Factors Affecting Internal Supply Chain Integration:

The case of Cosmar East Africa Business S.C

By

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Declaration

I, the undersigned, declare that this research paper entitled “Factor affecting internal supply chain integration: the case of Cosmar East Africa Business S.C” is my original work and has not been produced by others in any other universities, for any other requirements in any form and all the sources used to support this particular study have been appropriately acknowledged.

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Statement of Certification

This is to certify that the thesis carried out by Tamrat Duguma on the topic entitled: “factors affecting internal supply chain integration: the case of Cosmar East Africa Business S.C (CEABSC) is his original work and is suitable for submission for the award of Master of Art Degree in Logistics and Supply Chain Management.

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Table of Contents

List of Tables

Table No Description of the table Page No.

ABBREVIATIONS AND ACRONYMS

CEABSC: Cosmar East African Business S.C

EDI: Electronic Data Interchange

ERP: Enterprise Resource Planning

FMCG: Fast Moving Consumer Goods

ISCI: Internal Supply Chain Integration

IT: Information Technology

SC: Supply Chain

SCI: Supply chain Integration

SCM: Supply Chain Management

SCR: Supply Chain Responsiveness

TMS: Top Management Support

ABSTRACT

In this competitive business environment continuously improving operational performance is a crucial issue for the existence of the organization and preferred by customers in the market. The main objective of this study is to assess factors affecting internal supply chain integration on organization supply chain performance in the Case of Cosmar East Africa Business S.C. taking this view in to account, different challenge and obstacles of internal supply chain integration like luck of organizational structure, luck of top management support, lack of information usage practice and lack of interdepartmental relationship practice were assessed and described in order to meet the basic objective of the research topic. For the theoretical foundation and analysis different literatures was investigated and the research problem was studied through the use of a descriptive research design. Target population in this study was all permanent employees of the company. Since the population is relatively small, the research used census sampling technique. To carry out the study both primary and secondary data was collected. Data collected was purely quantitative and it was analyzed through descriptive analysis and inferential statistics. Descriptive statistical tools such as Statistical Package for Social Sciences (SPSS) were employed to analyze the data. Based on the analyzed data and the research finding, the study concluded that the extent of ISCI of the company is low. The result of the analysis also proved that there is strong and significant relationship between internal supply chain integration and supply chain performance. In addition to that ISCI have a strong and positive influence on supply chain performance. The results also indicated that interdepartmental relationship had the highest effect on ISCI & SCP, followed by top management support, information usage practice and organizational structure. Therefore, in order to enhance the level of ISCI and SCP of the company, the study recommends CEABSC should improve the practice of the studied four factors those are negatively affected the company supply chain performance.

Keywords: Internal Supply Chain Integration, supply chain performance, Cosmar East Africa Business S.C

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

The supply chain integration has been around since 1989. The term integration of supply chain is how everyone in the team and company and its trading partners work in sync to achieve the same business objectives via integrated business process and information sharing. Internal supply chain refers to the chain of activities or functions within a company that concludes with providing a product to the customer (Chuda Basnet, 2013). This process involves multiple functions within the company sales, production, and distribution. Integration of these functions involves holistic performance of activities across departmental boundaries. A well-integrated internal supply chain should result in excellent customer service and company performance.

According to Mentzer et al, (2001) the rules of the game have changed. Trading and production environment is becoming more competitive, necessitating constant attention to stay ahead of competitors. Thus, Companies has to create an integrated working space on different internal supply chain activities to exist in the market more competitively and to prefer by customers.

The reason behind striving for internal integration is also clear; its adoption improves lead times, reduces the probability of stock-outs, reduces costs, and makes a firm & the supply chain in which it operates more competitive (Chen et al, 2009). In addition to this the optimization of the internal supply chain helps to create effective and efficient production, ensure happy employees through comprehensive management and an improved ability to effectively deal with unforeseen circumstance. Whereas, the internal supply chain integration is influenced by different factors. There are in the literature different approaches describing the overall supply chain integration processes and its impact on supply chain performance. Although, there is not sufficient articles which is conducted on factors that affect internal supply chain integration. Thus, within the frame of this paper, the research focused on major factors that affect internal supply chain integration.

1.2 Background of the organization

Ethiopia still has an underdeveloped cosmetics industry. Basic cosmetic and toiletry products such as shampoos, tooth paste and decorative cosmetics are not produced locally and are often supplied through illegal imports. Some of these products have not been tested as to their safety for human use.

Taking this into consideration, Cosmar East Africa Business Share Company (CEABSC) was initially established and gets legal recognition in January 25, 2007 to serve the local market in Ethiopia. The shareholders of the company were Berchaco Ethiopia P.L.C and De Streep Finance B.V. In December 2012 De Streep Finance sold an entire share to Ato. Egziael Buzuayehu. The Company operates a skin care and hair care manufacturing. Besides, it is integrated with plastic bottle, jar and cap production plant for its cosmetics product container as intermediate goods. It is located in Bole Sub city, Woreda 07, Gurde Sholla, Addis Ababa Ethiopia.

In Feb 2016 the company were restructure and accept new shareholders in 60:40 Share Base and the major shareholders are ChemiCotex Ethiopia limited and East African Holding S.C. ChemiCotex Ethiopian Limited is a company incorporated under the law of British Virgin Islands and having its registration office at Trident Chambers, Road Town, Toraola, and British Virgin Islands. The factory has opened job opportunity for More than 150 regular and more than 28 contracts Employees.

CEABSC is fully committed to produce and deliver quality Skin Care and Hair Care products in different Ethiopian market that satisfy customers need, and meet the statutory and regulatory requirements by maintaining and developing the quality management system.

The company products categorized in to two groups namely skin care and hair care such as shampoos, hair foods, body lotions, glycerin and other cosmetics products. This company has a significant positive contribution in the Ethiopian cosmetics industry in terms of import substitution and availability of health-related products as body lotion and shampoos of certified quality for both low and middle income groups of the society**.**

1.3 Statement of the problem

In the current climate of global supply chain competition, integration is regarded as a prerequisite for winning performance (Lee H., 2000).To remain competitive in the strong pressures of the global competition, organizations are constantly in search of new ways to improve the performance of their supply chain in order to reduce costs, improve quality and to enhance productivity. Business integration entails linking the various functions of a business or organization. This integration is made possible through technologies such as the Enterprise Resource Planning (ERP) systems that enable various departments in an organization to link and share information. Contemporary business organizations are finding it essential to integrate their functions if they need to reduce costs and remain competitive. Thus, Collaboration and information exchange between partners then becomes essential within any supply chain.

SCM Coordinates activities both downstream and upstream to align supply and demand require a collective performance of stakeholders to support the customer's needs. It is important to recognize that the internal supply chain has a massive impact on the final product and its ultimate delivery to the consumer. The internal supply chain refers to the chain of activities within a company, specifically, purchasing, production, sales and distribution (Chuda Basnet, 2013). The internal supply chain has a significant impact on a company's success; operations need to run smoothly in order to create a harmonized working environment and an efficient workflow. A lot of companies mainly focus on the external supply chain that internal processes can often be left behind.

Since the main objective of manufacturing companies is producing the right product at the right place at the right time to the right person; the internal supply chain integration plays a vital role to achieve the basic objective of these manufacturing companies. However, regardless of the antecedents of a supply chain, there are dominant problems in integrated chains such as: low flexibility during change in the market and supply chain complexity. Thus, due to this and other related supply chain process company's face different factors that will be challenge to create an integrated working environment between different functional units within the company.

In our context (Ethiopia), no studies have been conducted regarding on internal supply chain integration. It is therefore evident that there is existed knowledge gap that needs to be filled through research. Therefore, this research is conducted on fast moving consumer goods (FMCG) manufacturer Company who is known by Cosmar East Africa Business S.C (CEABSC). Although the internal supply chain integration (ISCI) in CEABSC doesn't well performing based on interdepartmental relationship this may result from different factors. Like: lack of application integration, lack of collaboration between internal supply chain partners, and lack of periodic interdepartmental meeting. Hence, for FMCG manufacturing organization like CEABC, the detail investigation of factors that affect its ISCI becomes crucial to improve the overall internal supply chain performance.

Therefore, this study tried to help bridge this gap by determining major factors that affect internal supply chain integration then, as per the finding of the result the research suggested suitable measures to improve the ISCI during the company basic internal supply chain operation.

1.4 Research Questions

The study tried to answer the following basic research questions.

1. What are the factors affecting internal supply chain integration in CEABSC?

Sub Questions

1. What is the extent of internal supply chain integration in CEABSC?
2. How does organizational structure affect the internal supply chain integration of CEABSC?
3. How does lack of top management support affect the internal supply chain integration of CEABSCC?
4. How does information usage practice affect internal supply chain integration of CEABSC?
5. How interdepartmental relationships practice affecting internal supply chain integration of CEABSC?

1.5 Objective of the Study

1.5.1 General Objective

The general objective of this study is to assess factors that affect Internal Supply Chain Integration: In the case of CEABSC**.**

1.5.2 Specific Objectives

1. To assess the extent of internal supply chain integration practice at CEABSC.
2. To examine how organizational structure of CEABSC affect its Internal Supply Chain Integration.
3. To examine how top management support practice affect the internal supply chain integration of the CEABSC.
4. To examine how information integration practice affect the internal supply chain integration of the CEABSC.
5. To examine how interdepartmental relationship practice affect the internal supply chain integration of CEABSC.

1.6 Significance of the Study

Since research is conducted to find a solution for different problems the study findings are beneficial to various stakeholders. The research outcome is important input for the company management specifically purchasing, production and sales department to make the necessary adjustments and improve their collaboration for the overall supply chain performance based up on the recommendation of this study. It's also helpful for local managers to those who seeking ways to enhance supply chain performance by embracing ISCI. Finally, future scholars could use the result of this study as a source of reference for internal supply chain integration.

1.7 Scope of the study

Due to the nature of this research topic the study was covered only factors that affect ISCI so, other researcher can use these study findings for ISCI and expand his topic in to internal supply chain integration and its impact on operation performance. Since the company has one manufacturing plant in Ethiopia this particular study cover staff of CEABSC specifically player of the internal supply chain process. Thus, other researcher

can conduct a research by using companies those who has different manufacturing plant in Ethiopia.

1.8 Limitation of the study

The basic limitation of the study was unavailability of sufficient related articles which is conducted on factors that affect ISCI. Even though without the insufficient area related articles of ISCI there was not any limitation to conduct this research and collect the relevant information from the company. Similarly, since the company has only one manufacturing plant there was not geographical limitation for this research.

