

Effect Of Supply Chain Management Practices In A Case Study Of Dire Dawa Food Complex Share Company In Dire Dawa Town, Ethiopia

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ABSTRACT

Supply chain management is the means by which firms engaged in creating, distributing and selling products, can join forces to establish a supply network with an unbeatable competitive advantage has emerged as one of the most powerful business improvement tools around. Companies all over the world are pursuing supply chain as the latest methodology to reduce costs, increase customer satisfaction, better utilize assets, and build new revenues. The purpose of this paper is to study the practices of supply chain management from the five Supply chain management practice perspectives i.e. Supplier and customer relationship, internal operations, information sharing, information technology and training and to see the integrations among Supply chain partners. For the accomplishment of this, the study was employed through descriptive design in which the selections of the respondents were carried out by using judgmental, purposive and convenience sampling techniques. The total numbers of Dire Dawa food complex share company employees are 336. Out of this about 120 employees are not educated. Therefore, the target was 216. From this target population, 32 respondents were considered as a sample size. Both primary and secondary sources of data were used for this study. 5-Likert scaled questionnaire and interviews were used as instruments for data collection. The data was analyzed by using descriptive statistics and presented in tables with mean and standard deviation. The major findings indicate that, most Supply chain management practices are moderately practiced with in the Dire Dawa food complex share company. Whereas IT and training practices are poorly applied and sales forecast information sharing with customers is poor. Based on both quantitative and qualitative analysis the case company has poor relationship with its customers and suppliers and poor customer's services. Manufacturing, supply and demand uncertainties are the major challenges of the case company's Supply chain which prohibits effective implementation of Supply chain management

Keywords

Supplier & customer relationship, internal operations, information sharing, information technology, training and the integrations

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Introduction

The subject of the Supply Chain Management has different aspects. It has its derivations in a number of fields such as purchasing, logistics and operations. Given its nature, it requires for cross boundary management to deal with an internal cooperation within the organization, in addition to external inter organizational integration. Many definitions have been applied to explain the term SCM. For example, it was once defined as an integrating philosophy to manage the total flow of a distribution channel from supplier to ultimate customer. Another definition is the management of upstream and downstream relationships with suppliers and customers to deliver superior customer value at less cost to the supply chain as a whole. SCM is also defined as the simultaneous integration of customer requirements, internal processes, and upstream supplier performance. The different definitions have some features in common, including an end-to-end coordination and a focus on integration with other entities in the chain to deliver value to the end customer (Meehan, and Muir, 2008).

One reason for the increased interest in SCM is that organizations progressively find themselves reliant upon having effective supply chains, or networks, to successfully compete in the global market economy (Lambert 2008). In the competitive global environment, performance can no longer solely be determined by the decisions and actions that occur within a firm as the execution of all members involved contributes to the overall results of the supply chain. Similarly, Wen et al. (2007) mean that competition has changed from being between individual enterprises to

increasingly being between supply chains. As organizations form global alliances, it is imperative that they understand how SCM can be successfully applied (Halldorsson et al. 2008); especially as organizations face challenges including mitigating risks and disruptions in the supply chain (Neureuther, 2009). For these reasons, there is a need for companies to manage not only their own organizations but also their relationships with other companies in the same supply chain (Croxtton et al. 2001; Stock et al. 2010).

With the growth of inter-network competition, individual business may no longer compete solely as independent company but must do as supply chains. Companies associated in the same network require efficient supply chain integration in order to optimize their collective performance. Moreover, numerous companies have started to appreciate that, as SCM plays a major role in building a sustainable competitive edge for their products in highly competitive markets (Jones, 1999). Because of the collaboration between members of the chain, supply chain management gives significant opportunities to the firms involved in terms of cost reductions, revenue enhancement, flexibility, customer satisfaction, speed and economy of time (Forrester, 1958 cited in Neeley, 2006). Morten (2003) concluded the general understanding of the business environment in most industries as, competition has been increasing and the condition under which business is running becomes more turbulent. By understandably this, many companies are now focusing on improving and developing their supply chain processes because it can play a significant role in customer service and their profitability. Currently the Ethiopian business environment is becoming

