researchers will also use the study's findings as a point of reference for their own research in the same area. The results can also be used as a secondary source of data.

1.5. Definition of Some terms

Competitive Advantage

The degree to which a corporation can build a position that can be defended against rivals. It is the outcome of significant management decisions and comprises the skills that allow a business to differentiate itself from its competitors. Creating and maintaining superior performance is a competitive advantage.

Customer Relationship

The whole range of procedures used to deal with consumer grievances, establish enduring good association with clients, and raise client satisfaction levels (Moberg CR, Cutler BD, Gross A, Speh TW).

Organizational performance

It is the degree to which an organization meets its financial and market-oriented objectives (Kumar, N., & Gulati, R. 2009).

Supply Chain Management Practice

The most recent developments in supply chain management (SCM) techniques are part of a set of actions taken to improve performance of an organization. These procedures include sharing of information, cycle time reduction, outsourcing, supplier partnerships, and continuous process flow (Donlon, 1996).

1.6. Limitation of the study

Due to time limitation other humanitarian organization practices and variables are not included in the research. For example the study does not include contextual variables such as firm size, industry type, supply chain position, length, Firm size, in particular, may correlate with SCM practice adoption due to the complexity of larger organizations' supply chains.

On the other hand constructs of SCM are not only limited to SCM practices selected in this study. Therefore it is not representing all constructs that could explain SCM practices.

1.7. Scope of the Study

SCM encompasses vast areas of managerial practices. However, it is difficult and unmanageable to conduct the study in all areas that summarizes SCM in terms of time, finance, and research manageability.

Therefore, the scope of this study is delimited to SCM practices and organizational performance of BGI Ethiopia. The subject scope of this study is also delimited to the organization's point of reference towards the supply chain management practices (strategic supplier partnership, customer relationship, level of information sharing, Quality of information and internal operation) and the organizational performance was delimited to (market share, return on investment, the growth of sales, the growth of market share, profit Margin on sales and over all competitive Positions). The area of the study is also delimited to the case organization i.e., BGI Ethiopia (Addis Ababa Hawasa and Kombolcha).

1.8. Organization of the Paper

This paper was organized into five chapters. The first chapter include introduction which includes background of the study, statement of the problem, objective of the study, significance of the study, scope and limitation of the study. The second chapter deals with review of related literature from different sources. The third chapter involves methodologies applied in the study. The fourth chapter presents data analysis and interpretation. The fifth chapter includes summary of the study, conclusions, recommendation and suggestion.

CHAPTER TWO

LITERATURE REVIEW

2. Theoretical Review

2.1. The Concept of Supply Chain

The term "supply chain management" (SCM) first emerged in 1982 (Oliver & Webber, 1982). By the early 1990s, scholars began to define SCM from a theoretical standpoint, differentiating it from traditional logistics approaches that primarily managed the flow of materials and information (Cooper et al., 1997). As a discipline, SCM remains in its early evolutionary phases (Gibson & Cook, 2005). It embodies the concept of a "business ecosystem" and provides a framework for companies to collaborate rather than compete (Bechtel & Jayaram, 1997). While the term originated from consultants, educators built the foundational theory and structure needed for its implementation. Over the last twenty years, SCM has gained significant traction, leading to extensive research in the field (Ashish, 2007).

The supply chain may go through several phases, such as the following:

- Suppliers of raw materials and components
- Customers
- Manufacturers
- Retailers
- Wholesalers/distributors

Each phase of a supply chain is connected by the movement of information, products and funds.

2.2. Supply chain management overviews

According to some academics, supply chain management originated with the system theories shortly before the 1960s. However, the field started to receive more attention in the 1980s, and since 1990, the rate of publications has dramatically increased (Wisner et al., 2005; Oliver & Webber, 1982). Various scholars and organizations defined supply chain management as follows: It is the awareness of the specific function of coordination inside a single company and between trade partners in the supply chain with the purpose of enhancing the overall performance of the supply chain and an individual organization. It is referred to the process of controlling products, data, and funds as they move from manufacturer to supplier to wholesaler to retailer to consumer (Johnson, P. F., & Flynn, A. E. (2015)).

Bimha et al. (2020) assert that supply chain management should be integrated into an organizational mind-set that considers the company as a unified entity rather than as distinct business divisions.

A supply chain is made up of a network of raw material suppliers, manufacturing plants that turn raw materials into completed goods, and distribution hubs that ship those goods to customers. Often called the value chain, this process encompasses the production and shipping of goods or services (Zailani & Rajagopal, 2005). It involves the coordination and movement of both information and goods among businesses, spanning from raw materials to end customer (Handfield & Nichols, 2002).

All of the personnel engaged in completing a client request, whether directly or indirectly, make up a supply chain. It consists of retailers, warehouses, transporters, and even the clients themselves, alongside producers and vendors. All of the processes that go into receiving and completing a customer request within a particular company, like a manufacturer, are included in the supply chain. These roles include those in marketing, operations, distribution, finance, customer service, and new product development (Chopra and Meindl, 2007).

All business operations are integrated and coordinated into a smooth process by effective supply chain management. It connects and embraces every chain partner. The supply chain structure, management components, and business processes are the three main and interrelated components of the supply chain management (SCM) framework Sahay (2007).

The fundamental aim of supply chain management is to enhance chain performance to increase value while minimizing costs." In other words, its objective is to link all supply chain participants so that they can collaborate within the organization to boost supply chain efficiency and maximize benefits for all stakeholders (Finch, 2006). Mentzer (2001) emphasizes that supply chain management (SCM) is essential for the coordinated and strategic alignment of traditional business functions both within a single organization and across the entire supply chain. This strategy seeks to improve both the supply chain's overall performance and the long-term performance of individual businesses.

2.3. Supply Chain Management Practice

SCM approaches put the customer and leadership, internal lean practices, and information quality first order constraints (Wijetunge 2016). In this study, the second-order constructs of our

independent variable were three well-known supply chain management (SCM) strategies: sharing of information, relationship with customer, and strategic supplier partnerships. One characteristic of supply chain management (SCM) procedures is multi-dimensional construction. Examples of this include departmental integration within the organization and supplier-customer integration, also referred to as upstream SC (Babatunde et al., 2015). There are two primary goals for SCM practice. The first is to make every SC organization and every company perform better. SCM procedures also seek to lower the organization's overall costs, which makes it possible for a business to run more effectively and successfully (Elfawal et al, 2021)

Fawcett et al. (2007) describe supply chain management as the design of a seamless value-adding process that transcends organizational boundaries to meet actual customer needs. However, Supply chain management execution frequently involves a number of intricate problems and obstacles that originate from the design and implementation stages. It is necessary to fully identify these important issues before creating proactive problem-solving techniques. Therefore, the following are the supply chain design and management issues listed insufficient coordination of efforts, incompatibilities between information systems, lengthy cycle times, communication difficulties, issues with customer support, relatively high inventory for the level of customer service attained, and lower than ideal profits (Fawcett et al. 2007).

2.4. Customer relationship

Businesses must understand what customers want now and in the future in order to better meet their needs, as customers is the foundation of any successful business. These days, supply chain management includes customer relationship management, or CRM. The success of the company in supply chain management can be significantly increased by effective customer relationship management (Diabat et al., 2014). Additionally, a company's continuous supply chain selling, advertising, and service policy activities can be characterized as CRM. In order to increase customer satisfaction and brand recognition, businesses use integrated information technology to try and predict actual customer needs in order to create products internally.

Customer relationship management defined as a set of strategies designed to address customer complaints, foster lasting relationships with clients, and improve overall customer satisfaction Kimechwa et al. (2015). Because committed partnerships inherently create barriers to competition, they provide the most sustainable advantage. Customer relationship management is

essential to a company's survival in the new era being ushered in by the rise of mass customization and customized services (Nzeyimana & Njenga, 2022).

Customer relationship management (CRM) in supply chain management (SCM) addresses both outbound and inbound client relationships. The ability of the business to communicate with customers to provide pertinent goods and services to clients both domestically and internationally at the appropriate time, location, quantity, and quality is linked to customer relations (Kumar et al, 2017). According to Govindaraju (2017), having strong customer relationships enables a business to differentiate itself from competitors, foster customer loyalty, and significantly enhance the value it delivers to its clients.

2.5. Strategic supplier partnership

A strategic supplier partnership is an organization's long-term relationship with its supplier, according to Nyamasege and Biraori (2015). Strategic partnerships promote cooperative planning and problem-solving initiatives and are centered on long-term relationships between trading partners. Organizational strategic partnerships promote ongoing collaboration and the development of shared advantages in important strategic areas such as markets, technology, and products. The goal of strategic supplier partnerships is to help employee-participating firms gain significant competitive advantages by leveraging their operational and strategic strengths (Govindaraju et al, 2017). Additionally, deliberate collaboration promotes cooperative planning, problem-solving activities, and direct, long-term relationships. According to Kosgei and Gitau (2016), this approach is centred on cooperative planning, also known as mutual planning, and attempts to address shared problems between businesses and suppliers.

Agus (2015) suggests that strategic supplier partnerships are viewed as a supply chain approach that fosters collaboration among partners and customers, leading to loyalty, trust, and integration. This cooperation is essential for achieving long-term sustainable success. Long-term direct connections with customers are the main goal of strategic supplier partnerships in order to facilitate collaborative planning and problem-solving. A leading supply chain relies heavily on effective supplier collaboration (Al-Shboul et al., 2017).

2.6. Information sharing

Sharing of information is essential for brewery companies because it helps present a clear picture to partners greatly enhances SC performance (Rached et al. 2015). According to Berut et al.

(2018), information sharing involves business partners exchanging private data to monitor the status of orders and goods throughout different supply chain processes. elements of this process include collecting, computing, preserving, interpreting, accessing, and Key distributing data related to market forecasts, stock locations and levels, customer orders, pricing, and performance metrics. Important first steps include developing a firm grasp of supply chain concepts and being open to information exchange. Information can be used to gain a competitive edge by gathering current data and disseminating it to other supply chain players (Kimechwa et al, 2015).

Govindaraju et al. (2017) identify information sharing as one of the five critical elements of a robust supply chain relationship. They argue that frequent communication among supply chain participants fosters teamwork, allowing them to quickly adjust to changes in the market and better understand end-user needs. Utami et al. (2019) emphasize that timely information sharing is crucial for supply chain partners to promptly meet customer demands.