1.9 Organization of the study

This study organized in to five chapters. The first chapter deals with the back ground of the study, statement of the problem, research question, objectives, significance, scope and limitation of the study. The second chapter deals with review of related literature in the area of ISCI in addition to that this chapter consist of both theoretical, empirical study as well as comprises conceptual framework of the study. The third chapter deals with research methods and research approach. The fourth chapter discuss on the findings of the research study along with analysis and discussion of the study. Finally, the fifth chapter provides summary of finding, conclusions and recommendations based on the research result analysis and discussion of the study. In addition to that other sections, namely, list of references and annexes are also parts of the research framework.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

This chapter contains both the theoretical and empirical review of the study in addition to that it's incorporated with summary of the conceptual framework. Theoretical literature reviews contain various concepts and theories linked to internal supply chain integration. Empirical literature review contains review of various empirical studies which is conducted on supply chain integration. Finally, the conceptual framework describes various variables of the study.

2.1 The Concept of Supply Chain and Supply Chain Management

A supply chain is a network of facilities and distribution options that performs the functions of procurement of materials, transformation of these materials into intermediate and finished products, and the distribution of these finished products to customers (Ganeshan and Harrison, 1995). Supply chain is also known as the value chain, it is the sequence, which involves producing and delivering of a product or service (Zailani & Rajagopal, 2005). Within each organization, such as a manufacturer, the supply chain includes all functions involved in receiving and filling customer requests. Customer is an integral part of the supply chain. The primary purpose for the existence of any supply chain is to satisfy customer needs, in the process generating profits for itself. Supply chain activities begin with a customer order and end when a satisfied customer has paid for his/her purchase.

Supply chain management is a set of approaches utilized to efficiently integrate suppliers, manufacturers, warehouses, and stores; so that merchandise is produced and distributed at the right quantities, to the right locations, and at the right time, in order to minimize system wide costs while satisfying service level requirements (David, 2003).

According to (Lummus et al. 2001) Supply Chain Management includes the logistics flows, the customer order management, the production processes, and the information flows necessary to monitor all the activities at the supply chain nodes. As companies began implementing supply chain management initiatives, they began to understand the necessity of integrating all key business processes among the supply chain participants enabling the supply chain to act and react as one entity. The basic objective of supply chain management is to "optimize performance of the chain to add as much value as possible for the least cost possible". In other words, it aims to link all the supply chain agents to jointly cooperate within the firm as a way to maximize productivity in the supply chain and deliver the most benefits to all related parties (Jie, Parton, & Cox, 2007).

2.2 Supply Chain Integration

Supply Chain Integration which is emphasized as the basis of supply chain management incorporates various functions within and across the company's boundary. The Integration supply chain needs close synchronization of all daily operational and planning processes and the avoidance of departmental biases and the creation of strategic congruence and consensus. The operation of supply chain is highly important that it's on time delivery enhances value offerings customers need for fulfillments and as such they dictate the place, the time and the mechanisms these goods are delivered to them and in what manner. Supply chain integration enhances these and leads to increase operational performance, market share and business performance (Guangyu Xiong & Petri Helo, 2008).

Supply chain integration is considered as the whole system, and having high operational performance, supply-chain partners need to be concerned with the optimization of the supply chain rather than that of each department. Information transfer and corporative actions are key successes as they can ease integration, decision making, and trade-off strategies. Supply chain integration can comprise three dimensions: relationship among supply-chain partners, information sharing, and collaborative resource management. The

dimensions of supply chain integration are collaborative actions and sharing resources, setting a plan, and controlling activities (Childer house & Towill, 2011).

Supply chain integration can assist supply chain partners to flawlessly work together. In this way, they can manage internal and external operations, and can get benefits, such as better serve customers' needs and more effectively reduce costs in both operation and distribution processes. With information sharing and knowledge transferring through different ways, the relationship and working performance are significantly improved. Flynn et al. (2010) noted that supply chain integration can be adopted in three areas: internal operations, customers, and suppliers. However, this research conducted on the internal supply chain integration.

2.3 Internal Supply Chain Integration (ISCI)

ISCI is integration within all internal departments from incoming material up to distribution. It involves integration across departments and functions under the control of the manufacture in order to fulfill customers' requirements. This suggests that more consideration should be given to interaction in the middle of functional departments, for instance production, procurement, logistics, inventory, marketing, sales and distribution (Zahra Lotfiet al.2013).

ISCI is described as the strategic system of cross functioning and a joint responsibility across various functions where collaboration will be made along product design, procurement, sales and distribution functions that will be undertaken to meet customer requirements at a lower possible cost (Awino and Gituro 2009). Internal integration mainly involves data and information system integration through the use of enterprise resources planning (ERP), real-time searching of inventory and operating data, and integration of activities in different functional areas. Internal integration recognizes that different functions within a firm should not act as functional silos, but instead as player of an integrated process (Zhao, et al.2011).

Flynn, et al. (2010) defined internal integration as "the degree to which a manufacturer formulates its own strategies, practices and processes into harmonized, collaborative

processes to fulfill its customers' requirements and efficiently interact with suppliers". Internal integration can help functions to leverage each other's resources and capabilities to jointly design products, ensure product quality and reduce duplicated tasks which allow speeding up product delivery processes, improving distribution process and reducing the obsolescence of inventory through accurate information about the demands and preferences of the customer (Schoenher & Swink, 2012).

Since supply chain relationships play an important role in achieving the firm’s goals the coordination and integration of activities with internal supply chain partners and understanding of customer’s needs results in greater benefits for companies. Thus, organizations must have willingness to integrate capabilities through data, system and process internally before they engage in meaningful external integration. Internal integration is a systematic way of creating inter-functional interaction, collaboration, coordination, communication and cooperation that takes functional areas together to create a cohesive organization (Awad & Nassar, 2010).

2.3.1 Inter-Functional integration in supply chain management

As a firm begins to divide labor and seek specialization among organizational members, it is necessary to make certain that everyone continues to work toward the common goals of the organization. Thus, coordination and control of actions among firm members become imperative Mentzer (2002). There are three existing dimensions of integration, these are: cooperative arrangements (mutual adjustment), management controls (direct supervision), and standardization (standardization of work processes, outputs, skills, and norms). The integration of key business processes is essential to effective supply chain management. Integrative types of activities yield the following benefits to firms: operational agility, lower costs, superior product/service design, and enhanced profitability. (Mentzer, 2002:377).

2.3.2 Information Technology

IT allows all the actors in the supply chain to communicate among each other and it's a major driver of supply chain integration. The use of information technology allows player of the supply chain partners to reduce lead time, paperwork, and other unnecessary activities. Integration through IT enhances internal coordination and improves information sharing as seen in studies on information sharing, which showed improved management through accurate planning, cost transparency, and improved visibility (Ajmera and Cook 2009, P.38).

According to Turner (1993), another key for supply chain management success is the use of planning tools. He also mentions that without the use of information systems, companies cannot handle costs, offer superior customer service and lead in logistics performance. Li (2001) identified 14 such information technology tools, among them electronic data interchange (EDI), enterprise resource planning (ERP), internet, and extranets are the basic tools that is used by different companies to enhance their supply chain integration and supply chain performance.

2.4 Benefits of Supply Chain Integration

Recent research suggests that the higher level of integration with supply chain partners in the supply chain benefits at greater extent. The most frequently cited reason for firms to engage in supply chain activities is in response to threats and overtures from competitors, both domestic and global. High levels of supply chain performance occur when the strategies at each of the firms fit well with overall supply chain strategies. Thus, each firm must understand its role in the supply chain, the needs of the ultimate customer, the needs of its immediate customers, and how these needs translate into integrative internal operations requirements and the requirements being placed on suppliers. The ISCI is considered as a pillar to build the overall supply chain integration and to achieve the fundamental goal of the organization. (Jharkharia & Shankar, 2005; Naude & Badenhorst-Weiss, 2011; Kureshi, 2010).

2.5 Factors Affecting ISCI

According to Chopra and Meindhl (2001), a number of factors can impede integration along the supply chain, causing information distortion, longer cycle times, stock-outs, and bullwhip effect, resulting in higher overall cost and reduced customer service capabilities. Katunzi (2011) literature, reveals the dominating factors motivating manufacturing firms to engage in supply chain management activities, the barriers they face upon implementation, the strategies or bridges used to overcome the barriers, and the benefits that are available to successful companies. The major barriers of ISCI are organization structure, lack of top management support, employee measurement & reward system, Lack of collaborative & aggregate planning, lack of technological adoption, lack of job rotation system, lack of employee training on others department activities, the final one is lack of willingness to share knowledge & experience.

2.5.1 Organization Structure

Organizational structure shapes interactions between people and how they relate to one another in an enterprise. The organization structure of a business can serve to stifle cross-functional processes. Most business organizations seek to align authority and responsibility based on functional work. In essence, both structure and financial budget closely follow work responsibility. The traditional practice has been to group all persons involved in performing specific work into functional departments such as inventory control, warehousing operations, or transportation. Each of these organizations has an operational responsibility, which is reflected in its functional goals. Although, organizational structure should mobilize different functional departments in to one integrated team to smoothly perform the best operational performance and to easily achieve the company goal. The wrong organizational structure can inhibit the collaboration needed for alignment. Working within the organization structure, the skills and capabilities of people are critical to successfully integrating a supply chain. (Carter et al 2009).

2.5.2 Top Management Support

The TMS in an organization might have an important role towards the success and survival of the organization. According to Halldórsson et al (2008) research he found that both American and Scandinavian managers rate top management support as the most important facilitator of SCM implementation. The role of top management is more than making decisions that affect all employees. It's also to set the bar for the way managers treat the staff and relate to each other, which also affect the success of the company. Understanding the effects of their role helps the top management team make changes as necessary the way they interact with other managers and teams, and how they are perceived by the staff. When employees feel their input is valued, they're more likely to do their jobs enthusiastically and improve the achievement of the company. (https://smallbusiness.chron.com).

2.5.2.1 Measurement and Reward Systems

Traditional measurement and reward systems serve to make cross-functional coordination difficult. Measurement systems typically mirror organization structure. Most reward systems are based on functional achievement. Managers must be encouraged to view specific functions as contributing to a process rather than a stand-alone performance. A function may, at times, have to absorb increased costs for the sake of achieving lower total process cost. Unless a measurement and reward system is in place that does not penalize managers who absorb cost, integration will remain more theory than practice.