customer driven, competitive and technology based. Hence, it is unquestionable that companies should build an integrated and efficient system through which resources would flow in a seamless and instantaneous manner across the supply chain. The current practices of Ethiopian manufacturing industries with regard to supply chain management is traditional in that, partners involved across the supply chain act independently in designing, developing and executing strategies with minimum effort made to align strategies with the partners doing business with them particularly suppliers, whole sellers, distributors, and customers. Russell, (2006) as a coping up strategy suggests that the relationship with suppliers and other partners should be supported with an appropriate level of collaboration, information technology, information system and lean- agile principles.

Even if it is clear that, currently other sectors of industry are playing a significant role for the economic growth of Ethiopia, in addition to these sectors it is not a new history that for a long period of time and still now the Ethiopia economy is dominated by agriculture.

One of many management philosophies that boost the growth, flexibility and management efficiency is SCM, that operate under an integrated, collaboration and efficient value chain all over the world but its effective implementation varies country to country. In the other extreme, there are many research works on various business practices in Ethiopia particularly; financial performance, technology application, and etc. Unfortunately, the investigator of this paper is hardly come across sufficient research works on this timely global management philosophy, SCM which effect competitive advantage in many proxies if managed well.

The justification for targeting on food processing sector is that, Food price increases are creating severe difficulties for poor people and have led to political unrest in many parts of the world. Currently in Ethiopia the price of food related items are increasing and even there is shortage of some food items on the market this may be due to poor supply chain management, collaboration, and other factors across the supply chain partners.

The primary goal of supply chain management is to enhance competitive performance by closely integrating the internal functions within a company & closely linking them with external operations of suppliers, customers, and other channel members (Kim, 2006). For seeking the efficient and effective cooperation between organizations of a supply chain, each chain member must seek not only to improve its own individual competitiveness (i.e. quality, cost, delivery lead time, and etc.) but also improve the competitiveness and performance of all enterprises in its supply chain. This involves sharing of information, working together to reduce costs, cut lead-time and building total, quality into all the stages of the supply chain (Davis 1993). Makweba & Xu, (2009) concluded that, the majority of food processors operate individually without any strong relationship with their downstream partners apart from sell-buy relationship. Each member within the network seeks to optimize individual profit rather than the entire supply network. This is an implication of yet, reform heterogeneous supply chains is not an easy task, since each company has individual work structure,

organizational structure, work flow, information flow, and culture. With the use of SCM, enterprises can rationalize manufacturing processes across functional or organizational boundaries, and possess up-to-date production schedule of suppliers and avoid the bullwhip effect and finally promote the product and service quality (Yan and Cheng 2001).

Olsson and Skjolde, (2008) conclude as, a food supply chain is complex, time-critical and dynamic and the Swedish consumers' are experienced with products that is lower food quality than achievable, shorter shelf life than possible, more waste than necessary and in the worst case, health risks due to a combination of limited knowledge in all steps in the food supply chain and certain negligence in the food handling. Therefore, food supply chain needs effective management, integration, knowledge, and due attention throughout the supply chain. If properly implemented SCM can improve the company's responsiveness, flexibility and efficiency (Olsson and Skjolde, 2008). However, most of the researches related to the supply chain management's were carried out in developed countries which have different economic, political, technology, social, legal and cultural status. As a result, it may be difficult to directly apply and generalize that the same practices and collaboration as well as problems of SCM exists in Ethiopia. This is because of Ethiopia has different Economic, political, social, legal and cultural status than other countries.

In Ethiopia the practice of integration, collaboration and having willingness and the trend of managing the SC from supplier to the customer is traditional i.e., not more than just buy-sale transactional relationship. Even if there is SC by default it is not well managed, and implemented for getting the benefits resulted from effective SCM. So that, each partners with in the SC are using their own individual efforts to improve their own competitiveness (like, quality, cost, delivery lead time, and etc) but it is not as such effective. Dire dawa food complex share company is one out of these companies.