2.7. Quality of information

Since it helps them finish their work with accurate information, quality of information sharing which is a Customers have been shown to be motivated to buy a product based on a company's merit in the information context (McKnight et al., 2017). A crucial element in the modern brewery sector is the calibre of information exchange. The fundamental concept is to provide customers with a wide range of accurate information so they can obtain a clear picture of their products and obtained them(Sagawa & Nagano, 2015). Quality information exchange is believed to enhance business performance by providing a comprehensive picture of the services (Fauver et al., 2017).

According to Gorane & Kant (2017), businesses can experience several advantages from information sharing, such as streamlined operations due to less paperwork, readily available information, more effective transactions, and enhanced service for customer, excellent communication, increased productivity, and time savings. Furthermore, by providing a comprehensive representation of services, superior information sharing is believed to enhance business performance (Fauver et al., 2017). Businesses seem to have an innate reluctance to divulge more than the most basic information since doing so is perceived as a loss of authority.

Furthermore, Mollel (2015) stated that high-quality information must be impartial and free of bias, meaning it must be trustworthy, and it must be comprehensive, meeting all current

requirements. The information gathered should be sufficiently clear to eliminate the need for further explanation. Additionally, to ensure that the same data set produces consistent results when using the described methods, the information must be reproducible.

2.8. Competitive advantage

Competitive advantage refers to an organization's ability to establish a position that can be protected against rivals (McGinnis & Vallopra 1999). It is the result of important managerial choices and comprises the abilities that enable a company to stand out from its rivals (Tracey et al., 1999). Price/cost, delivery, quality of product, and flexibility have all been repeatedly recognized as crucial competitive advantages in the empirical literature. Additionally, recent research has identified time-based rivalry as a key competitive priority.

2.9. Organizational performance

The phenomenon of how successfully businesses achieve their intended goals is known as organizational performance, or OP. Although there have been numerous studies on OP in the past, there is currently no accepted definition for how to quantify OP. To gauge OP, some researchers look at financial performance. Others gauge an organization's performance using non-financial metrics.

The current study measures OP using market and financial factors (Yamin and others, 1999). Financial and market metrics, such as return on investment (ROI), market share, profit margin on sales, ROI growth, sales growth, market share growth, and overall competitive position, have been used in a number of earlier studies to assess organizational success (Li et al., 200). In line with the previously mentioned literature, the same items will be used in this study to measure organizational performance. Market share, return on investment, market share growth, sales growth, ROI growth, sales profit margin, and overall competitive position are all adjusted.

2.10. Empirical Studies

The practice of supply chain management and its impact on organizational performance have been the subject of several studies.

Researchers have identified various supply chain management practices (SCMPs). For example, different set of six SCMPs: supply chain integration, just-in-time capabilities, information sharing, supply chain characteristics, geographic proximity, and customer service management Choon et al. (2002). According to Tan et al. (1998), SCMP is represented by purchasing, quality,

and customer relationships. As a result, SCMP is portrayed in literature from a variety of angles, but ultimately, it has the same goal of improving OP.

The connections between supply chain management (SCM) practices, operational performance, and organizational performance was investigated. The organizational performance of SCM was not significantly and directly impacted by SCM practices. Close cooperation with suppliers, close cooperation with customers, subcontracting, outsourcing, third-party logistics, on-time delivery, strategic planning, keeping safety stock, and having a large number of suppliers are the twelve SCM practices that their study identifies Lenny et al. (2007).

Li et al. (2006) used their tool (created in 2005) to measure supply chain practices in order to investigate how SCM practices affect competitive advantage and organizational performance. They discovered that SCM practices, as a multifaceted concept, encompass internal supply chains as well as upstream and downstream supply chains. Additionally, their research showed that SCM practices have a major effect on competitive advantage and organizational performance. The results indicate that higher levels of SCM practice can lead to improved organizational performance and a greater competitive advantage. Additionally, a competitive advantage can directly and favourably affect the performance of an organization.

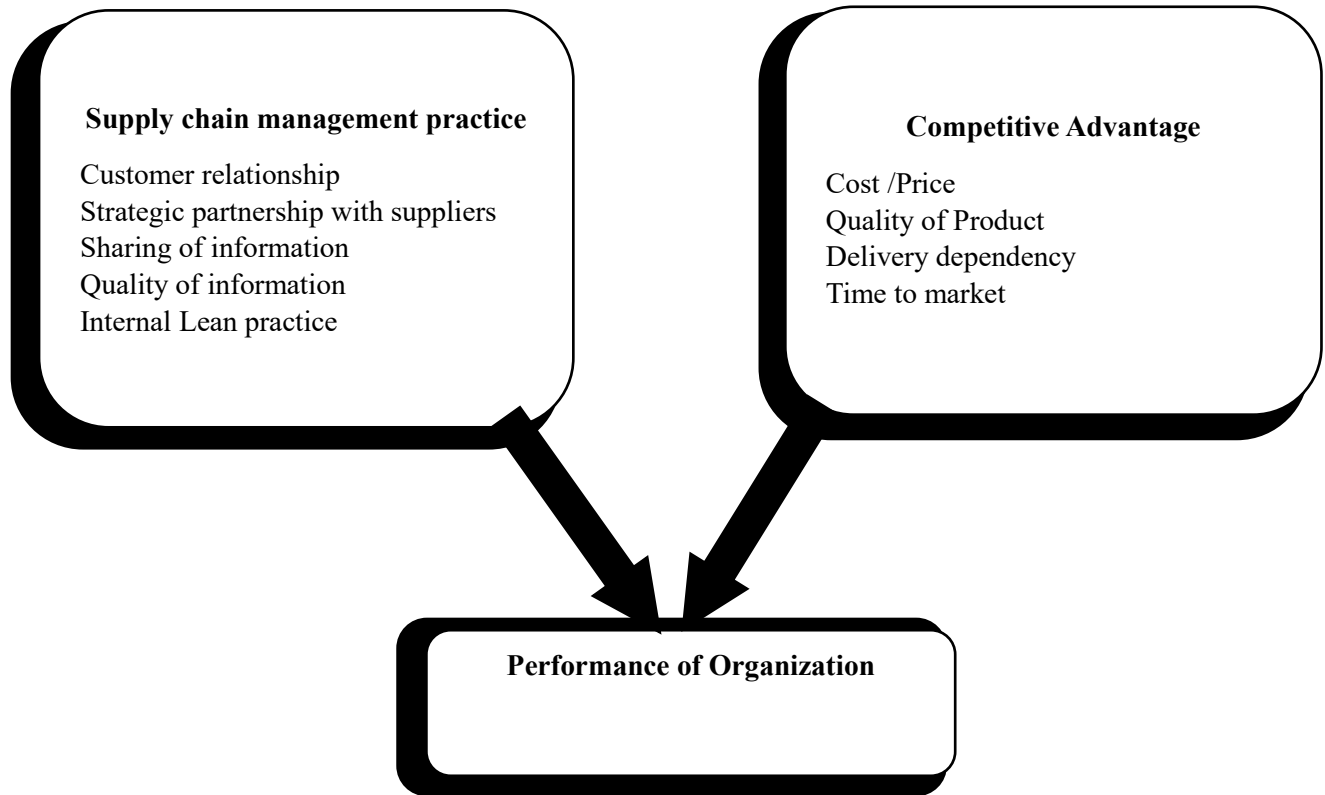
Tan et al. (2002) investigate the connections between organizational performance, supplier evaluation procedures, and supply chain management techniques. The six elements of supply chain management that they identify are geographic proximity, customer service management, supply chain integration, information sharing, supply chain characteristics, and JIT capability. They discovered that market share and geographic proximity were positively connected, which supports the idea that putting one's business near suppliers or customers increases market share. Additionally, they discover a favorable correlation between supply chain attributes and overall product quality and JIT capability. Performance is most affected by JIT capability. Product and delivery evaluation is positively connected with the overall customer service level, according to the correlation between supplier evaluation factors and performance.

Kim S. W. (2006) explores the causal relationships between competitive capability, supply chain management (SCM) practices, firm performance, and the degree of supply chain integration. The study reveals that large firms prioritize the infrastructure role of supply chain integration, highlighting a strong link between SCM practices and competitive capability. In contrast, small

firms focus more on the role of supply chain integration as a crucial mediator between SCM practices or competitive capability and firm performance. Since large companies have often already integrated their supply chains to a significant extent, it's plausible that supply chain management (SCM) practices have a stronger, more direct relationship with competitive capabilities. Furthermore, both SCM practices and competitive capabilities likely exert a greater direct influence on overall performance. According to his findings, performance improvement in small businesses may be more dependent on effective SC integration, whereas, in large businesses, performance improvement may be more significantly impacted by the close relationship between SCM practice and competitive capability. This suggests that the focus on systematic SC integration may be more important in the early stages of the process and that it may be wise to concentrate on SCM practice and competitive capability after SC integration has somewhat advanced.

2.11. Conceptual framework

A conceptual framework is a model that outlines the key concepts within a research study and illustrates the relationships between them.



Source: Modified from Jabessa (2023)

2.12. Research Hypothesis

Ha: The Customer relationships has no positively and significantly affect the organizational performance of BGI Ethiopia.

Ha: The Strategic supplier partnerships has no positively and significantly affect organizational performance of BGI Ethiopia.

Ha: Information sharing has no positively and significantly affects the organizational performance of BGI Ethiopia

Ha: Quality of Information has no positively and significantly affects the organizational performance of BGI Ethiopia.

Ha: Internal lean practices has no positively and significantly affect the organizational performance of BGI Ethiopia.

Hypothesis regarding Competitive advantage

Ha: The price/cost competitive advantage has no significantly and positively affect the organizational performance of BGI Ethiopia.

Ha: Offering High product quality has no significant competitive advantage and positive impact on organizational performance of BGI Ethiopia.

Ha: Reliable delivery provides has no significant competitive advantage and positive influences on organizational performance of BGI Ethiopia.

Ha: A faster time to market has no significant competitive advantage and positively impacts BGI Ethiopia's organizational performance.

CHAPTER THREE

Research methods

This study investigates how supply chain management techniques affect the effectiveness of an organization. This section details the research methodology, encompassing data sources, sample selection, data collection tools, measures of validity and reliability, and the analytical approach.