2.5.2.2 Employee training on other department's activity

When employees are solely focused on their own specialty, they may not fully understand the needs of others in different departments within their company. Training people in other internal supply chain functions and procedures should encourage worker collaboration across departments. The importance of inter-organizational training is preferable to improve integration (Daugherty et al. 1996). Similarly, the brain storming session builds involvement, commitment, loyalty, and enthusiasm. Participating in the sessions stimulates and unlocks people's creative talents. Brainstorming also builds self-

esteem because people are being asked for their participation and their ideas. Therefore, the practice of employee's training and brain storming session has positive impact for company's internal integration, operational performance and the overall goal achievement.(https://www.google.com/searchq=brain storming benefit)

2.5.3 Information usage practice

Proper information utilization refers to the sharing of key information along the supply chain network which is enabled by information technology (IT). One of the main purposes of information integration is to achieve real-time transmission and processing of information required for supply chain decision making. Proper information utilization will lead to greater coordination in the chain and a better coordination in the flow of information between partner's results to growing impacts on the timely delivery (speed), accuracy, quality of products. A critical emphasis on information technology without the interest of sharing information will not contribute to associate organizations together. Proper information sharing can lead to lower cost through reductions in inventories and shortages. (Lee et al 2000) According to the study of Koçogluipek , Salih Zekiimamoglu, Hüseyinince, Halit Keskin (2011), sharing of information across the chain is a key and critical component in achieving an integrated supply chain because it is believed that SCI increases collaboration, minimizes uncertainty, increases the speed of material flow, accelerate order fulfillment, reduction of inventory costs, increases the satisfaction of customer through reliable and fast delivery of products, improve performance and increase operational effectiveness.

2.5.4 Interdepartmental Relationship

Collaboration between departments is more than simply "cooperating" with other teams. It involves a shared vision, mutual respect, and in-depth understanding of each other's role in a project with the goal of achieving excellent business outcomes and outstanding customer experience. Collaboration comes a lot easier when every department realizes and works toward a shared goal. It's no longer about every department for itself it's about working together to accomplish the larger enterprise mission (Kevin and Jackie Freiberg, 2018).

A culture of collaboration ultimately begins with the leadership team. Departmental collaboration consists of interdisciplinary groups trying to come together and it helps everyone to understand the benefits of collaborating and identifying the overall goal. A large part of understanding how departments fit together to achieve the organization's mission knows what and how a department contributes to a process. Several companies that have gone through company-wide system strongly suggest gathering teams and departments together to understand multi-department tasks is good in order to give departments the opportunity to learn about each other and discover: What other departments do, what tasks require which departments, How departments support each other and What pressures, roadblocks and barriers other departments face in carrying out the enterprise mission. When departments cooperate to achieve organizational goals, tasks are completed faster and more efficiently, which can ultimately translate to a better customer experience. Company's departmental collaboration can also evaluate by their collaborative and aggregate planning practice, job rotation practice and willingness to share knowledge and experience practice among them employees.(https://www.laserfiche.com/-ways-to-drive-collaboration-among-departments)

2.5.4.1 Collaborative and Aggregate planning

According to Chopra & Meindl, (2001) aggregate planning is a process by which a company determines planned levels of capacity, production, subcontracting, inventory, stock outs, and even pricing over a specified time horizon. The goal of aggregate planning is to build a plan that satisfies demand while maximizing profit. To be effective, aggregate planning requires inputs from all stages of the supply chain partners, and its results have a tremendous impact on supply chain performance. However, if everyone travels on a different route, we may not end up in the same place. Operations, sales finance, R&D, and others need to have a plan to guide day to day decisions, but there is no guarantee that these plans are the same or even similar. Unless there is a consensus on goals, there is no reason to believe that day to day decisions support a company direction. Therefore, it is important to form collaborative and aggregate plans over a wide scope of the supply chain. This is because without collaborative planning companies did not achieve effective aggregate plan, and operational performance.

2.5.4.2 Job rotation practice

Job rotation is considered as an effective tool for successful implementation of settling employees at the right place where they can deliver the maximum results. In today's highly competitive world, this can be proved as the best strategy to find the immediate replacement of a high-worth employee from within the organization. Job rotation helps managers determine who can be replaced by whom and create a suitable and beneficial fit.

According to (Chuda Basnet, 2013) Job rotation moving employees along the internal supply chain enhances their holistic understanding of the entire supply chain. Additionally, this should enhance relationships, communication, and integration among the various functions. Thus, organization those who didn't implement job rotation system will face challenge to enhance their internal integration and operational performance.

2.5.4.3 Willingness to Share Knowledge and Experience

In most business situations, knowledge is power, so unwillingness to share and a general lack of understanding concerning how to best share knowledge and experience are not uncommon. But by reinforcing functional specialization and by encouraging a workforce composed of experts, organizations inherently doom process integration. Consider, for example, the case when an experienced employee retires or for some other reason departs a firm. Replacement personnel must be given sufficient time to learn, but if information is concealed, all the time in the world may not help bring the new employee up to speed. A more serious situation occurs when managers fail or are unable to develop procedures and systems for transferring cross-functional knowledge and experience. Much process work is shared between jobs and is not restricted to a specific functional area, so transfer of knowledge and experience is vital to enhance integration between supply chain partners.

2.6 Responsiveness

According Holweg (2005) responsiveness is the ability of the manufacturing system or organization to adapt to changes and requests in the marketplace. Matthias (2005) defined the SCR as the "ability to react purposefully and within an appropriate time-scale to

customer demand or changes in the marketplace, to bring about or maintain competitive advantage". Matson and MacFarlane (1999) define production responsiveness as the ability of a production system to achieve its operational goals in the presence of supplier, internal and customer disturbances. The responsiveness of a manufacturing or supply chain system is defined by the speed with which the system can adjust its output within the available range of the four external flexibility types: product, mix, volume and delivery, in response to an external stimulus, e.g. a customer order.

The SCR is the agility and speed the organization uses to react to customer input. The quickness and flexibility of the supply chain is important. A conflict of the goal and vision between members of the organization can affect the profitability of the supply chain. A long-term orientation with a combination of suppleness and rapidity in the supply chain will create responsiveness and prompt delivery, reduced cost and accurately forecast data. SCR is maintaining it as the levels of speed and flexibility in a supply chain increase, the level of supply chain responsiveness increases. Thus, a responsive system is also flexible (Swafford et al., 2006)

2.7 Flexibility

Flexibility is expressed through the capability of a system to undertake proactive and reactive adaptation of settings to deal with uncertainties which occur both internally and externally uncertainty. In the supply chain the main reason for flexibility is to increase the complexity of processes that adds value and to shorten the time of response to the demand of the customer. Into days business world the complexity of business process is very increasing, thus businesses must be customer oriented. Companies can take different measures to improve their products and increase their flexibility and one of the measures is to outsource some of their products to other companies (Singh &Sharma, 2014). Flexibility is described as the ability of a system of an organization in responding quickly to changes occurred both inside and outside the system.

2.8 Empirical Review

Most of the studies on internal integration have sought to determine the performance benefits of integration. Chen et al. (2007) found that "marketing-logistics collaborative activities "lead to "firm-wide integration", which leads to "performance". Ellinger (2000) investigated marketing – logistics collaboration and posited that "Evaluation and reward system", "Cross functional collaboration", "Effective inter-departmental relations" and "Distribution service performance" were serially linked. This linkage was supported by a survey and regression analysis.

Gimenez & Ventura (2003) tested the effect of internal integration and external integration on performance, using structural equations modeling and a survey. They found that both had positive effect on performance. Kahn & Mentzer (1998) sought to separately identify the benefits of communication and collaboration on performance in the context of marketing's integration with other departments. They found significant benefits for collaboration, but not for communication.

Huo (2012) research on supply chain integration can be viewed as internal and external integrative capabilities that lead directly or indirectly to company performance. Even though, most of the previous studies that address the relationship between supply chain integration and performance but no researches are conducted which components of supply chain integration highly impact on performance. There is a pay little attention to scholarly work focusing on explicitly the impact of various dimensions of supply chain relationships (such as knowledge, production & design, technology and resource) on performance, rather the general internal and external supply chain integrations impacts. The author intends to fill the gap by use data collected from the literatures for the question of whether the implementation of supply chain integration (such as knowledge, production & design, technology and resource) can make an impact on company quality performance.

Gentjan Mehmeti and Orjon Xhoxhi (2016) conducted a study on the review of factors that influence the supply chain performance. The factor mentioned were: Longevity of the relationship, Supply base Reduction, Supplier involvement, Information sharing, Cross-functional teams, Trust and Commitment, Environmental uncertainty, Top-management

support, Customer focus, Information Technology (IT), Strategic Purchasing, Logistic integration, and Supply network structure. It should be noted that some of these factors are interrelated with each other. It can be said that SC performance is a function of the factors mentioned above. A possible option for future research would be to quantify in a regression model the relationship between the factors identified here and SC performance.

A study by Sweeney 2012 concluded that there is significant evidence that the effective implementation of integrated SCM has the potential to generate significant improvements in the performance of firms. The work of Frohlich and Westbrook (2001) based on a survey of 322 global manufacturers strongly supported the hypothesis that the companies with the greatest arcs of supplier and customer integration will have the largest rates of performance improvement.

Awasthi and Grzy bowska (2014) researched on challenges of supply chain integration process using barriers affecting entities in businesses among 17 were identified with methodological tests such as Decision MAking Trial and Evaluation Laboratory (DEMATEL). Further research is recommended to allow planning and information sharing. Pagell (2004) conducted case studies to determine the factors that foster or inhibit internal (supply chain) integration in firms. His focus was on the integration of production, logistics, and purchasing functions. He identified the constructs influencing integration as structure, culture, facility layout, job rotation and cross-functional teams.

2.9 Literature Gap

Most of the previous studies addressed the relationship between supply chain integration and organizational performance and the impact of supply chain integration on operational performance, whereas there were no researches are conducted related with what factor are affecting ISCI of manufacturing firms, specifically fast-moving consumer goods (FMCG) industry in Ethiopia.