As the main objective of this research is to investigate the practical implementation of supply chain management and its implication on Dire dawa food complex share company on their collaboration, supplier and customer relationship, information sharing, information technology, internal operations of SCM and customer services to achieve this objective, the following specific objectives were raised to study the existing practices of supply chain management from the five SCM practices perspectives, to assess the extent of collaboration/integration among the SC partners and to assess the case company's orientation of internal operation towards customer service. Therefore, the purpose of the study was the effect of supply chain management practice in case of Dire dawa food complex share company.

Theoretical Framework

1.1. Collaboration in Supply Chain

The best supply-chain performers are deeply involved in relationships that call for tight links between partners. As companies migrate toward more extended supply chains,

collaboration is becoming their most strategic activity. Collaboration can have a variety of meanings but for the purpose of this study the researcher adopt the definition from Cohen et. al., (2004) that is collaboration is the means by which companies within their supply chain work together toward mutual objectives through the sharing of ideas, information, knowledge, risk and rewards. Practically, coordination and collaboration of up-stream and down-stream of a supply chain is difficult because of uncertainty in demand and supply and the lack of communication between members of a supply chain which is amplified through successive linkages (Lee 2000). In fact a very immediate and available opportunity when two or more companies involve in a chain is, the situation where partners would be able to recognize each other's competencies and combine them in order to satisfy the customer requirements. Some other features which may participant anticipate when entering in a partnership are joint planning, management and measurement; and sharing goals, objectives, benefits, resources, information, and risks with partners. Collaboration is a recognized term which could explain and entail all of the above features (Sunil, et, al. 2004). Some companies have achieved integration through information sharing and inter- organizational collaboration. In a study to measure the degree of integration among the companies it was found that information sharing and inter-organizational integration were the underlying factors for integration with suppliers and customers in areas like supply chain design, inventory management, and customer relationship management (Bagchi & Chu ha, 2005). But from time to time Firms have been struggling to balance their competitive and cooperative relationships with other firms and stakeholders in the supply chain (Morgan et. al., 2007). Ultimately supply chain management is about getting the right product, at the right time, in the right quantity to the right customer (Higgins, 2010).

1.2 Practice Of Supply Chain Management

SCM practices are defined as a set of activities undertaken in an organization to Promote effective management of its supply chain. Many manufacturers and distributors are waking up to the potential for the major cost reduction and service improvements offered by implementing best practices in their supply chain. A number of literatures show many different perspectives of SCM practices (Tan et al., 2002; Chen and Paulraj 2004; and Li, 2002 and 2005). These different writers perspectives suggested a multi-dimensionality of SCM that covers set of activities and processes from upstream, firm's internal operations to downstream of the supply chain. Supply Chain Management is now recognized as a critical business process for companies manufacturing or distributing products. This is because customers' demand for most products are ever more demanding in response time, in choice and in seeking more competitive prices and thanks to globalization, customers can choose from an increased number of suppliers (Lazarovic et al., 2007). There are five basic dimensions/perspectives of supply chain management practices. These are namely; supplier and customer relationship, information sharing, internal operation,

information technology and training (Perry and Sohl 2000; Lazarovic et al., 2007).