3.1. Research Design

This study aimed to investigate supply chain management (SCM) practices by applying fundamental theories and principles to the case company's main business operations. Consequently, the current SCM procedures of the company were evaluated, along with the challenges that impede their effectiveness. The research sought to uncover the underlying facts and actual circumstances regarding SCM practices within BGI Ethiopia and to describe these findings. Therefore, descriptive analysis was employed to examine both qualitative and quantitative data. Additionally, an explanatory research design was utilized to demonstrate the causal relationship between SCM practices and organizational performance.

3.2. Target population

Employees and distribution agents of BGI Ethiopia made up are the study's target population. Stratified probability sampling was used, dividing the target population into distinct strata. The study's target population was divided into nine strata according to the divisions and divisions within the company that have a direct bearing on the SC of the company. Subsequently, samples were chosen from each stratum based on their percentage of the overall population. Data was collected from the following strata, representing different departments: production, finance, supply chain, administration (including leaders and managers), marketing and sales, quality control, procurement, store technology, draft technology, and production distribution agents.

Table 3.1 total employees for each department across the branches

Name of the department	Population			
	Adiss Ababa	Kombolcha	Hawassa	Total
Leaders and managers	126	18	13	157
Quality control	31	18	20	69
Finance	24	8	10	42
Supply chain	128	36	42	206
Production	71	43	58	172
Sales and marketing	127	16	23	166
Procurement store technic	290	156	221	667
Draft technic	20	13	14	47
Production distribution agent	46	34	35	115
Total	863	342	436	1641

3.3. Sample size determination

The sample size must be taken into account in any empirical study where the goal is to infer population characteristics from a sample. The study's target population was drawn from BGI Ethiopia's Addis Ababa, Kombolcha, and Hawassa branches because the study was restricted to the case company. According to information gathered from the BGI HR office, there were 1641 employees working across the Addis Ababa, Kombolcha, and Hawassa branches during the study period. However, our sample consisted of 322 employees based on Ymane's (1967) sample size determination.

$$n = \frac{N}{1 + N(e)^2} = \frac{1641}{1 + 1641(0.05)^2} = 322$$

n –Sample size

N –Total population (which is 1641 employees)

e – Margin of error ($e=0.05$)

Proportional allocation of samples

Each stratum's sample size is set proportionately to the number of sampling units in that stratum through proportional allocation. That is:

$$n_i = n \frac{N_h}{N}$$

n_i - The sample size for the i^{th} stratum

n – The total sample size

N_h - The total population for the i^{th} stratum

N - The total sample size

Table 3.2 Determination of sample for each stratum
Population

Name of the department	Adiss Ababa	Kombolcha	Hawassa	Total	Sample
Leaders and managers	126	18	13	157	31
Quality control	31	18	20	69	14
Finance	24	8	10	42	8
Supply chain	128	36	42	206	40
Production	71	43	58	172	34
Sales and marketing	127	16	23	166	32
Procurement store technic	290	156	221	667	131
Draft technic	20	13	14	47	9
Production distribution agent	46	34	35	115	23
Total					322

3.5. Data source and instruments

In this study, data from primary and secondary sources were combined. Primary data was gathered by means of interviews and questioners. The variables that were determined to be crucial for achieving the study's goals were used in the questionnaire's design. The respondents

were given both closed-ended and open-ended questionnaires. Existing sources within the organization were used as secondary data sources. The company's employees, BGI Ethiopia agents, and a few chosen suppliers were given the questionnaires. Additionally, key informants and company managers who have a direct operational connection to supply chain management will be interviewed.

3.6. Method of data analysis

Descriptive statistics were used in the quantitative data analysis to calculate the central tendency. To analyze the data gathered through questionnaires, a descriptive-analytical technique was employed with the assistance of Statistical Package and Service Solutions (SPSS). A five-point Likert-type response scale was used to administer the questionnaires. Inferential data analysis correlational and regression analysis of variables were applied. Additionally, open-ended interviews were used to collect qualitative data.

Model specification

This study examines organizational performance (the dependent variable) as influenced by supply chain management (SCM) practices and competitive advantages (the independent, predictor variables). A multiple regression model was employed to assess the predictive power of five SCM practice, along with competitive advantages, on organizational performance.

3.6.1. Multiple Linear regression model

Several explanatory variables are used in a statistical technique known as multiple linear regressions (MLR) to predict the value of a response variable. The goal of MLR is to model the linear relationship between the response and explanatory variables.

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

Where

Y -The dependent variable (organizational performance)

β 's- Parameters of the regression model

X 's -The independent variables

ε –random error term

3.7. Ethical consideration

The following outlines how these principles were addressed in the questionnaire design and administration.

Informed consent: each participant will receive a brief explanation of the purpose of the study, allowing them to give their full consent.

Right to privacy (confidentiality): The researcher will maintain complete confidentiality regarding the type and calibre of participants' performances. No data will be kept on file to connect respondents to their answers.

Security: the participants are not subjected to excessive stress, humiliation, or low self-esteem by the researcher.

Honesty: The findings were presented by the researcher in full honesty.

CHAPTER FOUR

RESULT AND DISCUSSION

In this chapter, the data were analyzed concerning research objectives and research questions. The results were presented in the form of a table, chart, and graph. The results of the analysis were interpreted according to scientific concepts. The Statistical Package and Service Solution (SPSS) version 20 was used to analyse the data.

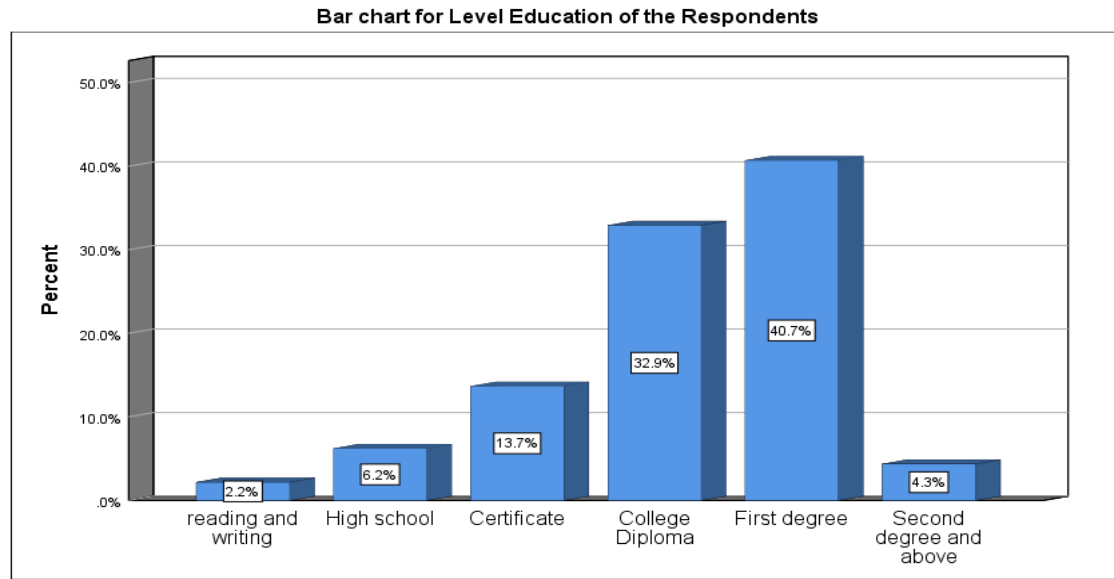
4.1. Demographic Profile of the Respondents

Table 4.1 Respondent's age and sex

	Category	Frequency	Percentage
sex	Male	164	50.9
	Female	158	49.1
age	20-25years	9	2.8
	26-30 years	145	45.0
	31-35 years	86	26.7
	36-40 years	60	18.6
	greater than 40 years	22	6.8

Table 4.1 presents the respondents' sex and age demographics. The gender distribution is nearly even, with males comprising 50.9% and females 49.1% of the respondents. Age-wise, the majority of respondents were young, with 45% falling between 26 and 30 years old, and 26.7% between 31 and 35. The youngest age group (20-25 years) represented 2.8% of the respondents.

Figure 4.1 Bar chart for level of education of the respondents



The highest bar on the chart, representing the highest level of education attained by the majority of respondents, is a first degree, as seen in Figure 4.1. This is followed by college diploma holders, who make up 32% of the respondents. Approximately 4.3% of the respondents have a second degree or higher.

Table 4.2 Description of job position and year of experience

		Frequency	Percentage
Job Position	managerial position	40	12.4
	section head	139	43.2
	no managerial position	122	37.9
	other position	21	6.5
Experience in the Organization	under two years	20	6.2
	Two up to five years	143	44.4
	Six up to ten years	142	44.1
	over ten years	17	5.3

According to the data in Table 4.2, the majority of respondents (43.2%) were section heads, while 37.9% held non-managerial positions. Additionally, 12.4% were in managerial roles, and

the remaining 6.5% occupied various other positions. This diversity in job roles enables the researcher to gather a broad range of information and perspectives from employees with varying levels of experience.

Additionally, the majority of respondents have been employed by the company for two to five years (44.4%) or six to ten years (44.1%), according to the analysis in Table 4.2. Around 5% of those surveyed have worked for the company for more than ten years.

4.2. Reliability and Validity Analysis

Reliability defined as the extent to which a variable or collection of variables reliably measures the intended outcome (Hair et al. 2007). Although reliability can be tested in a number of ways, Cronbach's alpha is thought to be suitable.

Table 4.3 Estimation of Cronbach Alpha

Variables	Number of item	Cronbach Alpha
Customer relationship	5	.746
Strategic supplier partnership	6	.837
Information sharing	7	.727
Quality of Information	5	.753
Internal lean practices	3	.861
Organization performance	7	.829
Price/cost	5	.943
Product quality	4	.761
Delivery dependability	5	.916
Time to market	4	.751

All variables have Cronbach's alpha values greater than 0.7, which indicates good reliability (Table 4.3). Cronbach's alpha values greater than 0.7 are regarded as accepted value (Andy, 2006). The validity test also proves that the questionnaires are valid since there was a significant correlation between each variable and the total sum of each predictor see table in the appendix.

4.3. Descriptive Statistics for Aggregated Variables

This analysis examines the impact of supply chain management practices and the competitive advantages on the performance of organization.