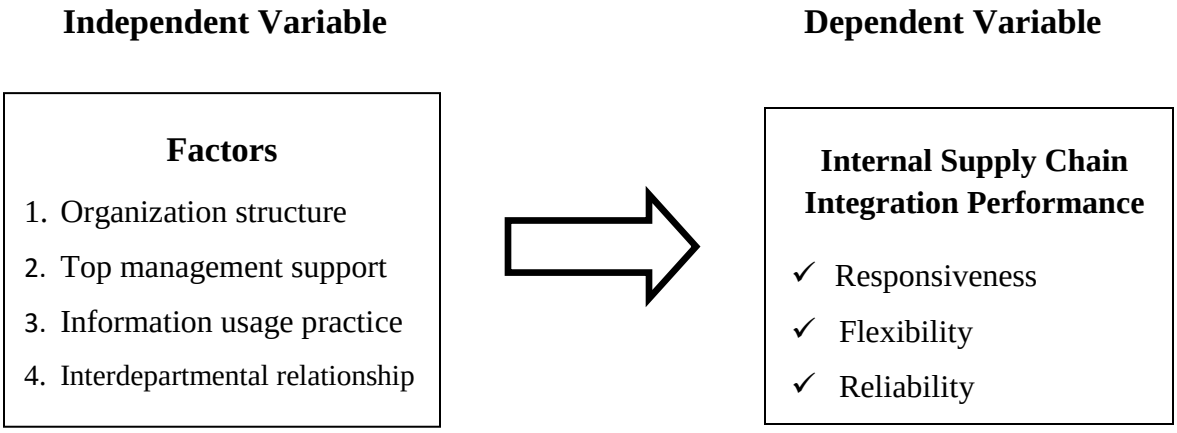
As a result, the study identifies there is knowledge gap that needs to be addressed with related to the proposed topic of the study. Thus, Ethiopian manufacturing industries require further research on the topic of the stud which will enable identify factors

affecting ISCI. Hence, this paper tried to fill this gap by using data's that was collected from literature review, books and other academic related material in order to screen out those critical factors that affect ISCI during organization internal supply chain operation.

2.10 Conceptual Framework of the study

The main objective of the study was to assess the critical factor affecting Internal Supply Chain Integration of CEABSC. As it's described previously in the review of related literature parts, supply chain integration of manufacturing sectors affected through several factors, however, this study tried to focus on identifying major factors that affect the ISCI of the organization like barrier of integration within different departments and barriers of overall internal supply chain process and partners. According to this idea the study developed the following conceptual frame work.

Conceptual Frame Work of the Study



Source: Conceptual framework adopted from Carter et al (2009), Halldórsson et al (2008) & Lee et al (200)

CHAPTER THREE

RESEARCHDESIGN AND METHODOLOGY

Research methodology provides a means to systematically solve a research problem. This chapter explains the methodological approaches that were being adopted whenever the research is conducted. This includes the research design, population and sampling technique, tool of data collection and method of data analysis.

3.1 Description of the study area

The study set to assess factors affecting ISCI, in the case of CEABSC. Since the study is conduct on ISCI the study mainly focused on different departments those who have direct or indirect relationship on internal supply chain process of the company.

3.2 Research Approach

According to Creswell (2003) there are three research approaches namely, the quantitative, qualitative, and mixed approaches. The study used quantitative research approach which is highly useful to examine the relationship between variables. Therefore, by using quantitative research approach this study were focuses on ways to collect the relevant data which has good contribution to screening out those factors that affect the ISCI of the studied company.

3.3 Research Design

Descriptive and explanatory research design was used to conduct the research. Due to the nature of information required quantitative research method was deployed to analyze and discuss information's that was being collected from the respondents.

3.4 Population and sampling Technique

The total populations of the study were all supply chain partners of the organization; managers, department heads, internal supply chain staff and all employees those who are participate on internal supply chain process. Therefore, the target populations of this study were employees of the company those who are working in various departments. According to CEABSC human resource department 2020 data, the total size of the target population for this study was 73 (N=73) employees. Therefore, the study used census method. A census method eliminates sampling error and provides data on all the individuals in the population. Although cost considerations make this impossible for large populations, however in this study since the total size of the target population is 73 a census method is effective to collect accurate data from the respondents and to ensure that all department employees are adequately presented their own perception on the company internal supply chain integration process.

3.5 Source & type of Data and collection procedure

The study used both primary and secondary data sources. The primary data was obtained from the target staff of CEABSC mainly through questionnaires. To get high response rate from the respondent the study used structured and close-ended type questionnaire. Secondary sources of the study were different published books, internet websites, journals, previous research papers and archive documents of the organization.

3.6 Ethical Consideration

Credibility of research and research methodology justified only when ethical concerns of research are maintained. The study seriously committed to maintain basic ethical principles (Marczyk et al., 2005). The first ethical principle considered within this study was respect for person. This includes two ethical mandates: first, that individual is treated as autonomous agents, and second, that individuals with diminished autonomy are entitled to protection.

The questionnaire was design to collect data from employees; so as to conduct research on the assessment of factors affecting ISCI in the case of CEABSC. The collected

information was used only for research purpose, it was not transfer to another party and no need of write the name of any respondent hence, confidentiality is assured.

3.7 Reliability and Validity Test

According to Ellen Drost (2011) reliability is the extent to which measurements are repeatable when different persons perform the measurements, on different occasions, under different conditions, with supposedly alternative instruments which measure the same thing. In sum, reliability is consistency of measurement (Bollen, 1989), or stability of measurement over a variety of conditions in which basically the same results should be obtained (Nunnally, 1978).

Reliability assessment

According to Tavakol et al. (2011), Cronbatch's Alpha value ranging from 0.70 to 0.95 is acceptable. As can be depicted in table 3.1 all the Cronbach's alpha values of the items were found within the range attesting the good reliability of the instrument.

Table 3.1 Reliability Statistics

Variables	No. of items	Cronbach's Alpha
Internal Supply chain Integration Practice	10	0.793
Organizational Structure	4	0.877
Top Management Support	7	0.813
Information Usage Practice	7	0.758
Interdepartmental Relationship	7	0.801
Responsiveness, Flexibility & Reliability	7	0.753

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

As discussed in previous chapter, this study attempted to examine major factors of internal supply chain integration and its effect on supply chain performance in the case of Cosmar East Africa business S.C. Therefore, the findings of the study are presented and discussed in this chapter. The questionnaires were developed in five scales (Likert scale) ranging from five to one; where 5 represents strongly agree, 4 agree, 3 Neutral, 2 disagree, and 1 strongly disagrees. A total of 73 questionnaires were distributed for employees of the studied company and 66 (90.4%) questionnaire were obtained valid and used for analysis. The collected data were presented and analyzed using SPSS (version 23) statistical software. First, the study variables were analyzed and described from statistical point of view by using frequency and percentage. Second, the study used correlation analysis, specifically Pearson correlation in order to measure the degree of association between different variables under consideration.

4.2 Descriptive Analysis

4.2.1. Demographic Description

The purpose of demographic analysis in this research is to describe the characteristics of the respondent such as proportion of male and female, Age of respondents, academic qualification of respondents and experience of respondents at Cosmar East Africa Business S.C. Accordingly these variables are summarized and described in tables 4.1 shown below: -

Table 4.1General information of the respondent

Variables	Category	Frequency	Percentage
Gender	Male	30	45.5
	Female	36	54.5
	Total	**66**	**100**
Age	20-30	45	68.2
	31-40	19	28.8
	41-50	2	3
	51 & Above	0	0
	Total	**66**	**100**
Educational Proficiency	1-8 Grade	6	9.1
	9-12 Grade	25	37.9
	Diploma or Degree	31	47
	Master's Degree	4	6.1
	Total	**66**	**100**
Work Experience	Below 1-5 Years	51	77.3
	6-10 Years	13	19.7
	Above 10 Years	2	3
	Total	**66**	**100**

Source questionnaire, 2020

Table (4.1) shows the general distinctiveness of the respondents in terms of **Gender**, **Age**, **Educational proficiency** and **Work experience**.

Gender: As the above table depicts that the gender distribution of respondents at CEABSC covers, 36 (54.5%) were female while 30 (45.5%) respondent were male. This implies the respondent for the research was almost balanced on gender. However, female respondent was slightly high comparing with male respondent.

Age: This study wanted to investigate the composition of the respondents in terms of age in order to understand how the respondents were distributed across the various age groups and consequently their opinions regarding on the topic of study. The result shows that 45 (68.2 %) of the respondent were aged between 20 up to 30 years, 19 (28.8%) of the respondents were aged between 31 and 40 years and only 2 (3%) of the respondents were aged between 41 and 50 years. From the results, the respondents were well distributed in terms of age and they are active for the company operation thus, they are contributed constructively in this study to assess factors affecting internal supply chain integration in the case of Cosmar East Africa Business S.C.

Academic qualification: Regarding on academic proficiency Most of the respondents hold Diploma & Bachelor degree with a range of 31 (47%), while 25 (37.9%) respondents complete secondary & preparatory school, while the respondent with grade 1 – 8 were 6 (9.1%), the least respondents academic qualification were 4 (6.1%) master's degree holder. This suggests that the majority of respondents provide relevant and accurate information needed for the study on factors affecting internal supply chain integration and how it's affected the company performance.

Years of experience: with regard to work experiences 51 respondents (77.3%) were between 1 up to 5 years, while a total of 13 respondents (19.7%) have stayed at the company between 6 up to 10 years and only 2 respondents (3%) stayed more than 11 year within the company. This indicated that most of the respondents have good experience in the studied company and all respondents were permanent employees of the organization thus, their response can be considered as authentically.

4.2.2. Internal Supply Chain Integration Analysis

4.2.2.1 The extent of ISCI at CEABSC

This part of analysis tried to describe both independent and dependent variables from statistical point of view through frequency, percentage and correlation coefficient. As it is clearly mentioned in the 2nd chapter internal supply chain integration can be affected through several factors. Whereas, this study focused on some specific area such as, major

factors like: organizational structure, top management support, information usage practice and interdepartmental relationship practice at CEABSC.

In this regard the study was analyzed in two basic analyses system. In the first section the collected data were analyzed through descriptive approach that can help to create clear image on the determinant variables how and to what extent determine the dependent one. Considering the existing internal supply chain integration challenges, respondents were asked to indicate the level of their agreement for the alternative questions arranged in five-point Likert scale method, where 1 stands for strongly disagree, 2 disagree, 3 Neutral, 4 agree and 5 stands for strongly agree. Accordingly, each of the major determinates analyzed as follow:

The first objective of the research sought to determine the extent of internal supply chain integration at CEABSC and the respondents were requested to indicate their level of agreements on the practices of internal supply chain integration through different questions. To answer this question, the study used descriptive statistics like frequency and Percentage. The response which is collected from the respondents stated clearly with the following table below.

Table 4.2. The Extent of Internal Supply Chain Integration at CEABSC.