1.2.1 Supplier and Customer Relationship (SCR)

Supplier and customer relationship is defined as a set of firms' activities in managing its relationships with customers and suppliers to improve customer satisfaction and synchronize supply chain activities with suppliers, leverage suppliers' capacity to deliver superior products to customers. This is due to the ultimate objective of SCM is to deliver products to the satisfaction of end customers (Tan, 2001). The growth of mass customization & personalized service is leading to an era in which relationship management with customers is becoming crucial for corporate survival (Wines 1996). The customer relationships include the complete range of practices that are employed for the purpose of managing customer complaints, building long-term relationships with customers & improving customer satisfaction (Tan et al. 1998; Claycomb et al. 1999). Close customer relationship allows a company to be more responsive in fulfilling customers' demand and differentiate its product from competitors, sustain customer loyalty, & dramatically extend the value it provides to its customer through improving customer satisfaction by proactively seeking customers' needs and requirements. The ability to build a close relationship with customers will bring companies in to a long-lasting competitive edge (Bowersox et. al, 1999). SCM suggests that firms need to integrate with their suppliers and customers to achieve both financial and non financial growth objectives (Tan, 2001). Stank et al, (2001) asserted that, the industry leaders increasingly build competencies to integrate with suppliers and customers and find that, these competencies lead them to supply chain excellence. Coordinating operational activities through joint planning with suppliers also results in inventory reduction, smoothing production, improve product quality, reducing supply uncertainty and lead time reduction (Lee, 2002). Makweba & Xu, (2009) in their study, reviled that customers' need to be given its deserved weight. In today's competition, firms with a superior ability to provide services that customers perceive as valuable incur an important competitive advantage. The food processors need to make commitments to learn what customers need and set strategies that implement customer friendly process relationship rather than the existing one buy-sell traditional relationship. This is because; in most cases customers base their purchasing decisions on the service they receive, not just on price. Therefore, quality and availability of the product that provides superior service to the customers is very important for the firm (Makweba & Xu, 2009).

1.2.2 Internal Operation

In addition to the upstream and downstream integration, SCM also emphasize on the importance of both effectiveness and efficiency of firm's internal operations on its performance. This is due to a significant element of SCM practice is an internal operations and they are the basis for developing a competitive advantage before embarking into external integrations. Poor internal

operations can lead to failure in coordinating with external partners (Handfield and Nichols, 1999). Internal operation summarizes all activities related to production system and internal, logistics flow (Handfield and Nichols, 1999). To judge the SCM practice as an effective and value adding the internal operation should be flexible in responding to changing market needs, which is expressed on the basis of agility principles. This means that, a production system must be able to perform rapid change over in both order patterns and mass customization (Lambert and Cooper 2000). Power and Soha (2001) find that technology utilization, continuous improvement and computer based automation in manufacturing are some of characteristics of agile/flexible organization. Thus, the effectiveness of SCM can be examined by the ultimate effect it would have on customer satisfaction through responsiveness and lower price resulting from lean internal operations. Automated orders and automated productions are the key enablers to realize the quick response program (Perry and Sohal, 2000).

1.2.3 Information Sharing

Information sharing is an important aspect in achieving perfect integration in a supply chain. Cross functional integration and inter organizational integration requires the visibility of information across the supply chain. Poor information sharing between partners in a supply chain will result in poor coordination that will lead to many serious problems such as high inventory levels, inaccurate forecasts, low resource utilization, and high production costs. Indeed, information sharing is highly considered as the way to reduce demand uncertainty (Lee and Whang, 2000; Lee, 2002). Many studies have reported that information sharing can bring many benefits to both suppliers and buyers, such as inventory reduction, and reduced manufacturing costs (Yu et al, 2001; and Raghunathan, 2003). The way companies share information whatever the confidential level or not; determines the success of the collaboration. The nature of information to be across the supply chain differs based on the degree of integration, institutional trust and availability of infrastructure that facilitate the practice (Lazarovic, et al., 2007). Therefore, an informatics perspective is vital in the supply chain since information flow is an integral part of SCM and material flow is closely dependent on information flow.

1.2.3.1 Types of Shared Information

Sales Data: In the traditional supplier-buyer relationship, companies communicate demand information exclusively in the form of orders. Indeed, orders from downstream serve as a critical source of information about future businesses. When the information is transferred in the form of orders tends to be distorted, can misguide upstream partners in their inventory and production decisions. It ultimately harms the efficiency of the supply chain in the form of excess raw material inventory, unplanned purchases of supplies, additional manufacturing expenses created by excess capacity, inefficient utilization and overtimes, excess warehousing expenses, premium shipping costs, and poor

customer service level (Lee, et al. 1997). **Sales Forecast:** To exploit the vendors' superior forecasting capabilities, retailers including Wal-Mart formed an initiative called Collaborative Planning, Forecasting and Replenishment (CPFR), which calls for the retailers and the manufacturers to exchange knowledge and jointly develop forecasts and replenishment plans. The common form of forecast sharing involves a downstream site sharing the information to the supplier, as it is closer to the market and is thus better positioned to forecast future market demand Tsay (1997).