Table 4.4 Description of variables

Variables	N	Mean	Std. Deviation
Customer relationship	322	2.7708	.47441
Strategic supplier partnership	322	2.8235	.37045
Information sharing	322	2.6837	.38241
Quality of Information	322	3.6348	.46434
Internal lean practices	322	3.3789	.68611
Organization performance	322	3.0417	.39487
Price/cost	322	3.0981	.51790
Product quality	322	4.0590	.42002
Delivery dependability	322	2.7137	.50183
Time to market	322	2.5722	.49729

Table 4.4 shows that Product Quality, Information Quality, Internal Lean Practices, Price/Cost, and Organizational Performance had mean values above the midpoint. Customer Relationships, Strategic Supplier Partnerships, Information Sharing Level, Delivery Dependability, and Time to Market had mean values below the midpoint.

4.4. Description of the Explanatory Variables

Customer Relationship

The questions assess customer relationship management, focusing on reliability, responsiveness, satisfaction measurement, future expectations, customer capability development, and the ongoing value of customer relationships.

Table 4.5 description on measure of Customer Relationship

Customer Relationship	N	Mean	Std. Deviation	Skewness	Kurtosis
Regular communication with customers to set reliability and other qualities	322	2.82	.981	.102	-1.114
We regularly gauge and assess customer satisfaction.	322	2.39	1.068	.764	-.022
Future customer expectations are often ascertained by us.	322	2.60	1.277	.529	-.953
Easy for clients to contact us for help.	322	3.53	1.117	-.470	-.815
We regularly evaluate the worth of our relationship with our clients.	322	2.52	.918	.818	-.442

BGI Ethiopia employees generally expressed dissatisfaction with the company's customer relationship management practices. They disagreed by the Regular communication with customers to set reliability and other qualities (mean = 2.82), the measurement and evaluation of customer feeling (mean = 2.39), the determination of future customer expectations (mean = 2.6), and assess the value of our relationship with our customers (mean = 2.52). A positive sentiment was observed regarding clients to contact us for help. The data's normal distribution was confirmed by skewness and kurtosis values falling between -2 and +2.

Most respondents disagreed on the elements of customer relationship management. However, customer relationship management is a crucial element in the implementation of supply chain management practices in any organization. Keeping positive customer relations is crucial in the age of mass customization and individualized service.

Strategic Supplier Partnership

The chosen employees were asked to measure the supplier partnership. The questions explore supplier selection based on quality, supplier involvement in problem-solving and quality improvement, collaborative continuous improvement efforts, and the integration of key suppliers into BGI Ethiopia's planning, goal-setting, and new product development processes.

Table 4.6 Description on strategic supplier Partnership

Strategic Supplier Partnership	N	Mean	Std. Deviation	Skewness	Kurtosis
Quality is our top consideration for selecting suppliers	322	3.43	1.086	-.285	-.883
Frequently work with our suppliers to resolve issues.	322	2.98	.949	.176	-1.224
Assisting suppliers in raising the caliber of their product.	322	3.12	.972	.048	-1.111
Suppliers are a part of our on-going improvement initiatives.	322	2.55	.816	1.008	-.740
Suppliers are involved in our planning and goal-setting processes.	322	2.62	.765	.763	-.888
Suppliers are actively involved in the development of new products.	322	2.25	.977	.818	.469

Table 4.6 reveals that respondents generally agreed by quality as top supplier selection criteria (mean = 3.43). However, they disagreed with the company's practices work with our suppliers to resolve issues (mean = 2.98), inclusion of suppliers to on-going improvement initiatives (mean = 2.55), planning and goal-setting activities (mean = 2.62), and new product development (mean = 2.25). The data for strategic supplier partnerships was normally distributed, as indicated by skewness and kurtosis values between -2 and +2.

These findings suggest that BGI Ethiopia should focus on improving joint problem-solving with suppliers, assisting suppliers in enhancing product quality and integrating suppliers into planning, goal-setting, and new product development processes.

Level of Information Sharing

Information that is shared can range from general market and customer data to logistics-related data, and it can be strategic or tactical in nature. In order to achieve this, questions were posed to the respondents, and the table below shows their answers.

Table 4.7 Description of information sharing

Level of information sharing	N	Mean	Std. Deviation	Skewness	Kurtosis
When needs change, we let trading partners know ahead of time.	322	2.71	1.065	.302	-.974
Sharing of essential information with Our trading partners.	322	2.51	1.024	.456	-.509
Our trading partners keep us fully informed about matters that impact our business.	322	2.99	.936	-.073	-1.072
Communicate business process knowledge to trading partners.	322	3.00	.910	-.025	-1.632
Exchange of information that aids in the creation of business plans with trading partners.	322	2.84	1.131	.172	-1.054
Regular sharing of information with partners.	322	2.20	1.131	1.013	.389
We kept our trading partners and ourselves updated on developments that could impact the other partners.	322	2.54	1.136	.702	-.452

The results presented in Table 4.7 indicate that most respondents disagreed with the practice of all elements of information sharing. Specifically, there was a weak regular exchange of information with partners (mean = 2.20, SD = 1.13), limited exchange of information that aids in business plan with partners (mean = 2.84, SD = 1.13), insufficient sharing of essential information between trading partners and the company (mean = 2.51, SD = 1.02), and let trading partners know ahead of time about changing needs (mean = 2.71, SD = 1.06). Additionally, most respondents remained neutral regarding Share Knowledge of business processes with trading partners.

Frequent information exchange enables supply chain participants to work together as a cohesive team. When they work together, they can better understand the needs of the final consumer and react to changes in the market more quickly (Stein & Sweat, 2008). However, BGI Ethiopia does not adequately communicate with its trading partners about the evolving needs of the business, share information of priority with suppliers, or fully notify them of any issues that may arise that impact the company and its strategic suppliers.

Quality of Information

In any organization, maintaining the calibre of the information exchanged becomes essential to efficient supply chain management. Respondents were given five items to evaluate the level of information sharing at BGI Ethiopia.

Table 4.8 Description on information Quality

information Quality/ between trading partners and us	N	Mean	Std. Deviation	Skewness	Kurtosis
Promptly information exchange.	322	2.52	1.195	.681	-.532
Accurate information exchange	322	3.71	.858	-.450	-.061
Complete Information	322	3.82	.902	-.413	-.563
Adequate information exchange mechanism	322	3.92	.918	-.683	-.240
Reliability of information	322	4.20	.723	-.525	-.260

Table 4.8 indicates a wide range in perceived information exchange quality with suppliers, from high agreement on reliability (mean = 4.20) to significant dissatisfaction in promptly information exchange (mean = 2.52). While respondents generally found the information exchange complete, adequate, and reliable, the low score for timeliness suggests a critical area for improvement. BGI Ethiopia should prioritize ensuring accurate and timely information flow with suppliers, recognizing information as a strategic asset requiring minimal delay and distortion.

Internal Lean Practice

As explained in the previous chapters, a system that produces at a mass production speed with less input and offers end users more variety is called "lean." Eliminating waste is one of the fundamental ideas of the lean system. Therefore, three questions were posed to BGI Ethiopia's staff in order to learn more about its lean practices. The results are summed up as follows.

Table 4.9 Description of Lean Practice

Internal Lean Practice	N	Mean	Std. Deviation	Skewness	Kurtosis
Our firm cuts down process set-up time	322	3.83	1.010	-.692	-.347

We have on-going quality improvement initiatives at our company.	322	3.41	1.207	-.049	-1.519
Only when customers request it does our company produce it.	322	2.90	1.004	.449	-.649

Table 4.9 shows that the highest mean value (3.83, SD = 1.01) is for reducing process setup time. Continuous quality improvement programs have a mean of 3.41 (SD = 1.207). The lowest mean value (2.90) is for producing only what is demanded, suggesting neutrality among respondents about BGI Ethiopia's demand-driven production. This implies that BGI Ethiopia effectively meets product and service needs with minimal setup time.

Interviews with section heads revealed the following challenges to effective SCM implementation.

Due to its recent establishment as a separate department, the SCM lacks human resource experience. The department is having trouble getting foreign currency from banks, particularly when it comes to importing raw materials and goods. The current beer market's increased level of competition gives suppliers more negotiating leverage. The management of the supply chain is very dynamic. The efficiency of SCM implementation in the business is being impacted by raw material shortages, demand upsides, supplier problems, and severe financial constraints.

The SCM Manager emphasized that the SCMP is crucial for performance and growth. He acknowledged that while growth is achievable with effective supply chain management, it is challenging due to demanding customers, supplier bargaining power, and intense competition. He also noted that the company can enhance its performance and drive growth by utilizing SCM tools and techniques.

4.5. Descriptive Analysis of Competitive Advantages

Price/cost

The respondents' views on the company's competitive advantage regarding price and cost were evaluated.

Table 4.10 Descriptive Statistics on price/cost

price/cost	N	Mean	Std. Deviation	Skewness	Kurtosis
We provide prices that are as low as or lower than those of our rivals.	322	3.26	1.160	.237	-1.436
We have excellent capacity utilization.	322	2.84	1.194	.282	-.927
We have a high inventory turnover rate.	322	3.46	1.225	-.221	-1.286
We operate at a lower cost of production.	322	3.11	1.357	.039	-1.369
We provide affordable prices.	322	2.82	1.191	.297	-1.061

Table 4.10 shows generally positive perceptions of BGI Ethiopia's price/cost competitive advantages, with high mean scores for inventory turnover rate (3.46), lower prices than competitors (3.26) and operate at lower production costs (3.11). However, respondents largely disagreed with the company's capacity utilization (2.84) and its ability to offer affordable prices (2.82).

Competitive advantage product Quality

Respondent perceptions of the company's quality-based competitive advantage were assessed.

Table 4.11 Quality of product as Competitive advantage of the company

Product Quality of the company in terms of	N	Mean	Std. Deviation	Skewness	Kurtosis
Competing based on quality.	322	3.84	.971	-.970	.741
Offering highly reliable products.	322	4.24	.544	.084	-.308
Offering very durable products.	322	4.12	.756	-.635	.214
Offer high quality products to customer.	322	4.03	.802	-.462	-.363

The majority of respondents concurred that the company has a competitive advantage in terms of product quality, which includes durability, competitiveness based on the product, and product quality and reliability, as shown in Table 4.11. Additionally, the interview results indicate that

the marketing manager emphasized that quality products are key to the company's success, stating, "everyone is willing to market our products" because of their quality.