Sq No	Internal supply chain integration practice	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
		Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
1	Our internal supply chain partners have a practice of share idea, information and resource together.	14	21.2%	20	30.3%	7	10.6%	19	28.8%	6	9.1%
2	We have a practice of conducting joint plan to anticipate and resolve supply chain problem.	12	18.2%	24	36.4%	11	16.7%	14	21.2%	5	7.6%
3	Our internal supply chain partners strive to maintain a good working relationship with each other.	7	10.6%	20	30.3%	11	16.7%	18	27.3%	10	15.2%
4	Our internal supply chain partners interact with each other through internet, meeting, phone call and documents in order to exchange different data's and to perform the company basic operation.	9	13.6%	20	30.3%	20	30.3%	14	21.2%	3	4.5%
5	Our organizational culture is good to enhance integration between internal supply chain partners.	5	7.6%	26	39.4%	9	13.6%	20	30.3%	6	9.1%
6	Our internal supply chain partners share the same vision for the company.	9	13.6%	23	34.8%	10	15.2%	20	30.3%	4	6.1%
7	Our internal supply chain partners have a practice of consult with each other before making decision affecting other departments.	7	10.6%	31	47.0%	8	12.1%	15	22.7%	5	7.6%
8	Our internal supply chain partners understand the pressure and concern of each other.	13	19.7%	22	33.3%	8	12.1%	19	28.8%	4	6.1%
9	We spend more time to enhance our service quality and customer satisfaction.	7	10.6%	13	19.7%	13	19.7%	23	34.8%	10	15.2%
10	We synchronize our activities with each other.	6	9.1%	27	40.9%	9	13.6%	17	25.8%	7	10.6%

As observed in the above table data respondents of the organization were forwarded their view regarding on the extent of internal supply chain integration at CEABSC. In this regard the study was provided ten several related questions that assumed to prove whether internal supply chain integration practice has existed and exercised very well inside the company or not. The analysis below described each of the respondent's view.

Regarding on the extent of internal supply chain integration at CEABSC, the study were start questioning the respondents whether internal supply chain partners of the organization have a practice of share idea, information and resource together or not, accordingly respondents accounted for 21.2% and 30.3% respectively implied strongly disagree and disagree, which indicate there is no strong relationship between internal supply chain partners of the organization such as, lack of using digital technologies, lack of automated data flow, lack of special mechanism that used to interact and exchange information between members of the internal supply chain process permanently. However, the rest 28.8% and 9.1% respondent accounted for their level of agreement in opposing with disagreed respondents and their response implied that, internal supply chain partners of the organization have a practice of share idea, information and resource together.

The study was also assessed whether, there is a practice of joint planning to anticipate and resolve supply chain problem or not, then the respondents response implies that 36.4% and 18.2% disagree and strongly disagreed respectively which implies, there is poor practice of joint planning which is useful for the studied organization in order to anticipate and resolve supply chain problem. In opposed to that, 21.2% and 7.6% respondent's response implies their agreement.

The other question which is asked for the respondent was, whether internal supply chain partners of the organization strive to maintain a good working relationship with each other or not, the respondents answer were indicated that 30.3% and 10.6% their disagreement which implies there is lack of effort among the member of internal supply chain partners to maintain a good working relationship each other. However, 27.3% and 15.2% response show that internal supply chain partners strive to maintain a good working relationship with each other.

The research questionnaire is also addressed whether there is interaction between internal supply chain partners through internet, meeting, phone call and documents in order to exchange different data's and to perform the company basic operation, accordingly respondents accounted for 30.3% and 13.6% respectively indicated that strongly disagree and disagree, which implies there is weak relationship between supply chain partners such as, lack of using internet, phone call, document exchange and other technological instrument during the company internal supply chain activities. In opposed to that, 21.2% and 4.5% of respondents answer shows there is a good exchange and interaction of data among members of the internal supply chain partners through internet, meeting, phone call and documents.

With regard to organizational culture the respondent was requested to put their level of agreement whether the company organizational structure is good to enhance integration between internal supply chain partners or not. Then response of the respondent's implies that 39.4% & 7.6% respectively strongly disagrees and disagrees, however 30.3 & 9.1% respondents agreed and strongly agreed on the culture of the organization is good in order to enhance integration between internal supply chain partners.

The respondent also requested to answer regarding on whether they are share the sane vision for the company or not, accordingly majority of the respondents accounted for 34.8% and 13.6% respectively in disagreement which is implied there is not similarities between supply chain partners for the same vision of the company, this is because there is not clarity and creating awareness for internal supply chain partner about the company vision. Whereas, the answer of 30.3% and 6.1% respondent implies that, there is a practice of sharing the same vision for the company between internal supply chain partners.

The study also assessed whether internal supply chain partners have a practice of consult with each other before making decision affecting other departments or not, accordingly respondents accounted for 47% and 10.6% respectively strongly disagree and disagree, which implies the internal supply chain partners have a weak practice of consulting one department with another department before making any decision which is a basic obstacle

to create strong integration between internal supply chain partners. However, the rest respondent accounted for 22.7% and 7.6% respectively implied their level of agreement in opposing with the rest respondent and they are agreed with internal supply chain partners of the organization have a practice of consult with each other before making decision affecting other departments.

With regard to understanding the pressure and concern of each other between player of the internal supply chain process, respondents of 33.3% & 19.7% respectively disagree and strongly disagree that shows there is not a practice of sharing pressure and concern among internal supply chain partners which is a good input for internal supply chain integration that makes the companies to run the basic operation with a high productivity. Whereas, 28.8% &6.1% of respondents answer implied there is a practice of sharing pressure and concern of one with other which is a good indication for the company to highly strive for train its employees and show how important it is sharing of pressure and concern among internal supply chain partners in order to be more productive and to easily solve and react for supply chain problem.

The study also assessed whether the internal supply chain partners are spend more time to enhance service quality and customer satisfaction, respondents of 34.8% & 15.2% answer implies that they are agreed and strongly agreed respectively the internal supply chain partners of the organization have a practice of spending more time to enhance service quality and customer satisfaction that gives a better advantage for the company in order to build good image on its customer and provide a chance to be on the top of its competitors. However, there is still 19.7% & 10.6% of respondent respectively disagreed and strongly disagreed with the opposite of the rest respondents and answer there is not a practice of spending more time to enhance service quality and customer satisfaction that indicate the company to be focused and do something on this area also.

Finally, the study asks the respondent to answer whether there is a practice of synchronizing activities between partners of the internal supply chain process or not, then the response implies 40.9% & 9.1% respectively disagreed and strongly disagreed. It means there is not a practice of synchronizing activities among internal supply chain

partners and the companies should be focus to minimize the gap in order to get a chance to reduce its lead time for manufacturing different items in the same time. However, in opposed to the rest respondents 25.8% & 10.6% response shows there is a practice of synchronizing activities which is good for any companies in order to enhance the level of productivity during every internal supply chain process.

Generally as per the analysis of the above table data the study finding implied that the firm internal supply chain integration practice were affected through several factors such as lack of share idea and information, lack of collaborative planning, lack of information communication system, lack of compatible organization culture that is used to enhance integration, lack of communication before making a decision which is affect other internal supply chain partners and lack of activities synchronization were the major factors those are negatively affected the company internal supply chain integration. As a whole the listed factors imply that the extent of internal supply chain integration at CEABSC is low.

4.2.3. Factors that affect Internal Supply Chain Integration

Assessing and provide an indication of the major determinant factors that determine internal supply chain integration is important for the studied organization. Due to this the study assessed four major factors those are highly affected companies' internal integration unless they are implemented and properly managed within the organization. Thus, the study focused on these major factors such as: Organizational structure, top management support, information usage practice and interdepartmental relationship factors. The related question and respondent answer bellow briefly show how these factors are affected CEABSC internal integration and its supply chain performance.

4.2.3.1 Organizational Structure

The role of organizational structures is to enable strategic change and improve business performance in several dimensions. Organization structures have to be organized in such a way that shaping interactions between people and how they relate to one another in an enterprise. Besides, organizational structure should mobilize different functional

departments in to one integrated team to smoothly perform the best operational performance and to easily achieve the company goal. Poor organizational structure can inhibit the collaboration needed for alignment. Efficient and effective organization structures help in rapid delivery of top-quality communication, meeting the mission and vision of organizations. According to this the study try to assess what look like the organizational structure of CEABSC with regard to ISCI and supply chain performance of the company and below the table implies respondents view.

Table 4.3 Organization structure of the company

Sq No	Organizational Structure	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
		Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
1	Our company organizational structure is compatible for internal supply chain integration.	6	9.1%	23	34.8%	15	22.7%	18	27.3%	4	6.1%
2	Our organizational structure is linked for vertical and horizontal communication.	12	18.2%	22	33.3%	14	21.2%	13	19.7%	5	7.6%
3	Our organizational structure is well-suited to make a decision for middle and low-level employees during operational problem	7	10.6%	26	39.4%	14	21.2%	14	21.2%	5	7.6%
4	Our organization structure is good for enhancing the level of internal supply chain integration and employee's performance.	12	18.2%	19	28.8%	17	25.8%	13	19.7%	5	7.6%

As indicated in the above table, the study sought to find out the perspective of employees on the company organizational structure and how its affect the integration of internal supply chain partners. The perspective of respondents in this regard for internal integration is explained bellow:

Concerning the compatibility of the company organizational structure for internal supply chain integration, majority of the respondents put their level of agreement accordingly 34.8% disagreed, 9.1% strongly disagreed, 27.3% agreed and 6.1% strongly agreed.

Therefore, most respondents agreed that the organizational structure of CEABSC is not compatible for creating and developing integration between internal supply chain partners. Similarly, CEABSC staff respondents were asked whether the organizational structure is linked for vertical and horizontal communication or not. 33.3% disagreed, 18.2% strongly disagreed, 19.7% agreed and 7.6% strongly agreed. It is clear indicated that organizational structure of the company is not linked for vertical and horizontal communication among supply chain partners that is hard to build strong integration between overall staff of every department.

With regard to, the company organizational structure suitability to make a decision for middle and low-level employees during operational problem. The response of the respondent implies that 39.4% disagreed, 10.6% strongly disagreed, 21.2% agreed and 7.6% strongly agreed. Therefore, the respondent response implies that the authority of middle and low level employees is weak for making any decision whenever operational problem is happened and it is not enough to make a solution since technical and other problem occurs during the company internal supply chain operation.

Finally, the study asked whether the organization structure of the company is good for enhancing the level of internal supply chain integration and employee's performance. Then the response of the respondent implies 28.8% disagreed, 18.2% strongly disagreed, 19.7% agreed and 7.6% strongly agreed. This indicated that the organization structure is not good for enhancing internal integration and employee's performance which is the major obstacle for the company to be more productive in terms supply chain performance.