Inventory Level: One of the most common data shared between supply chain partners is inventory level.

Access to supply chain inventory status can contribute to lowering the total inventory level in the supply chain. If the retailer and the manufacturer independently manage their respective inventories without sharing inventory status information, they may end up having duplicate safety inventories or stock-outs at both locations (Milgrom and Roberts, 1998)

Other Information Sharing: Other information often shared in a supply chain include may be performance metrics and capacity. Performance metrics include product quality data, lead times, queuing delays at workstations and service performance. By sharing this type of information, the supply chain can identify the bottlenecks of the chain and improve the overall performance (Tsay, 1997).

1.2.3.2 Level of Information Sharing

Level of information sharing refers to the extent to which critical & proprietary information is communicated to one's supply chain partner. Many researchers have suggested that the key to make supply chain effective and efficient is making available undistorted & up-to-date marketing data at every node within the supply chain (Balsmeier et. al.1996; Childhouse and Towill, 2003). The impact of information sharing on SCM depends on what information is shared, quality on shared information, and company's capability in using and translating the information in to a supply chain strategy and operational activities (Moberg et al, 2002). Basically, Information sharing can vary from strategic to tactical & from information about logistics activities to general market & customer information (Mentzer et al. 2004).

1.2.3.3 Quality of Information Sharing

Quality of information sharing includes aspects such as the accuracy, timelines, adequacy, & credibility of information exchanged. As information sharing is vital, its major impact on supply chain management depends on what information is shared, when & how it is shared, & with whom it is shared (Monczka et. al., 1998; Moberg et. al. 2002).

1.2.4 Information Technology (IT)

Nowadays, since IT is involved in every step of operation in each company, therefore it is not surprising that organizations' Supply Chain Management supported by adopting IT. Talluri, (2000) makes the comment that the

advances in IT systems have given opportunities for organizations' to transform the way they manage their business. In SCM, IT is highly regarded as a major enabler in achieving effective SCM. As a supply chain spans many organizations in developing products to customers both up-stream, down- stream and many functional areas within a company, the implementation of IT allows the companies to increase communication and coordination of various value adding activities with their partners and between functions within their own operation (Simchi-levi et al, 2000). In addition to advance development of the internet technology offers significant opportunities for cost reduction, increasing flexibility, increasing response time, and improving customer services (Lee and Whang, 2001). The benefits of IT in SCM do not come from the capabilities of IT itself; instead the significant benefits come from the combination of its application with corporate strategy and the nature of relationship between companies. IT will improve collaboration and coordination between supply chain members in the environment where trust and long-term commitment between partners exist (Chae, 2005). Li et al, (2005) revealed that, the objectives of IT in SCM are; to provide the information availability and visibility to supply chain partners, to enable the collaboration with organizations in the supply chain and to allow the decision making based on the total supply chain information.

1.2.5 Training

Effective SCM requires managers to have an understanding of supply chain dynamic and ability to use information based tools. Lee and whang, (2000) argue that information visibility throughout a supply chain will bring significant impact if companies do not have a capability to utilize the information in effective ways. Hence companies need to consider the skills requirements and education when integrating their value-adding activities with their partners (Gattoma and Clark, 2003). The major concept of SCM is collaboration and seamless integration between various value adding activities within individual companies and across different organizations along a supply chain. Beginning this concept in to practice requires significant changes in corporate culture as well as a new level of human performance. Successes full implementation of SCM concept largely depends on human aspects of organizations (Bowersox et al, 2000; Mentzer, et. al. 2004). The review literature of different studies indicates that, there are various complicated and sophisticated operations and decision making those primarily demand knowledge based employees. To this end, organizations are supposed to enhance and maintain existing skills and knowledge of employees. Continuous development and skill building activities demand are sources of competent employees (Lazarovic, et al., 2007). Therefore, effective training and knowledge based learning is essential in developing and maintaining these new SCM skills.