Quality, a key marketing differentiator, encompasses both level and consistency. Maintaining consistent product quality, especially crucial in the beverage industry (Bamforth, 2009), requires precise control. BGI Ethiopia demonstrates competency in providing quality products. The normal distribution of product quality data is confirmed by skewness and kurtosis values between -2 and +2.

Competitive Advantage of Delivery dependability

Table 4.12 Delivery Dependability as Competitive advantage

Delivery dependability	N	Mean	Std. Deviation	Skewness	Kurtosis
We provide the necessary products.	322	2.62	1.073	.733	-.151
We promptly fulfil customer orders.	322	2.91	1.034	.290	-.879
We provide dependable delivery.	322	2.91	.927	.505	-.659
There is not much time to address customer complaints.	322	2.69	1.045	.691	-.546
Customer order processing time is short.	322	2.43	1.232	.702	-.595

Respondent perceptions indicate dissatisfaction with BGI Ethiopia's delivery dependability, specifically regarding customer order processing time, delivery time, and complaint resolution time. This suggests weaknesses in on-time delivery, delivery dependability, and the timeliness of order processing and complaint resolution

Competitive Advantage of time to market

Table 4.13 Time to market as competitive advantage

Time to Market	N	Mean	Std. Deviation	Skewness	Kurtosis
We deliver product to market quickly	322	2.47	1.168	.671	-.420
Our time to market is shorter than the industry standard.	322	2.80	1.048	.284	-1.027
We are leaders for launching new goods.	322	2.34	.920	.444	-.175

We have fast product development.	322	2.68	1.094	.374	-.595
-----------------------------------	-----	------	-------	------	-------

Table 4.13 presented that most respondents are not agree with delivery of product to market, launching of new products to the market and in fast product development. The skewness and kurtosis of each item is between -2 and +2 indicating that the data is collected from normal distribution.

4.6. Descriptive Analysis on Organizational Performance

BGI Ethiopia's organizational performance was evaluated by assessing its success in meeting financial and market-oriented objectives (Li et al., 2006) over the past five years. Respondents rated the company's performance considering factors like market share, return on investment, sales and market share growth, profit margin, and overall competitive position.

Table 4.14 Overall performance of BGI Ethiopia

Organizational performance	N	Mean	Std. Deviation	Skewness	Kurtosis
Market share.	322	3.17	1.070	.084	-1.165
Return on investment.	322	3.02	1.042	.205	-1.240
The growth of market share.	322	2.88	.953	.303	-1.046
The growth of sales.	322	2.74	.956	.665	-.555
Growth in return on investment.	322	2.95	.845	.344	-.938
Profit margin on sales.	322	3.15	.969	.063	-1.331
Overall competitive position.	322	3.37	1.140	.031	-1.447

Table 4.14 confirms the normal distribution of BGI Ethiopia performance (skewness and kurtosis between -2 and +2). Respondents generally perceived positive trends in market share and profit margin. However, they expressed dissatisfaction with growth in sales (mean = 2.74), return on investment (mean = 2.95), and market share price (mean = 2.88). These findings highlight areas where BGI Ethiopia needs to improve organizational performance, particularly given the increasingly competitive business landscape. To remain competitive, the company must maintain consistent performance to achieve success.

4.7. Correlation and Regression Analysis

4.7.1. Correlation analysis

A statistical technique used in research to ascertain the relationship between two variables and gauge the degree of their linear relationship is correlation. There is a strong correlation between the variables when the value in absolute value is closer to one.

The Appendix's correlation table presents the correlation between the organizational performance of BGI Ethiopia and the explanatory variables. Correlation analysis reveals significant relationships between BGI Ethiopia's performance and the following variables: customer relationships, strategic supplier partnerships, information sharing (level and quality), delivery dependability, and product quality. The coefficient of correlation between Customer relationship and organizational performance ($r = 0.151$). Here the value of the correlation indicates that they have positive moderate relation between Customer relationship and organizational performance.

A strong positive correlation ($r = 0.748$) exists between strategic supplier partnerships and organizational performance. Delivery dependability shows a weak positive correlation ($r = 0.182$) with organizational performance.

Positive correlations with BGI Ethiopia's performance were found for customer relationships, strategic supplier partnerships, information sharing (level and quality), internal lean practices, and product quality. Improvements in these areas are likely to enhance performance. Conversely, negative relationships were observed for delivery dependability, price/cost advantage, and time to market. Minimizing these latter factors may contribute to improved performance.

4.7.2. Regression Analysis

Regression analysis is a group of statistical methods used to estimate the relationships between one or more independent variables and a dependent variable. Regression model fitting requires that the regression assumption be met.

4.7.2.1. Assumption of multiple linear regression model

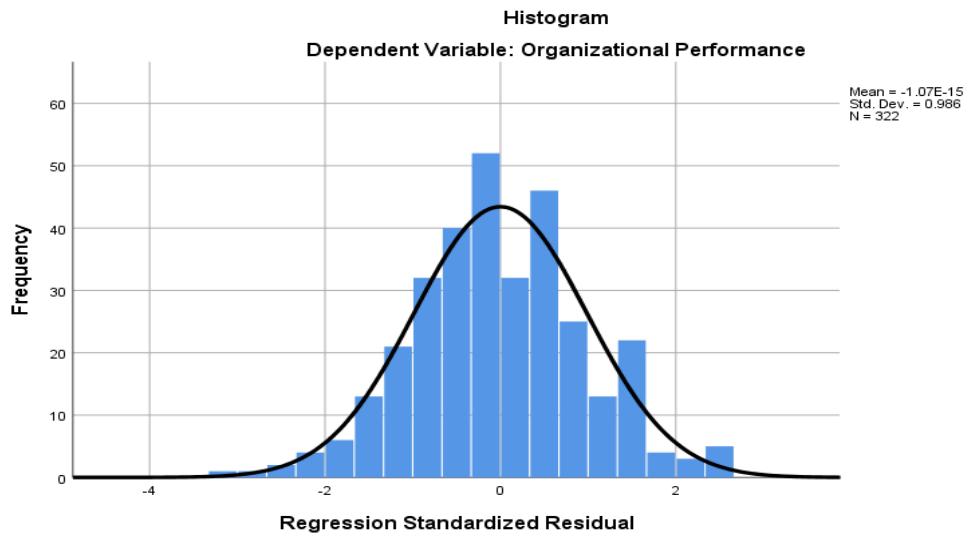
Regression analysis relies on several assumptions to produce reliable results. Violating these assumptions can lead to unreliable results, such as unstable estimates or biased test results.

Normality of the error terms

When drawing statistical conclusions from linear regression models, multivariate normality is a crucial premise. In particular, it indicates that when taking into account several predictors at

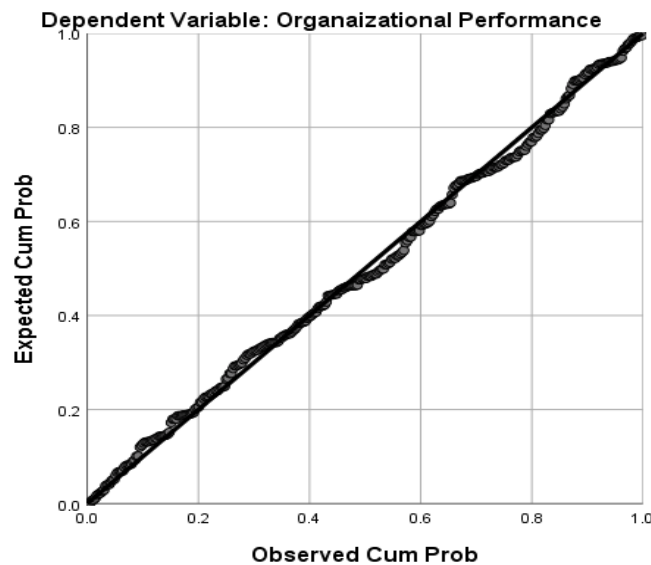
once, the residuals (the variations between observed and predicted values) should have a normal distribution. This presumption guarantees the validity of p-values, confidence intervals, and hypothesis tests. This presumption is essential because it enables us to draw reliable conclusions regarding the parameters of the model and the correlation between the independent and dependent variables.

Figuer 4.2 Histogram of the error terms



The presented in Figure 4.2 supports that the error terms are normally distributed since the histogram makes bell shaped.

Figure 4.3 Normal P-P plots of Regression Standardized Residuals



The normal P-P plot of Regression Standardized Residuals in the above figure 4.3 also proves that the normality of residuals. The normality Assumption was satisfied for the regression analysis.

No Multicollinearity

When two or more independent variables in the model have a high degree of correlation with one another, it is known as multicollinearity and results in redundant information from the variables. Determining the impact of each independent variable may become challenging as a result of this inflating the standard errors of the coefficients. Accurately interpreting the regression model's coefficients becomes difficult when multicollinearity is present (Noora Shrestha (2020)).

Table 4.15 Multicollinearity diagnosis

Variables	Collinearity Statistics	
	Tolerance	VIF
Customer relationship	.941	1.062
Strategic partnership with suppliers	.970	1.031
Information sharing	.936	1.069

Quality of information	.982	1.019
Internal Lean practice	.965	1.037
Price/cost	.962	1.040
Product Quality	.971	1.030
Delivery dependency	.971	1.030
Time to market	.958	1.044