4.2.3.2 Top Management Support practice

Top management support is basic and core activity towards the success and survival of the organizations. The role of top management is more than managing employees and the basic operation of the company. It's also to set the bar for the way managers treat the staff and relate to each other. Understanding the effects of their role helps the top management team make changes as necessary the way they interact with other managers and teams,

and how they are perceived by the staff. With regard to this assessing the practice of top management support at CEABSC is a good opportunity to make necessary action which is helpful the company to create strong relationship between managers and other partners of the internal supply chain process. Therefore, the study tries to assess the practice of top management support practice by providing seven related questions which was answered by employees of the company and their response was briefly explained with the following table as follow:

Table 4.4 Top managements support practice of the company.

Sq No	Top Management Support	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
		Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
1	Our top managements provide most of the necessary help and resources for integrating the overall internal supply chain system.	13	19.7%	24	36.4%	11	16.7%	13	19.7%	5	7.6%
2	Our top managements support and encourage the use of internal supply chain integration.	3	4.5%	24	36.4%	16	24.2%	12	18.2%	11	16.7%
3	Our top managements are committed to be part of the internal supply chain integration system.	5	7.6%	27	40.9%	11	16.7%	17	25.8%	6	9.1%
4	Our top management provides periodic training for its employee.	12	18.2%	19	28.8%	13	19.7%	13	19.7%	9	13.6%
5	Our top managers encourage innovative ideas.	12	18.2%	21	31.8%	7	10.6%	20	30.3%	6	9.1%
6	Mistakes regarding creative and innovative efforts of individuals are tolerated by top management.	7	10.6%	22	33.3%	19	28.8%	15	22.7%	3	4.5%
7	Our top manager's measurement and reward system practice inspire for internal supply chain integration.	10	15.2%	23	34.8%	12	18.2%	16	24.2%	5	7.6%

As can be viewed from the above table, the first question of the study sought to find out the perspective of employees with regard to the practice of the company top management whether they provide most of the necessary help and resources for integrating the overall internal supply chain system or not. Then, the response implies 36.4% and 19.7% of respondents was disagreed and strongly disagreed respectively. However, 19.7% and 7.6% of respondents agreed and strongly agreed respectively. This implies basically the top managements of the organization is not provide necessary help and resource which is helped the company to integrate the overall internal supply chain process. In addition to that the respondents were requested to answer the level of their agreement regarding on the company top managements practice of supporting and encouraging the use of internal supply chain integration and then majority of the respondents accordingly 36.4% disagreed, 4.5% strongly disagreed, 18.2% agreed and 16.7% strongly agreed. Therefore, most of respondents agreed that top management of the organization is not support and encourage the use of internal supply chain integration which is hard to reduce lead time and enhance the company responsiveness.

Concerning top management's commitment to be part of the internal supply chain integration system 40.9% disagreed, 7.6% strongly disagreed, 25.8% agreed and 9.1% strongly agreed which implied there is lack of commitment among top management of the company. Also, the respondents were asked to answer whether there is periodic training which is given by top managements for the company employees then, the respondent is accounted 28.8% disagreed, 18.2% strongly disagreed, 19.7% agreed and 13.6% strongly agreed. This is also implied the top management is not provided training periodically for the company employees who make the staff more productive and enhance customer satisfaction.

The study was also assessed whether top managers encourage innovative ideas or not according to the respondent data 31.8% disagreed, 18.2% strongly disagreed, 30.3% agreed and 9.1% strongly agreed. As per the collected data there are almost similarities between agreement and disagreement responds whereas disagreement responds are slightly high thus, the company should be focused to encourage innovative ideas in order to use the ability of its employees. Beside to this the respondent is requested to answer,

mistakes regarding creative and innovative efforts of individuals are tolerated by top management. Then, the response implies that 33.3% disagreed, 10.6% strongly disagreed, 22.7% agreed and 4.5% strongly agreed which indicated that the top management of the organization is near to penalize employees rather that teaching them whenever problem and any mistake is performed by the overall employees of the company during innovation effort.

Finally, the study wanted to examine top manager's measurement and reward system practice how inspire for internal supply chain integration. Then the response of the respondent implies 34.8% disagreed, 15.2% strongly disagreed, 24.2% agreed and 7.6% strongly agreed. This indicated that the organization **top** management reward and measurement system is not satisfied and inspire internal supply chain partners in order to strive for internal integration.

4.2.3.3. Information usage practice

Supply chain management emphasizes on the flow of information and products along the members of supply chain inside and outside of the organization. Proper information utilization will lead to greater coordination in the chain and a better coordination in the flow of information between partner's results to growing impacts on the timely delivery. A critical emphasis on information technology without the interest of sharing information will not contribute to associate organizations together. In this regards the study was assess what factors affect the information exchange practice of the studied organization and below the table implied respondents view**.**

Table 4.5 Information usage practice of the company

Sq No	Information Usage Practice	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
		Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
1	There is high level of sharing free and accurate information across member of internal supply chain.	22	33.3%	21	31.8%	8	12.1%	10	15.2%	5	7.6%
2	There is a practice of timely sharing of information across the members of internal supply chain.	10	15.2%	26	39.4%	11	16.7%	15	22.7%	4	6.1%
3	There is Strong coordination in the flow of information among internal supply chain partners.	8	12.1%	19	28.8%	17	25.8%	16	24.2%	6	9.1%
4	There is strong utilization of information among internal supply chain partners.	9	13.6%	21	31.8%	18	27.3%	12	18.2%	6	9.1%
5	There is Enterprise application integration among internals functions (ERP).	56	84.8%	1	1.5%	9	13.6%	0	0.0%	0	0.0%
6	There is high level of internet usage practice for information exchange between internal supply chain partners	13	19.7%	26	39.4%	10	15.2%	8	12.1%	9	13.6%
7	Our company level of automation manual tasks is consistently growing.	15	22.7%	25	37.9%	11	16.7%	8	12.1%	7	10.6%

As indicated in the above table, the study sought to find out the perspective of employees regarding on information usage practice and how its affect the integration of internal supply chain process and productiveness of the studied company. The perspective of respondents in this regard for internal integration is explained bellow:

The study first concern to address the perspective of employees about the members of internal supply chain practice regardless on sharing free and accurate information at the same time using the company resource together during the company operation. Then the

respondents answer implies that 33.3% strongly disagreed, 31.8% disagreed 15.2% agreed and 7.6% strongly agreed, thus as per the majority of respondents perspective there is lack of sharing free and accurate information across members of internal supply chain which is highly reduce the company productiveness and create problem for satisfying customers in terms of supply chain reliability. In addition to this, respondents were asked whether there is a practice of timely sharing of information across the members of internal supply chain or not. Then, employees of the company put their level of agreement accordingly 39.4% disagreed, 15.2% strongly disagreed, 22.7% agreed and 6.1% strongly agreed. Therefore most respondents disagreed that the practice of timely sharing of information across the members of internal supply chain is not good and should be exercised by employees of CEABSC in order to meet the company objective and being responsive for uncertainty.

The study was also assessed how strong it is the coordination of information flow among internal supply chain partners, according to the respondent data 28.8% disagreed, 12.1% strongly disagreed, 24.2% agreed and 9.1% strongly agreed. It means there is lack of coordination for information flow among internal supply chain members. Similarly, CEABSC staffs were asked to answer whether there is strong utilization of information among internal supply chain partners to perform the company basic operation. The collected data implies 31.8% disagreed, 13.6% strongly disagreed, 18.2% agreed and 9.1% strongly agreed which indicate the company should be focus in this area also in order to build a better information utilization practice among member of the internal supply chain process.

With regard to, the company Enterprise application integration among internals functions (ERP) The respondent response implied that 84.8% strongly disagreed, 1.5% disagreed, and the rest is neutral by 13.6%. Based on the respondent result the research prove that, the company has not enterprise resource planning (ERP) system therefore, the study try to asses and strive to know why the rest of 13.6% respondent select neutral answer since the question is whether the company has ERP system or not then, the study become to know that the reason of respondents was the company was try to use the system two times and fell because of technical difficulty. Beside to this the research tries to assess the internet

usage practice for information exchange between internal supply chain partners. Then, the respondent response indicated that 39.4% disagreed, 19.7% strongly disagreed, 12.1% agreed and 13.6% strongly agreed. According to the response there is still lack of internet usage practice for information exchange between internal supply chain partners that makes the company waste unnecessary time during the basic and routine operation of the company.

Finally, the study try to conclude the questions with regard to information usage practice of the studied company by asking the respondent to answer whether the company is consistently growing automating manual tasks or not. However, majority of respondent 37.9% and 22.7% respectively disagreed & strongly disagreed. In oppose to that 12.1% and 10.6% respondents respectively agreed & strongly agreed with the level of growing automating the manual task of the organization. Therefore, the collected data clearly indicated that the company should be minimizing manual tasks that would be obstacle for supply chain productiveness and fast delivery service.

4.2.3.4. Interdepartmental relationship practice

As it is clearly mentioned in the 2nd chapter, interdepartmental relationship practices play a vital role for every company to enhance productivity and reliability at the same it is useful in terms of lead time and cost reduction. However, if it's not properly exercised and managed it could be the reason for a lot of company's failure. With regard to this the study assessed how the interdepartmental relationship practice is exercised at CEABSC and then briefly explains the respondents view as follow:

Table 4.6 Interdepartmental relationship practice of the company

Sq No	Interdepartmental Relationship	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
		Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
1	There is strong collaboration between internal supply chain partners for supply chain operation.	8	12.1%	23	34.8%	7	10.6%	16	24.2%	12	18.2%
2	There is collaborative and aggregate planning practice among departments.	10	15.2%	30	45.5%	8	12.1%	13	19.7%	5	7.6%
3	There is willingness to share knowledge and experience between internal supply chain partners.	9	13.6%	23	34.8%	8	12.1%	17	25.8%	9	13.6%
4	There is commitment among internal supply chain partners to maintain a good working relationship with each other.	10	15.2%	22	33.3%	9	13.6%	17	25.8%	8	12.1%
5	There is job rotation practice among internal supply chain partners.	5	7.6%	24	36.4%	11	16.7%	13	19.7%	13	19.7%
6	There is a practice of periodic inter-departmental meetings for internal supply chain functions.	8	12.1%	30	45.5%	13	19.7%	8	12.1%	7	10.6%
7	There is high level of linkage with each other through the exchange of forms, reports, or documents.	12	18.2%	21	31.8%	12	18.2%	15	22.7%	6	9.1%

As indicated in the above table-4.6, the study wanted to find out the perspective of employees on the company interdepartmental relationship practice and how it's negatively or positively affected the company productiveness in terms of reliability for customers demand. The perspective of respondents in this regard for internal integration is explained bellow:

Concerning the practice of collaboration between internal supply chain partners for different supply chain operation, the majority of respondents put their level of perspective accordingly 34.8% disagreed, 12.1% strongly disagreed, 24.2% agreed and 18.2%

strongly agreed. Therefore most respondents agreed that the organization internal supply chain partners have lack of collaboration which makes things hard to work with a highest motivation and effort. Beside to this the respondents were asked to answer whether there is collaborative and aggregate planning practice among the company different departments or not. However, majority of respondents 45.5% and 15.2% respectively disagree and strongly disagree which is negatively affected the company performance in terms of responsiveness and reliability. In opposed to this 19.7% and 7.6% respondents agreed and strongly agreed with the company has collaborative and aggregate planning practice among different departments.