1.3 Supply Chain Performances

Empirical studies by Ross (1998), confirmed the theory that, SCM practices considerably improve companies performance. Moreover, the results specifically highlight

that IT and information sharing significantly contributes to more performance measures than supplier and customer relationship practice. With regard to the relationship between SCM strategies and operational performance, Tan et al., (2002) observed that the following SCM-related strategies were significantly related to overall product quality and overall customer service: namely determination of customer's needs, reduction in response time and supplier delivery time, improvement of integration activities, trust among supply chain members, communication of future needs, use of information sharing, and assistance of suppliers in JIT (just in time) capability. The supply chain performance is now increasingly perceived as critical means for attaining a competitive edge over others competitors. The traditional way of measuring performance based on cost alone has giving way to more innovative approach incorporating non-cost performance measures like quality, flexibility, time, and the need for customer satisfaction (Ashish, 2006).

The driving force for a supply chain performance is the supply chain performance enablers: delivery speed, new product introduction, collaboration across enterprise boundary, data interchange, flexibility, and customer responsiveness. This in turn leads to a positive effect on the overall cost, lead time, quality, and service level, over all capacity, which constitutes supply chain determinants. The current market situations require increasing service levels and quality in union with low cost and small lead times (Ashish, 2006). Supply chain performance is a two dimensional definition which consists of effectiveness & efficiency. Effectiveness is about 'doing the right things' & efficiency is about 'doing things right'. Supply chain effectiveness relates to the preference of the end-consumer & the sole indicator is consumer satisfaction (David et al. 2006). Therefore, customer satisfaction is comes from meeting customer requirements, fitness for use, continuous improvement, elimination of waste, customer support, flexibility to meeting demands, design and engineering, quality assurance, inventory and etc (Eyong, 2009).

Methodology

The research adopted a descriptive research design. The purpose of this research is to find out the underlying facts and /or actual circumstances existing within the case company with regard to SCM practices and describing the facts. Also, the research adopted a descriptive research design which helps to use both quantitative and qualitative data analysis. The quantitative approach examined the extent to which supply chain practice at DDFCSC which statistical tools like: mean and standard deviation were employed. The quantitative approach was adopted since the study tried to understand the awareness of employess on supply chain practices. The research targeted selected employees at in dire dawa food complex share company in Dire Dawa town. The total numbers of employees in the dire dawa food complex share company are 336. Out of this about 120 employees are not educated. Therefore, the target was 216. From this target population, the sample size was 32 were considered as sample size respondents. It's also considered among 151-280 as sample in medium as per the Malhora Naresh's. Primary data was collected by use

questionnaire and personal interviews. The questionnaire was 5 point likert scales which were used to collect data from the sample respondents. The questionnaire has 5 rating scales ranging from 1- very low to 5- very high. the personal interviews with customers, procurement and supply manager, product manager, marketing and human resource managers. As the secondary data; books, articles, journals, magazines, and brochures were reviewed. Even though supply chain management is necessary for both manufacturing and service companies, this study was targeted on the food processing company particularly dire dawa food complex share company.

Furthermore, the exact sample units of respondents were considered from company’s management and employees on the basis of judgmental/non-probability sampling technique. Purposive sampling technique was used to interview managers who are directly related with the topic under investigation. The researcher preferred convenience sampling to contact the customers who are located at long distance with infrequent visit to the case company, this is due to its difficulty to address the whole customers and not exactly known lists of customers with in the case company. Therefore, these respondents were addressed as per their arrival or availability at the case company. From 32 questionnaires distributed, 31 were properly completed. From the accepted responses one was found invalid whereas the remaining thirty one (31) responses were found valid and used for the analysis. This account for 88.57% of response rate. Therefore, the data were summarised, organised, tabulated, and analysed by using the (SPSS) and descriptive statistics like frequency, and percentages, mean and standard deviation. These frequency tests have been used to further test the mean along with the standard deviations.