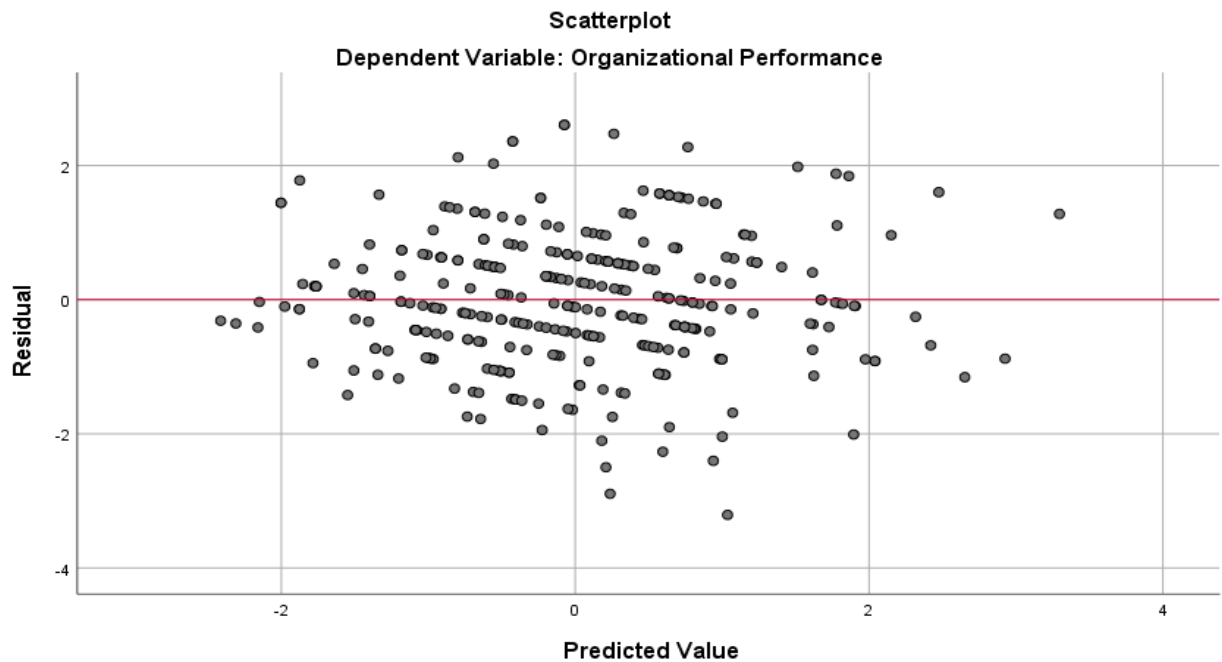
Here in the table 4.15 to check for multicollinearity, by calculating the VIF (Variance Inflation Factor). Significant multicollinearity is indicated by a VIF value larger than 10. However all the independent variable has VIF less than 10, so there is no Multicollinearity.

Homoscedasticity

One of the fundamental tenets of linear regression is homoscedasticity, which asserts that at all levels of the independent variables, the residuals' variance should be constant. Put more simply, it indicates that, independent of the predictor's value, the errors' distribution should be fairly uniform (Yang, Tu, and Chen, 2019).

A homoscedastic model is one in which the variance of the residuals remains constant. On the other hand, we call this phenomenon heteroscedasticity when the variance of the residuals varies with the level of the independent variable.

Figure 4.4 scatter plot of Residual versus Predicted Value



The figure 4.4 above shows that the residual spread evenly without any pattern across the regression predicted value i.e. there assumption of constant variance (Homoscedasticity) and Linearity are satisfied. So there is no problem of Heteroscedasticity.

4.8. Model Summary

Table 4.16 Summary of Regression Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.799 ^a	.638	.627	.37197
a. Predictors: (Constant), TM, CR, DD, LIQ, PQ, PR, SSP, ILP, LIS				
b. Dependent Variable: OP				

The regression models estimated R^2 is 0.638, as indicated in table 4.16 above. It indicates that the explanatory variables (SCMP and competitive advantage) account for 63.8% of the variation in the performance of BGI Ethiopia Company. That means 63.8% of the problem in the performance of the company was explained by those SCMP and Competitive advantage factors.

4.9. ANOVA between Organizational Performance and Independent Variables

The F-ratio tests the hypothesis that all regression coefficients are insignificant. A significant F-ratio indicates that the observed explained variation in the dependent variable (Y) by the predictor variables (Xs) is unlikely due to chance.

Table 4.17 ANOVA table for the regression model
ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	19.883	9	2.209	22.313	.000 ^b
	Residual	31.169	312	.099		
	Total	51.052	321			

a. Dependent Variable: OP

b. Predictors: (Constant), TM, CR, DD, LIQ, PQ, PR, SSP, ILP, LIS

The ANOVA results (Table 4.17) confirm the model's significance ($p < 0.000$). This indicates that the regression variables measure distinct attributes and that the model is a good fit for predicting the response variable. At a 95% confidence level, the model's predictive ability is further supported by the F-statistic of 22.313.

4.10. Coefficient of the regression Model

In order to know which explanatory variable has contributed significant effect on the performance of the organization the estimate of the parameter with its significance test was presented in the following table.

Table 4.18 Parameters estimation of the model

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.827	.362		5.042	.000
	CR	.101	.042	.132	2.428	.016
	SSP	.110	.049	.119	2.227	.027
	LIS	.120	.048	.137	2.529	.012
	LIQ	.060	.037	.086	1.627	.105
	ILP	.021	.032	.036	.678	.498
	PR	-.071	.039	-.097	-1.802	.073
	PQ	.182	.059	.166	3.115	.002
	DD	.117	.041	.153	2.873	.004
	TM	-.019	.044	-.023	-.432	.666

Table 4.18 displays the model coefficients and associated test statistics, used to evaluate the research hypotheses. Multiple regression analysis, examined the effect of predictor variables on BGI Ethiopia's organizational performance.

Based on the estimates of the regression parameter the regression model is

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

$$OP = 1.827 + 0.101CR + 0.11SSP + 0.12LIS + 0.06LIQ + 0.021IL - 0.071PR + 0.182PQ + 0.117DD - 0.019TM$$

At a 10% significance level, the t-test and p-values indicate that customer relationships, strategic supplier partnerships, information sharing level, price/cost advantage, product quality advantage, and delivery dependability advantage significantly influence organizational performance.

A one-unit increase in customer relationships is associated with a 10.1% increase in BGI Company's performance, holding all other variables constant. For Strategic partnership with supplier's $\beta = 0.11$ indicated that, for each unit increase in the Strategic partnership with suppliers

the performance of BGI Company will increase by 11% keeping all other predictors remain constant in the model.

Level of information sharing has coefficient $\beta = 0.12$ means, for each unit increase in the Level of information sharing the performance of BGI Company will increase by 12% keeping all other explanatory variable held constant in the model. These results align with Rached et al. (2015), who emphasize information sharing as crucial for manufacturers to provide partners with clear, up-to-date information, thereby significantly improving supply chain performance.

A one-unit increase in product quality advantage is associated with an 18.2% increase in BGI Company's performance, assuming all other factors remain constant.

For competitive advantage of Product Quality the coefficient is $\beta = 0.182$ indicated that, for each unit increase in the Product Quality the performance of BGI Company will increase by 18.2%, keeping all other predictors remain constant in the model.

For competitive advantage of Delivery dependency the coefficient is $\beta = 0.117$ indicated that, for each unit increase in the competitive advantage of Delivery dependency the performance of BGI Company will raise by 11.7% assuming all other predictors remain constant in the model.

4.11 Hypothesis testing

Ha: The Customer relationships has no positively and significantly affect the organizational performance of BGI Ethiopia.

Customer relationships and BGI Company's performance have a statistically significant positive relationship ($\beta = 0.10$, $t = 2.428$, $p = 0.016 < 0.05$), (as shown in Table 4.16). This aligns with Day (2000), who argues that strong customer relationships create a sustainable organizational performance.

Ha: The Strategic supplier partnerships has no positively and significantly affect organizational performance of BGI Ethiopia.

Table 16 demonstrates a statistically significant positive correlation between the performance of BGI Company and strategic supplier partnerships ($\beta = 0.11$, $t = 2.227$, $p = 0.027$). This supports existing literature highlighting the importance of supplier partnerships in effective supply chain management (Li et al., 2006). Sadikoglu and Zehir (2010) further emphasize the direct role of suppliers in strategic partnerships regarding organizational quality performance.

Ha: Information sharing has no positively and significantly affects the organizational performance of BGI Ethiopia

According to Table 16, the Information Sharing's coefficient, t-test, and p-value are $\beta = 0.12$, $t = 2.529$, and $p = 0.012$, respectively. These values indicate that the Level of Information Sharing has a positive and significant influence on BGI Company's performance, as the p-value is less than 0.05. Organizational performance is greatly improved when all functional components of the supply chain use pertinent and timely information effectively (Ahmadi, 2005).

Ha: Quality of Information has no positive and significantly affects the organizational performance of BGI Ethiopia.

Table 16 shows a positive but statistically insignificant relationship between information quality and BGI Company's performance ($\beta = 0.06$, $t = 1.627$, $p = 0.105 > 0.05$). This insignificance may be attributed to limited information sharing practices within the company. Ahmadi (2005) emphasizes the competitive advantage of effective information quality use throughout the supply chain. Li et al. (2005) stress the importance of accurate and timely information flow, viewing information as a strategic asset, to achieve optimal SCM solutions.

Ha: Internal lean practices has no positively and significantly affect the organizational performance of BGI Ethiopia.

The coefficient, t-test and p-value of Internal Lean practice were $\beta = 0.21$, $t=0.678$ and $p=0.498$ respectively as presented in table 16. This value indicates that Internal Lean practice has a positive effect on the BGI Company's performance but not significant effect at 5% level of significance.

Ha: The price/cost competitive advantage has no significantly and positively affects the organizational performance of BGI Ethiopia.

The coefficient, t-test and p-value of Competitive advantage Price/cost were $\beta=-0.071$, $t=-1.802$ and $p=0.073$ respectively as presented in table 16. This value indicates that Competitive advantage Price/cost has a Negative effect on the BGI Company's performance but has not significant effect at 5% level of significant, because of the p-value is greater than 0.05.

Ha: Offering High product quality has no significant competitive advantage and positive impact on organizational performance of BGI Ethiopia.

The coefficient, t-test and p-value of competitive advantage product quality were $\beta=0.182$, $t=3.115$ and $p=0.002$ respectively as presented in table 16. This value indicates that competitive

advantage product quality has a positive significant effect at 5% level of significant on the BGI Company's performance, because of the p-value is less than 0.05. As the product quality increases in offering high quality products, reliability, and durability the company performance by 18.2% as indicated in the regression model.

Ha: competitive advantage has no positive and significant influences on organizational performance of BGI Ethiopia.

Table 16 shows a Reliable delivery has positive statistically significantly affect BGI Company's performance ($\beta = 0.117$, $t = 2.873$, $p = 0.04 < 0.05$). Improved delivery dependability, including on-time product delivery, reduced order processing times, and timely complaint resolution, enhances BGI Company's performance.

Ha: A faster time to market provides a significant competitive advantage and positively impacts BGI Ethiopia's organizational performance.

Table 16 shows a negative, statistically insignificant relationship between time-to-market advantage and BGI Company's performance ($\beta = -0.019$, $t = -0.432$, $p = 0.666 > 0.05$).