Regarding on the company employee's willingness to share knowledge and experience during the process of internal supply chain operation, accordingly respondents accounted for 34.8 and 13.6% respectively implied disagree and strongly disagree, which implies there is no willingness to share knowledge and experience between internal supply chain partners of the organization. However, the rest respondent accounted for 25.8% and 13.6% respectively implied their level of agreement in opposing with the disagreed respondents and their response implied that, internal supply chain partners of the organization have a practice willingness to share knowledge and experience between internal supply chain partners. The respondents were also asked how internal supply chain partners of the organization are committed in terms of maintaining good working relationship with each other. Then, the respondents put their level of perspective accordingly 33.3% disagreed, 15.2% strongly disagreed, 25.8% agreed and 12.1% strongly agreed. The data still shows there is lack of commitment within employees of the organization that makes hard for the company to maintain good working relationship among different departments and employees of the organization.

The study was also assessed the respondents view whether job rotation practice among internal supply chain partners is exercised or not. According to the respondent data 36.4% disagreed, 7.6% strongly disagreed, 19.7% agreed and 19.7% strongly agreed. It means the job rotation practice of the internal supply chain partners is low and it need focus by the company in order to be responsive for internal and external uncertainty. Similarly, CEABSC staffs were asked to answer whether There is a practice of periodic

inter-departmental meetings for internal supply chain functions or not. The collected data implies 45.5% disagreed, 12.1% strongly disagreed, 12.1% agreed and 10.6% strongly agreed which indicate the company should be focus in this area also in order to build a better practice of periodic inter-departmental meeting that makes the company and employees more productive.

Finally, the study wanted to examine whether there is high level of linkage within the company employees through the exchange of forms, reports, or documents. The response of the respondents implies that 31.8% disagreed, 18.2% strongly disagreed, 22.7% agreed and 9.1% strongly agreed. This indicated that the organization employee's level of linkage through the exchange of forms, reports or documents is low and it needs more effort for practicing this activity between internal supply chain processes that makes the company to have a good interdepartmental relationship and to create good internal integration among different departments and employees of the organization.

4.2.4 Supply chain performance

Supply chain performance can be affected by several factors however in this research the study was mainly focused on those major factors such as poor organizational structure, top management support practice, information usage practice and interdepartmental relationship practice that makes enable any companies to integrate its activity between employees of the organization. The performance of the supply chain in this study measured through responsiveness, flexibility and reliability. In this regards the study was assessed supply chain performance of CEABSC and below the table implied respondents view**.**

Table 4.7 Supply chain performance of CEABSC in terms of responsiveness, flexibility and reliability

Sq No	Responsiveness, flexibility & Reliability	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
		Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
1	The lead time for fulfilling the receipt of customer's order and the delivery of goods is short.	9	13.6%	26	39.4%	8	12.1%	16	24.2%	7	10.6%
2	The organization is committed to deliver orders to customers within the agreed delivery times.	5	7.6%	27	40.9%	7	10.6%	17	25.8%	10	15.2%
3	The organization has ability to respond for unintentional events in a timely manner.	7	10.6%	20	30.3%	14	21.2%	17	25.8%	8	12.1%
4	The organization has ability to quickly response for change in market demands.	4	6.1%	22	33.3%	14	21.2%	20	30.3%	6	9.1%
5	The organization has ability to react for uncertainty.	6	9.1%	19	28.8%	18	27.3%	16	24.2%	7	10.6%
6	The organization has ability of a system to produce a number of different product mixes.	5	7.6%	27	40.9%	11	16.7%	17	25.8%	6	9.1%
7	Time to solve customer complaints is short in our organization.	17	25.8%	27	40.9%	5	7.6%	14	21.2%	3	4.5%

As indicated in the above table the study tried to assess respondents view regarding on the company supply chin performance in terms of responsiveness, flexibility and reliability of the internal supply chain operation of the organization accordingly, response of the respondent's stated bellow:

First the respondents were asked to answer the lead time for fulfilling the receipt of customer's order and the delivery of goods is short. However, as implied 39.4% and 13.6% respondents that implied disagreed and strongly disagreed in opposed to that 24.2% and 10.6% respondents were agreed and strongly agreed. Generally, the response indicated that the company lead time for fulfilling the receipt of customer's order and the delivery of goods is long and that is hard to create loyal customer for the company.

The respondents were asked to answer the commitment of the organization in terms of delivering customers order within the agreed time. Accordingly, the respondents counted, 40.9% disagreed, 7.6% strongly disagreed, 25.8% agreed and 15.2% strongly agreed. Therefore, it is clear indicated that CEABSC has lack of commitment to deliver customers order within the agreed delivery time.

The study was also assessed the respondents view regarding on whether the organization has ability to respond for unintentional events in a timely manner or not 30.3% disagreed, 10.6% strongly disagreed, 25.8% agreed and 12.1% strongly agreed. Therefore, it is clear indicated that the company ability to respond for unintentional events in a timely manner is weak. The respondents were also asked to answer whether the organization has ability to quickly response for change in market demands or not. Accordingly, 33.3% disagreed, 6.1% strongly disagreed, 30.3% agreed and 9.1% strongly agree. It means the organization ability of response for change in market demand is low. Similarly, the study was assessed whether the organization has ability to react for uncertainty or not. Accordingly, the respondents counted, 28.8% disagreed, 9.1% strongly disagreed, 24.2% agreed and 10.6% strongly agreed. This implies most of the time the organization has faced challenged to react during uncertainty.

Concerning to flexibility, the respondents were also asked that the organization has ability of a system to produce a number of different products mixes or not then, the response of majority respondents implies 40.9%, disagreed, 7.6% strongly disagreed 25.8% and 9.1% respondents agreed and strongly agreed which is indicated that the company face different challenges to react for uncertainties, change in demand and whenever the market is volatile.

Finally, the study was asked the respondent whether the time to solve customers' compliant by the studied company is short or not then the respondent's response implies 40.9% disagreed, 25.8% strongly disagreed, 21.2% agreed and 4.5% strongly agreed. Therefore, the response of respondents highly indicated that the time to solve the customer compliant at CEABSC is poor and it needs more focus in order to create honest customer for the company and to enhance the internal supply chain partner's solution finding ability.

Finally, as per the study finding well organizational structure, a practice of top management support, well organized information usage practice and interdepartmental relationship practice were strong relationship with internal supply chain integration and overall internal supply chain performance that makes companies more responsive, flexible and reliable for its customer.

4.3 Inferential statistics

4.3.1Correlation Analysis

Correlations are the measure of the linear relationship between two variables. A correlation coefficient has a value ranging from -1 to 1. Values that are closer to the absolute value of 1 indicate that there is a strong relationship between the variables being correlated whereas values closer to 0 indicates that there is little or no linear relationship. According to this the study used Bivariate Pearson's Correlation (r) between Independent and Dependent Variables.

Table 4.8 Bivariate Pearson's Correlation (r) between Independent and Dependent Variables

		Organization Structure	Top Management Support	Information Usage practice	Interdepartmental relationship	Supply chain integration performance
Organization Structure	Pearson Correlation	1	.450**	.393**	.413**	.563**
	Sig. (2-tailed)		.000	.001	.001	.000
	N	66	66	66	66	66
Top Management Support	Pearson Correlation	.450**	1	.580**	.677**	.798**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	66	66	66	66	66
Information Usage practice	Pearson Correlation	.393**	.580**	1	.610**	.740**
	Sig. (2-tailed)	.001	.000		.000	.000
	N	66	66	66	66	66
Interdepartmental relationship	Pearson Correlation	.413**	.677**	.610**	1	.875**
	Sig. (2-tailed)	.001	.000	.000		.000
	N	66	66	66	66	66
Supply chain integration performance	Pearson Correlation	.563**	.798**	.740**	.875**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	66	66	66	66	66

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

Source: Own survey result,2020

As the above table implies correlation coefficient of the four factors measuring internal supply chain integration where all are positively correlated with supply chain performance of the organization. A positive relationship was found between Interdepartmental relationship and supply chain integration performance ($r = .875$, $p < .01$), followed by top management support ($r = .798$, $p < .01$), information usage practice, ($r = .740$, $p < 0.01$) and organizational structure ($r = .563$, $p < 0.01$) which are statistically significant at 99% confidence level.

In general, the result further shows that, all of the independent variables are strongly and positively correlated with the dependent variable which implies that a positive change made in one of the variables can change the company internal supply chain integration positively. For this reason, any improvement which is made by the organization in one of the dimensions will positively contribute for enhancing the internal supply chain integration and supply chain performance of the company.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

Based on the previous chapter, this chapter provides the summary of major findings, conclusions and recommendation of the study.

5.2. Summary of the findings

The major objective of the study was to analyses factors that affect the internal supply chain integration in the case CEABSC. The study was analyzed in to two parts; in the first part the collected data were analyzed using descriptive approach and in the second part the study analyzed by using inferential statistics such as, testing the relation between dependent and independent variables. Based on this the major finding of the study result summarized as follow:

As per the result finding the extent of internal supply chain integration at Cosmar East Africa Business S.C is low and affected through several factors such as lack of share idea and information, lack of collaborative planning, lack of strong networked information communication, unavailability of compatible organization culture that is useful to enhance integration, lack of communication practice before making a decision which is affect other internal supply chain partners and weak activities synchronization were the major factors those are negatively affected the company internal supply chain integration. As a whole the listed factors imply that the extent of internal supply chain integration at CEABSC is low.

Regarding on organizational structure of the company the finding implies that it is not compatible for creating and developing integration between internal supply chain partners. Similarly, the organizational structure of the company is not suitable in order to make a decision for middle and low-level employees. In general, the study finding

implies organizational structure of CEABSC is not compatible for creating and developing integration between internal supply chain partners.