Results

3.1 Demographic Factor

		Frequency	Percent
Gender	Male	24	77.4
	Female	6	19.4
	Missing	1	3.2
	Total	31	100.0
Age	20-25 Years	5	16.1
	26-30 Years	8	25.8
	31-35 Years	5	16.1
	36-40 Years	3	9.7
	Above 40 Year	9	29.0
	Missing	1	3.2
	Total	31	96.8
Experience	1-3 years	9	29.0
	4-6 years	5	16.1
	7-10 years	2	6.5
	Above 11 years	14	45.2
	Total	30	96.8
Qualifications	Missing	1	3.2
	Below grade 8	2	6.5
	Grade10 completed	3	9.7
	Grade 12 completed	3	9.7
	Certificate	3	9.7
	College diploma	9	29.0
	First degree	8	25.8
	Second degree and above	1	3.2
	Total	29	93.5
Missing	2	6.5	

(Source; researcher’s survey)

From the respondent’s profile, 77.4% of the respondents were male, while 19.4 % were female respondents and one respondent (3.2%) is invalid because this respondent did not clarify his /her sex. The next age group with valid percent of 25.8 is respondents gain aging between 26- and 30. On the other hand, respondents within age group of 20-25 and 31-35 show similar percentage, which is 16.1%. In addition, 36-40 age groups represent 9.7% of valid respondents. At last, one respondent (3.2) did not mention in which age group he/she is. The respondents work experience, the largest of the respondents 45 % (14) have more than eleven (11) years of work experience. The highest education level attained by most of the respondents was college diploma holders which represents, (9) 29% out of the valid respondents and followed by first degree holders which accounts (8) 25.8%.

3.2 Descriptive Statistical Analysis

3.2.1 Supply chain Management Practice

Based on the quantitative and qualitative data analysis, discussion of results with respect to the basic questions, the following are the summary of major findings of this study. The degree of relationship across the supply chain of dire dawa food complex share company is leveled to be transactional or adversarial, which is characterized by less joint product planning with suppliers and customers’ and independent decision making across the SC.

The descriptive analysis and interview with management bodies has verified the prevalence of these characters of traditional relationship. With regard to internal operation, the descriptive data and interview analysis conveys that, there is good automated quality control system, moderate flexible production system for handling order patterns and market change, and internal logistic flow. Relatively the cases company is weak in innovation of new products, efficient resource utilization, and up-to- datedness of production. Information sharing practices of SCM in the case company is generally moderate. But there is poor information sharing on sales forecast with customers and suppliers which revealed mean value of 2.22 and 2.61 respectively. Again the overall efforts in coordinating and sharing information across the supply chain partners are weak. Even the shared information lacks adequacy and quality. Concerning information technology, the quantitative and qualitative analysis indicated that, poor and absence of IT & IS tools with in the case company which scored 2.12 groups mean. Supply chain management practice from training perspective of dire dawa food complex share company is the poorest in respect to other SCM practices which revealed mean value of 1.95. Each items and the overall training practice performance shows very poor than expected. This adversely affects the effectiveness of SCM. Among the possible challenges of SCM, manufacturing, supply and demand uncertainties appeared as the major headache of the case company with mean values of 3.41, 2.83 and 2.77 respectively. Inventory fluctuation due to in accurate information (bullwhip) effect is also another challenge of the case companies SC. There is also poor willingness to share risks and benefits among the SC partners. Regarding to integration among the SC partners the group mean of dire dawa food complex share company

integration with its supplier's shows 2.76 which approximate to moderate level. But the qualitative analysis reveals poor integration. The quantitative analysis of customers' integration conveys group mean value of 2.51 and it is really poor even if it approaches to moderate the customers have no strong integration with the dire dawa food complex share company than buy-sale transition. Concerning to the internal integration, data integration through network and information system integration among internal functional units are poor and would not support external integration. But, the overall internal integration is moderate represented by mean value of 2.70. With respect to orientation towards integrated superior customer service, both qualitative and quantitative analysis revealed that, the company's effectiveness and efficiency in meeting customers' requirement is poor and effectiveness in handling customers' compliant is poor and customers were dissatisfied with the company's compliant management. At the time of shortage of materials the case company gives priority to major customers and this dissatisfies other customers. In general the case company's orientation towards customers' service is poor.