Table 4.19 Result of Hypothesis testing

Conclusion of the hypothesis test	Decision on Ho
The Customer relationships positively and significantly affect the organizational performance of BGI Ethiopia.	Reject Ho
The Strategic supplier partnerships positively and significantly affect organizational performance of BGI Ethiopia.	Reject Ho
Information sharing positively and significantly affects the organizational performance of BGI Ethiopia	Reject Ho
Quality of Information does not significantly affect the organizational performance of BGI Ethiopia.	Accept Ho
Internal lean practices do not significantly affect the organizational performance of BGI Ethiopia.	Accept Ho
The price/cost competitive advantage does not significantly and positively affect the organizational performance of BGI Ethiopia.	Accept Ho
Offering High product quality has significant competitive advantage and positive impact on organizational performance of BGI Ethiopia.	Reject Ho
Reliable delivery provides significant competitive advantage and positive influences on organizational performance of BGI Ethiopia.	Reject Ho
A faster time to market provides does not have significant competitive advantage BGI Ethiopia's organizational performance.	Accept Ho

CHAPTER FIVE

Summary, Conclusion, and Recommendations

5.1. Summary of Major Findings

This study investigated the impact of supply chain management (SCM) practices and competitive advantage on BGI Ethiopia's organizational performance. Questionnaires and Interviews were used to gather primary data from the branches in Addis Ababa, Hawassa, and Kombolcha. The data were collected from a sample of 322 respondents.

The following summary is provided based on the study's findings. According to descriptive statistics on how strategic supplier partnerships affect the company's organizational performance, BGI Ethiopia's supplier selection process was founded on quality standards and assisting suppliers in raising the calibre of their output. It was proposed, nevertheless, that the business excludes important suppliers from the processes used to develop new products.

This study demonstrates the importance of supply chain management practices for BGI Ethiopia's performance. Five out of nine hypotheses were supported, with customer relationships and delivery dependability showing significant positive impacts on organizational performance.

Relationship with customers: the business regularly interacted with clients to establish standards for responsiveness, dependability, and other factors. According to the literature, a company can maintain customer loyalty and differentiate its products from those of its rivals by cultivating close relationships with its customers.

Effective supply chain management relies on quality information exchange. This study found that while BGI Ethiopia maintains comprehensive, adequate, and reliable information exchange with suppliers, timeliness is a significant weakness.

Beyond SCM practices, the study analyzed the impact of competitive advantage on organizational performance. Findings suggest that BGI Ethiopia struggles with competitive pricing and high operating costs. However, the company is perceived to offer high-quality products, giving it a quality-based competitive advantage. However, regarding competitive advantages, BGI Ethiopia is expected to reduce its production costs. The company faces

challenges in providing dependable delivery, resolving customer complaints promptly, delivering customer orders on time, and reducing customer order processing time.

Regarding organizational performance, respondents generally perceived improvements in BGI Ethiopia's profit margin, competitive position, and market share over the past five years. However, they felt that growth in return on investment and other market-oriented/financial goals remained stagnant.

5.2. Conclusion

Since the study's objective was to ascertain how supply chain management practice affected the effectiveness of BGI Ethiopia, the study found that every supply chain management practice examined improved the performance of the organization. The following conclusions are particularly alarming in light of the study's findings:

The positive relationship between supply chain practices and BGI Ethiopia performance suggests that SCM implementation at this company has a positive impact. However, interview and questionnaire data indicate that while BGI Ethiopia utilizes SCM, its implementation is not fully successful.

Correlation analysis showed a significant positive relationship between BGI's organizational performance and several factors: supply chain management practices, competitive advantage quality, and competitive advantage delivery dependability. On the other hand, competitive advantage quality (PQ) and competitive advantage Delivery Dependability (DD) were positively correlated with organizational performance. Regression analysis identified customer relationships, strategic supplier partnerships, information sharing level, price/cost advantage, product quality advantage, and delivery dependability as having a significant impact on BGI Ethiopia's performance.

The study also reveals that five of the nine hypotheses are supported. Relationships with customer, strategic supplier partnerships, sharing of information, quality of product as competitive advantage and delivery dependability as competitive advantage have significant positive effects on organizational performance.

5.3. Recommendation

While BGI Ethiopia demonstrates strengths in SCM practices and competitiveness, this study identified areas for improvement, leading to the following recommendations.

- Close collaboration with suppliers in new product development, planning, goal setting, problem-solving, and product improvement is recommended to enhance BGI's performance and competitive edge.
- To foster customer loyalty and product differentiation, BGI Ethiopia should prioritize strong customer relationships. This can be achieved by actively assessing customer expectations and providing accessible support channels, such as market research and needs assessments.
- Effective information flow is crucial for successful supply chain management. BGI Ethiopia should implement a digital information-sharing system to ensure accurate and timely information exchange, improving coordination and overall performance.
- Only production will not lead to good performance, so the company should do more to produce the kind of product needed, deliver the product to the end user timely, and solve customer complaints on time.
- Accurate market research and customer needs assessments will enable BGI Ethiopia to better meet customer demand and deliver products/services when needed.

5.4. Implication for future research

Future research could explore the influence of contextual variables such as firm size, industry type, supply chain position, length, and type. Firm size, in particular, may correlate with SCM practice adoption due to the complexity of larger organizations' supply chains.

It is also good to study the customer level of preference the product of BGI from other competitive products, this helps to improve the product as well as to introduce new product to the customers.

References

- African Journal of Science, Technology, Innovation and Development, 12(1), 97-100
- Agus, A., & Za'Faran, H. (2008). The strategic supplier partnership in a supply chain management with quality and business performance. *International Journal of Business and Management Science*, 1(2): 129-145.
- Al-Shboul, M. d. A. R., Barber, K. D., Garza-Reyes, J. A., Kumar, V. & Abdi, M. R. (2017). The effect of supply chain management practices on supply chain and manufacturing firms' performance. *Journal of Manufacturing Technology Management*, 28, 577-609.
- Aziz Muysinaliyev, Sherzod Aktamov. "Supply chain management concepts: a literature review" of *Physical Distribution & Logistics Management*, Vol. 33, No. 7, pp.582–606
- Babatunde, B. O., Gbadeyan, R. A., & Bamiduso, J. A. (2015). Supply chain management practices and market performance: evidence from selected major marketers of petroleum products in Nigeria. *Pacific Journal of Science and Technology*, 7(1), 129-139.
- Bechtel, C. & Jayaram, J. (1997), *Supply chain management: a strategic perspective*, *International Journal of Logistics Management*, Vol. 8 No. 1, pp. 15–34.
- Berut, Z. J., Namusonge, G. S., & Nambuswa, E. M., (2018). Influence of information sharing on the performance of New Kerry Corporative Creameries Limited. *International Journal of Social Science and Information Technology*, 48(8), 99-110
- Bimha, H., Hogue, M., & Munapo, E. (2020). The impact of supply chain management practices on industry competitiveness: a mixed method study in the Zimbabwean petroleum industry.
- Chen, I. J., & Paulraj, A. (2004). Towards a theory of supply chain management: the constructs and measurements. *Journal of operations management*, 22(2), 119-150.
- Chopra, S. and P. Meindl (2001), *Supply Chain Management*, Prentice Hall
- Cooper, M. C., Lambert, D. M., and Pagh, J. D. (1997), *Supply chain management: more than a new name for logistics*, *The International Journal of Logistics Management*, Vol. 8 No.1, pp. 1-14
- Diabat, A., Kannan, D. & Mathiyazhagan, K.(2014). Analysis of enablers for implementation of sustainable supply chain management– A textile case. *Journal of cleaner production*, vol. 83, 391-403.
- Donlon, J. (1996). Maximizing value in the supply chain. *Chief Executive*, 117(1), 54-63.
- Elfawal, A., Ragheb, M., & Adel, R. (2021). Supply chain management practices, innovation capabilities, and operational performance: empirical evidence from the FMCG sector. *The business and management review* 12(1) 70-81
- Fauver, L., Loureiro, G., & Taboada, A.G. (2017). The impact of regulation on information quality and performance around seasoned equity offerings:

- International evidence. *Journal of Corporate Finance*, 44, 73-98.
- Field, A., (2009). *Discovering Statistics using SPSS*. 3rd ed. London: SAGE Publication Ltd.
- Gorane, S., & Kant, R. (2017). Supply chain practices and organizational performance. *The International Journal of Logistics Management*, 28(1), 75–101. <https://doi.org/10.1108/IJLM-06-2015-0090>
- Govindaraju, B., Jeyasingram, J., Habib, M., Letchmana, U., & Ravindran, R. (2017). The impact of supply chain management practices on the performance of private universities in Malaysia. *International Journal of Supply Chain Management*, 6(3), 22-35.
- Jabessa Hinkosa (2023)/ Effect of Supply Chain Management Practice on Operational Performance in the Case of Bedele Brewery Share Company. *Journal of Business and Economic Development*. Vol. 8, No. 3, 2023, pp. 94-107. doi: 10.11648/j.jbed.20230803.13
- Johnson, P. F., & Flynn, A. E. (2015). *Supply Chain Management: Critical Concepts in Business and Management*. Routledge.
- Kim S. W., (2006), “Effects of supply chain management practices, integration and competition capability on performance”, *Supply Chain Management: An International Journal*, Vol. 11 · No. 3 · pp. · 241–248
- Kimechwa, V. K., Njeru, A., & Makau, G. (2015). Effects of supply chain management practices on the performance of banks in Kenya: a case of Postbank. *International Journal of Computer Applications Technology and Research*, 4(7), 556-565.
- Kosgai, R. C., & Gitau, R. (2016). Effect of supplier relationship management on organizational performances: a case study of Kenya Airways Limited. *International Academic Journal of Procurement and Supply Chain Management*, 2(2), 134-148.
- Koufteros XA, Vonderembse MA, Doll WJ. *Competitive capabilities: measurement and relationships*. Proceedings Decision Science Institute 1997)
- Kumar, N., & Gulati, R. (2009). *Organizational performance: A comprehensive review of financial and market-oriented objectives*. *Journal of Business Management*, 22(3), 12-27.
- Lambert, D. and Martha C. Cooper (2000) Issues in Supply Chain Management, *Industrial Marketing Management* 29, 65–83
- Lambert, D. M., Cooper, M. C., & Pagh, J. D. (1998). Supply Chain Management: Implementation Issues and Research Opportunities. *International Journal of Logistics Management*,
- Leedy P.D. and Ormrod J. E. (2010). *Practical research: planning and design* (9th edition). Upper Saddle River, NJ: Pearson
- McKnight, D.H., Lankton, N.K., Nicolaou, A., & Price, J. (2017). Distinguishing the effects of B2B information quality, system quality, and service outcome quality on trust and distrust. *The Journal of Strategic Information Systems*, 26(2), 118-141.
- Mentzer, J.T. et. al. (2001): Defining Supply Chain Management, in: *Journal of Business Logistics*, Vol. 22, No. 2, 2001, pp. 1–25