With regard to top management support practice, the study finding implies that the top manager of the company is not committed for internal supply chain integration and they are not provide periodic training for internal supply chain partners of the organization that makes more productive the company supply chain performance. Beside to this the practice of top management reward and measurement system is not satisfied and inspires employees of the company for internal integration. Generally based on the research finding the practice of top management support for ISCI at CEABSC was poorly performed.

Concerning on information usage practice as per the majority of respondent's perspective there is lack of sharing free and accurate information across members of internal supply chain. Similarly, coordination and utilization of information flow among internal supply chain partners was poor. Another finding of the study regarding on information usage practice was unavailability of Enterprise resource planning (ERP) system which makes companies more beneficial in order to build integrated information system within each departments and employees of the company.

The finding of the research regarding on interdepartmental relationship among the company employees shows that the company has lack of collaborative and aggregate planning practice, willingness to share knowledge and experience among majority of employees and poor job rotation practice was the major causes that makes the company interdepartmental relationship practice very weak. In general, the studied company interdepartmental relationship practice was not convenient for integrating internal supply chain partners.

5.3. Conclusion

This research was conducted in an attempt to assess factors affecting internal supply chain integration and its impact on supply chain performance in the case of CEABSC. As it is explained in summary of the study the extent of internal supply chain integration at CEABSC implies very low and the factors those are negatively affected the company internal integration is proved by the research based upon the result which is collected from the respondent. Therefore, based on the research findings the study tries to demonstrate how the stated factors affect the internal supply chain integration with different dimension and the following conclusions have been drawn on the bases of the findings of the data analysis endeavor.

- The organizational structure of the company is not suitability for vertical and horizontal communication among internal supply chain partners of the organization.
- Top manager's commitment for internal supply chain integration was found poor.
- Top management is not providing periodic training for its employee.
- The practice of top manager's measurement and reward system practice was not inspired for internal supply chain integration.
- The level of timely sharing free and accurate information across member of internal supply chain was found very weak.
- The level of coordination and utilization of information flow among internal supply chain partners was found poor.
- The company has not Enterprise application integration among internals functions (ERP).
- The practice of collaborative and aggregate planning among departments and employees of the organization was found poor.
- Willingness to share knowledge and experience between internal supply chain partners was found weak.
- The job rotation practice of the organization is also found weak.

❖ According to the study finding majority of respondents agreed on the supply chain performance of the organization as follow:

- The supply chain performance of CEABSC during the study period was found weak in terms of responsiveness and reliability.
- The lead time for fulfilling the receipt of customer's order and delivery of goods is weak.
- There is also found poor performance by CEABSC related with commitment to deliver orders for customers within the agreed delivery times.
- The level of ability to quickly response for change in market demands and uncertainty was poor.
- The organization has not ability of a system to produce a number of different product mixes.
- Time to solve customer complaints at CEABSC was found poor.

5. 4. Recommendation

As per the research finding the extent of internal supply chain integration at CEABSC is very low. Therefore, based on the research findings, the study suggests the following points in order to enhance the extent of internal supply chain integration and supply chain performance of the company in terms of responsiveness, flexibility and reliability.

- In order to make the company organizational structure more suitable for internal supply chain integration the company should revise and link its organizational structure vertically and horizontally. In addition to that CEABSC have to create a space for its middle and low-level employees that give full authority in order to decide during operational problem.
- Top managers should be committed for internal supply chain integration practice.
- Top management of the company should provide periodic training for internal supply chain members.
- Measurement and reward system should be developed in order to inspire internal supply chain members for integration.

- The company should improve the level of timely sharing free and accurate information across member of internal supply chain in order to enhance supply chain performance.
- The company should also improve level of coordination and utilization of information flow among internal supply chain partners.
- The company has to integrate the overall department and supply chain process through enterprise resource planning system (ERP) in order to be more productive in terms of information integration.
- The company should enhance the level of collaboration and aggregate planning in order to react for change in demand and uncertainties.
- Improvement is needed regardless on willing to share knowledge and experience between internal supply chain partners.
- The job rotation practice should be exercised between departments of the organization.

❖ Since the study finding conclude the supply chain performance of CEABSC is weak in different supply chain performance dimension, the company should improve the level of its internal supply chain integration in order to be more productive and enhance its supply chain performance in terms of responsiveness, flexibility and reliability. Thus, based on the result finding the study suggest the area of improvement which is needed by the company as follow:

- As per the result finding CEABSC internal supply chain system should be integrated in order to make the lead time for fulfilling the receipt of customer's order and the delivery of goods short.
- The company should be highly committed to deliver orders for customers within the agreed delivery time that makes its supply chain performance more reliable.
- Improvement is also needed regarding on the company ability for quick response during change in market demands and uncertainty.
- In order to be flexible, the company should be added additional machinery and qualified employees that make the company able to produce a number of different product mixes.
- The company has to improve its system in order to minimize the time interval to solve customer compliant.

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ADDIS ABABA UNIVERSITY

SCHOOL OF COMMERCE

DEPARTMENT OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT

Graduate Program

Questionnaire to be filled by employees of Cosmar East Africa Business S.C (CEABSC)

Dear Respondent

First I want to say thanks for your time in responding to the research questions provided below. I'm a post graduate student at Addis Ababa university school of commerce from the department of logistics and supply chain management. This questionnaire is design for intended purpose of collecting data on factors affecting internal supply chain integration (ISCI) in the case of Cosmar East African Business S.C. The response you provide me gives a critical input for my research. As per your role on this company operation you have identified as one of the respondents for this study and you are kindly requested to fill the questionnaire. The data will be treated with a high degree of confidentiality and it is meant for academic and research purpose only.

Instruction: Please give the requesting information by putting (√) marks on the appropriate spaces.

Part one:-

1. **Gender**

Male (1)	Female (2)

2. **Select your Age Group**

20-30 (1)	31-40 (2)	41-50 (3)	51 and Above (4)

3. **Select your Age Group**

20-30 (1)	31-40 (2)	41-50 (3)	51 and Above (4)

4. **Select your highest academic or professional qualification**

1-8 Grade (1)	9-12 Grade (2)	Diploma or Degree (3)	Master's Degree (4)

If other _____

5. **Years of Experience in CEABSC**

Below 1-5 Years (1)	6-10 Years (2)	Above 10 Years (3)

6. **Current Position:** _____

Part Two:-

The following questions are designed to assess critical factors affecting internal supply chain integration of your organization. Please indicate the level of your agreement or disagreement using (√) mark on the following statements based on your experience in your company on the following ISCI management practices.

The rating description

1= Strongly Disagree

2= Disagree

3=Neutral

4=Agree

5=Strongly Agree

❖ Questions related to research objective 1

Please tick (√) the box which reflects your agreement with the following 10 statements concerning the extent of your organization internal supply chain integration practice.

S.N	Internal Supply Chain Integration Practice	SD	D	N	A	SA
		1	2	3	4	5
1	Our internal supply chain partners have a practice of share idea, information and resource together.					
2	We have a practice of conducting joint plan to anticipate and resolve supply chain problem.					
3	Our internal supply chain partners strive to maintain a good working relationship with each other.					
4	Our internal supply chain partners interact with each other through internet, meeting, phone call and documents in order to exchange different data's and to perform the company basic operation.					
5	Our organizational culture is good to enhance integration between internal supply chain partners.					
6	Our internal supply chain partners share the same vision for the company.					
7	Our internal supply chain partners have a practice of consult with each other before making decision affecting other departments.					
8	Our internal supply chain partners understand the pressure and concern of each other.					
9	We spend more time to enhance our service quality and customer satisfaction.					
10	We synchronize our activities with each other.					

❖ Questions related to research objective 2-5

Please tick (√) the box which reflects your agreement to what point do the following factors affect the internalsupply chain integration in your organization?

S.N	Organizational Structure	SD	D	N	A	SA
A		1	2	3	4	5
1	Our company organizational structure is compatible for internal supply chain integration.					
2	Our organizational structure is linked for vertical and horizontal communication.					
3	Our organizational structure is well-suited to make a decision for middle and low level employees during operational problem.					
4	Our organization structure is good for enhancing the level of internal supply chain integration and employee's performance.					
B	**Top Management support Practice**	SD	D	N	A	SA
		1	2	3	4	5
1	Our top managements provide most of the necessary help and resources for integrating the overall internal supply chain system.					
2	Our top managements support and encourage the use of internal supply chain integration.					
3	Our top managements are committed to be part of the internal supply chain integration system.					
4	Our top management provides periodic training for its employee.					
5	Our top managers encourage innovative ideas.					
6	Mistakes regarding creative and innovative efforts of individuals are tolerated by top management.					
7	Our top manager's measurement and reward system practice inspire for internal supply chain integration.					
C	**Information Usage Practice**	SD	D	N	A	SA
		1	2	3	4	5
1	There is high level of sharing free and accurate information across member of internal supply chain.					
2	There is a practice of timely sharing of information across the members of internal supply chain.					
3	There is Strong coordination in the flow of information among internal supply chain partners.					
4	There is strong utilization of information among internal supply chain partners.					
5	There is Enterprise application integration among internals functions (ERP).					
6	There is high level of internet usage practice for information exchange between internal supply chain partners.					
7	Our company level of automation manual tasks is consistently growing.					

D	Interdepartmental relationship Practice	SD	D	N	A	SA
		1	2	3	4	5
1	There is strong collaboration between internal supply chain partners for supply chain operation.					
2	There is collaborative and aggregate planning practice among departments.					
3	There is willingness to share knowledge and experience between internal supply chain partners.					
4	There is commitment among internal supply chain partners to maintain a good working relationship with each other.					
5	There is job rotation practice among internal supply chin partners.					
6	There is a practice of periodic inter-departmental meetings for internal supply chain functions.					
7	There is high level of linkage with each other through the exchange of forms, reports, or documents.					

- Please tick (√) the box which reflects your agreement regardless on the company responsiveness and flexibility for change in market demand and during uncertainty occur.

S.N	Responsiveness, Flexibility& Reliability	SD	D	N	A	SA
		1	2	3	4	5
1	In our organization the lead time for fulfilling the receipt of customer's order and the delivery of goods is short.					
2	The organization is committed to deliver orders to customers within the agreed delivery times.					
3	The organization has ability to respond for unintentional events in a timely manner.					
4	The organization has ability to quickly response for change in market demands.					
5	The organization has ability to react for uncertainty.					
6	The organization has ability of a system to produce a number of different product mixes.					
7	Time to solve customer complaints is short in our organization.					

Thank you Very Much for Your kind Cooperation!!