Conclusion

With regard the respondent's profile, the respondents shows that the numbers of male respondents were almost three times as female respondents. In this study, the researcher can conclude that most of the respondents were above 40 ages. On the other hand assessing the work experience and education level of the respondents' is that, when the respondents are more experienced and educated they have better opportunity to understand the case and give better response than else. The eventual conclusion of this study is that generally, the case company's orientation towards SCM is traditional that lacks substantial indicators of an integrated, efficient and effective SCM. In addition, the quantitative analysis of the company's customer service group mean is moderate that is 2.62. Therefore, this can't ensure customer satisfaction with respect to customer service. Based on qualitative and quantitative analysis the investigator comes up with conclusion that the case company's orientation towards customer service is poor and SCM practices have direct impact on customers' service. The primary reason mentioned for poor level of customer service is the internal operations that have direct effect on the company's ability (potential) to embark on external integration. In other words, its effect is clearly reflected on customers not getting what they need when they need it, long lead time, and poor complaints management, poor integration with suppliers, not having effective flexible production system that could respond to the changing market and customer's preference. From SCM practices the case company has a great problem on training and IT practices. These two practices play a decisive role for creating effective and efficient SCM. Poor IT facilities lead to poor information sharing and poor information sharing practices makes a supply chain management ineffective. On the other hand, supply chain management need effective internal operation for creating integration with external partners. For making internal operation effective, the human resource is a critical factor and in order to have skilled,

committed, and capable employees and managers, to utilize resources effectively and efficiently training plays a significant role. But the case company's training practice to make both employees and managers competent is the poorest out of the five SCM practices. Therefore, the case company's poorness in training and IT leads to poor/ week integration both in internal and external partners.

The SCM main concept is creating a relationship with other partners through the SC to provide products and services in order to satisfy the customers. The relationship of the dire dawa food complex share company with its customers and suppliers is not strong, in sharing sales forecast, cooperativeness, joint product planning, is moderate. Therefore, these relationship shows as the relationship between dire dawa food complex share company SC participants are traditional, that is buy-sale relationship. The researcher concludes that the great challenges that prohibit effective SCM of dire dawa food complex share company like, manufacturing, supply and demand uncertainties and fluctuation of inventories due to distorted information (bullwhip effect) are because of poor relationships between SC partners.

Suggestion

It is noticeably explained that internal integration is vital in increasing the potential of the company to get external integration. Dire dawa food complex share company is suggested to integrate the internal operational units, so as to bring about flexible, responsive and efficient production. This can be done first, by networking the functional units of the organization with appropriate IT and integrated information system. Secondly, breaking functional silos to encourage coordination and interdependent work design accompanied with agile work force and multipurpose machineries to improve flexibility and responsiveness to market and customers requirements. The human resource is the essential factor that performs all activities to make Supply Chain Management effective and efficient. At the current situation marketing competition, customer preferences, and everything is changing rapidly. Therefore, this change enforces companies to change their strategies, and operations. Out of these changes having skilled, agile, and lean man power is the one. So that, dire dawa food complex share company is highly suggested that to prepare training program for its employees and managers in order to enable them to be competent, committed, responsive, finally this improves internal operation and customer service. This can be done through creating relationship with training institutions, strengthen the internal human resource department, internal sourcing. Using appropriately the opportunities given by the government through sending the right person to the training program. The current information technology practice of the case company is poor and affects effective communication and integration of data within the company. The case Company should improve and invest on IT facilities to enhance information sharing both internally and externally. This can be done through hiring IT specialists or out sourcing.

More importantly, the case company is suggested to improve its relationship with suppliers from simply buy-sale relationship to a modern supply chain relationship through

establishing strategic or long term relationship, contract, and continuous information sharing in order to minimize supply uncertainty which resulted in demand and supply unmatched and dissatisfaction of customers of the case company. Because, this could help the case company to obtain the inputs at the right time and quantity from these suppliers and provide the required quantity by the customers when they need it. So that, this will minimize the dissatisfaction of customers due to shortage of materials. Another important issue that is suggested to the case company's marketing department is improving the relationship with customers through a continuous information sharing, follow-up them and get feedback, monitoring customers' perceptions towards service of the company, improving its compliant management through conducting market research for better responsiveness.

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