- Mollet, A. A. (2015). Impact of supply chain management practices on organizational performance in food processing firms of Dar es Salaam, Tanzania. Unpublished Masters Thesis. Mzumbe University
- Nyamasege, O. J., & Biraori (2015). Effect of supplier relationship management on effectiveness of supply chain management in the Kenyan public sector. *International Journal of Managing Value and Supply Chains*. 61(1) 25.
- Nzeyimana A. & Njenga G. (2022). Supply chain management practices and performance of public institutions in Rwanda: a case of Rwanda Biomedical Center. *Journal of Procurement & Supply Chain*. Vol 6(1) pp. 37-57. <https://doi.org/10.53819/81018102t2069>
- Rached, M., Bahroun, Z., & Campagne, J.-P. (2015). Assessing the value of information sharing and its impact on the performance of the various partners in supply chains. *Computers & Industrial Engineering*, 88, 237-253.
- Sagawa, J.K., & Nagano, M. S. (2015). Integration, uncertainty, information quality, and performance: A review of empirical research. *The International Journal of Advanced Manufacturing Technology*, 79(1-4), 299-306
- Sandberg, K (2007), Supply chain management practices in Indian industry', *International Journal of Physical Distribution & Logistics Management*, Vol. 33, No. 7, pp.582–606
- Shrestha N. Detecting Multicollinearity in Regression Analysis. *American Journal of Applied Mathematics and Statistics*. 2020;8(2):39-42. doi:10.12691/ajams-8-2-1
- Stalk G. *Time—the next source of competitive advantage*. *Harvard Business Review* 1988;66(4):41–51
- Tan. (2002). Supply chain management: Practices, concerns, and performance issues. *Journal of Supply Chain Management*, 38(1), 42-53.
- Tracey M, Vonderembse MA, Lim JS. *Manufacturing technology and strategy formulation: keys to enhancing competitiveness and improving performance*. *Journal of Operations Management* 1999)
- Utami, C. W., Susanto, H., Septina, F., Sumaji, Y. M. P., & Pratam, I. (2019). Effect of supply chain management practices on the financial and economic sustainable performance of Indonesian SMEs. *International journal of supply chain management*, 8(5) 523-535.
- Schunn, C. D., & Wallach, D. (2005). Evaluating goodness-of-fit in comparison of models to data. In W. Tack (Ed.), *Psychologie der Kognition: Reden and Vorträge anlässlich der Emeritierung von Werner Tack*. Saarbrücken, Germany: University of Saarland Press.
- Wijetunge, W. A. D. S. (2017). The role of supply chain management practices in achieving organizational performance through competitive advantage in Sri-Lankan SMEs. *International journal of management and applied science* 3(1) 81-88.
- Yamane, Taro. (1967). *Statistics: An Introductory Analysis*, 2nd Edition, New York: Harper and Row.

- Yamin, S., Gunasekaran, A., & Mavondo, F. T. (1999). Relationship between generic strategies, competitive advantage and organizational performance: an empirical analysis. *Technovation*, 19(8), 507-518
- Yang K, Tu J, Chen T. Homoscedasticity: an overlooked critical assumption for linear regression. *General Psychiatry*. 2019;32:e100148. doi:10.1136/gpsych-2019-100148.

Appendix one : Questionnaire

Dear respondent, I'm conducting this survey as part of my research project, on The Effect of Supply Chain Management practice on Organizational Performance a case study in BGI Ethiopia which shall be submitted as part of the fulfillment of the master's degree in quality management and Organizational excellence from the Addis Ababa University. I thank you for your participation and reliable information.

General Instructions

Your name does not need to be written.

Tick (√) in the appropriate box

PART I: Demographic Information

Gender: Male ☐

Female ☐

Age:

20-25 years

26-30 years

31-35 years

36-40 years

Above 40 years

Educational Qualification:

Reading and writing

High school

Certificate

College diploma

First Degree

Second Degree and above

Job/position

Managerial position

Section head

No managerial position

Other

Years stayed at the organization:

Under two years

Two up to five years

Six up to ten years

Over ten years

Your department/work unit _____

Section one: supply chain management practices

Customer relationship	Strongly disagree	disagree	Neutral	Agree	Strongly agree
Regular communication with customers to set reliability and other qualities					
We regularly gauge and assess customer satisfaction					
Future customer expectations are often ascertained by us.					
Easy for clients to contact us for help.					
We regularly evaluate the worth of our relationship with our clients					

Strategic supplier partnership	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Quality is our top consideration for selecting suppliers					
Frequently work with our suppliers to resolve issues.					
Assisting suppliers in raising the caliber of their product.					
Suppliers are a part of our on-going improvement initiatives.					
Suppliers are involved in our planning and goal-setting processes.					
Suppliers are actively involved in the development of new products.					

Level of information sharing:	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
When needs change, we let trading partners know ahead of time.					
Sharing of essential information with Our trading partners.					
Our trading partners keep us fully informed about matters that impact our business					
Communicate business process knowledge to trading partners.					
Exchange of information that aids in the creation of business plans with trading partners.					
Regular sharing of information with partners.					
We kept our trading partners and ourselves updated on developments that could impact the other partners.					

Quality of information: between trading partner and us	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Promptly information exchange.					
Accurate information exchange					
Complete Information					
Adequate information exchange mechanism					
Reliability of information					

Internal lean practices:	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Our firm cuts down process set-up time					
We have on-going quality improvement initiatives at our company.					
Only when customers request it does our company produce it.					

Section two: Competitive Advantage

Price/cost:	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
We provide prices that are as low as or lower than those of our rivals.					
We have excellent capacity utilization.					
We have a high inventory turnover rate.					
We operate at a lower cost of production.					
We provide affordable prices.					

Quality of Product	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Competing based on quality.					
Offering highly reliable products.					
Offering very durable products.					
Offer high quality products to customer.					

Delivery dependability:	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
We provide the necessary products.					
We promptly fulfil customer orders.					
We provide dependable delivery.					
There is not much time to address customer complaints.					
Customer order processing time is short.					

Time to market	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
We deliver product to market quickly					
Our time to market is shorter than the industry standard.					
We are leaders for launching new goods.					
We have fast product development.					

Section three: organizational performance

Performance of BGI Ethiopia: How successfully has BGI Ethiopia met its financial and market-oriented objectives over the last five years?		Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
1	Market share.					
2	Return on investment.					
3	The growth of market share.					
4	The growth of sales.					
5	Growth in return on investment.					
6	Profit margin on sales.					
7	Overall competitive position.					

Section four: open questions

1. What are the company's main obstacles to putting in place a quality supply chain management system?
2. Do you believe that the performance of BGI Ethiopia is improved by the use of supply chain management Practice?
3. How do the supply chain networks and the SCM department interact?
4. What are the company's main advantages over competitors?
5. In order to become competitive, what are the main obstacles the SCM must overcome?

Appendix two Output

		CR	SSP	LIS	LIQ	ILP	PR	PQ	DD	TM	OP
CR	Pearson Correlation	1	.053	.181 [*]	-.021	.096	.094	-.053	-.036	.016	.151 ^{**}
	Sig. (2-tailed)		.346	.001	.701	.084	.091	.340	.523	.775	.006
	N	322	322	322	322	322	322	322	322	322	322
SSP	Pearson Correlation	.053	1	.006	.051	.039	.041	.067	-.061	.120 [*]	.748 ^{**}
	Sig. (2-tailed)	.346		.908	.363	.488	.465	.228	.273	.032	.000
	N	322	322	322	322	322	322	322	322	322	322
LIS	Pearson Correlation	.181 [*]	.006	1	-.037	.058	-.064	.086	-.106	-.036	.199 ^{**}
	Sig. (2-tailed)	.001	.908		.508	.296	.255	.124	.057	.517	.000
	N	322	322	322	322	322	322	322	322	322	322
LIQ	Pearson Correlation	-.021	.051	-.037	1	.036	.069	-.006	-.015	-.085	.506 ^{**}
	Sig. (2-tailed)	.701	.363	.508		.514	.218	.909	.790	.129	.000
	N	322	322	322	322	322	322	322	322	322	322
ILP	Pearson Correlation	.096	.039	.058	.036	1	.121 [*]	.035	-.084	.051	.071
	Sig. (2-tailed)	.084	.488	.296	.514		.030	.531	.134	.366	.207
	N	322	322	322	322	322	322	322	322	322	322
PR	Pearson Correlation	.094	.041	-.064	.069	.121 [*]	1	.042	-.038	-.020	-.064
	Sig. (2-tailed)	.091	.465	.255	.218	.030		.451	.500	.719	.249

	tailed)										
	N	322	322	322	322	322	322	322	322	322	322
PQ	Pearson Correlation	-.053	.067	.086	-.006	.035	.042	1	.002	.092	.173**
	Sig. (2-tailed)	.340	.228	.124	.909	.531	.451		.974	.101	.002
	N	322	322	322	322	322	322	322	322	322	322
DD	Pearson Correlation	-.036	-.061	-.106	-.015	-.084	-.038	.002	1	.078	.182**
	Sig. (2-tailed)	.523	.273	.057	.790	.134	.500	.974		.165	.001
	N	322	322	322	322	322	322	322	322	322	322
TM	Pearson Correlation	.016	.120*	-.036	-.085	.051	-.020	.092	.078	1	-.012
	Sig. (2-tailed)	.775	.032	.517	.129	.366	.719	.101	.165		.829
	N	322	322	322	322	322	322	322	322	322	322
OP	Pearson Correlation	.151*	.748*	.199*	.506*	.071	-.064	.173*	.182*	-.012	1
	Sig. (2-tailed)	.006	.000	.000	.000	.207	.249	.002	.001	.829	
	N	322	322	322	322	322	322	322	322	322	322

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

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