Evaluating supply chain management practice among micro and small manufacturing enterprise in Southwest Ethiopia

Bayelign A. Zelalem*, Ayalew A. Abebe

Abstract
The aim of this study was to assess the supply chain management practices of micro and small scale manufacturing enterprise operates in Bench-Sheko zone, southwest, Ethiopia. This examination utilized the realistic investigation plan to assess the evaluation of supply chain management in small and medium-scale manufacturing enterprises operating in Bench-Sheko zone. The evaluation has embraced a qualitative research methodology. The study revealed that only 38, 26, 32, 49, 15, 43, 36, 38, 32, 27, and 34% of manufacturing enterprises in the area incorporate environmental requirements in supplier selection, byproduct reuse, waste recycling strategy, utilization of energy-efficient raw materials, provision of incentives to potential suppliers, frequent information sharing with suppliers, promotion of strategic supplier relationships, promotion of supply chain integration, quality logistics, electronic logistics management, and logistics scheduling alone. The significances of this study have vital implications for small-scale and micro enterprise. In order to stay competitive and survive in the long run, manufacturing industries should prioritize the adoption of environmentally-friendly supply chain networks, supplier relationships, and logistics management.

Keywords: Green supply chain management, Supplier relationship management, Logistics management, Micro and small enterprise.

Introduction
Supply chain management nowadays becomes a pivotal strategy for firms to upgrade their productivity and stay competitive (Li et al., 2006). Besides, supply chain management (SCM) has been at the focal point of world discussion with expanding interest attributable to its high level business approach and upper hand (Zhou and Benton, 2017). Hence, supply chain management has been perceived as a significant marvel that has created broad interest among chiefs and scholastic specialists. Studies have uncovered that supply chain management builds execution, consumer loyalty, and upper hand, and decreases cynicism because of its positive effect on HR (Fritz et al., 2017). Likewise, (Sajad Vafaei et al, 2019) delighted that there is a positive and critical connection between supportable production network the executives and manageable upper hand.

Today cost advantage is generally accomplished through supply chain management (Govindan et al., 2014). Supply chain management tends to the financial, social, and ecological requirements of providers and clients. In the production network the executives' structure is considered as an essential for supportable achievement. Planning a feasible store network the executives' structure gives an upper hand to organizations (Büyüközkan, 2011). The execution of feasible store network the executives have been perceived as an imperative factor in business manageability (Ahi et al., 2016).

The linkage between supply chain management and SMEs have discovered that inventory network could be utilized by SMEs with significant achievement. Spekman (1998) and Quayle (2003) tracked down that the presentation of store network has helped SMEs in diminishing expenses without thinking twice about consumer loyalty levels. Unmistakable and theoretical advantages were likewise prominent with advantages, for example, expanding on-time request conveyance, lessening creation costs, shortening
the item advancement life cycle, working on quality, diminishing stock, and bettering stock administration being the substantial advantages.

The elusive advantages incorporate sharing and trading data precisely, ideally, and reliably, quicker reaction to client needs and further developing the quality of assistance. Soonhong (2015) contended that store network among SMEs further develops business chain joint effort and that the normal results of supply cooperation could be inventory network abilities that incorporate better interest arranging, stock deceivability and new information and abilities.

Rivalry in the present worldwide business sectors, the presentation of items with more limited life cycles, and the elevated assumptions for clients have constrained business ventures to put resources into and center consideration around their stockpile chains. Associations are going through an upsurge as far as executing new functional procedures and innovations in light of the difficulties and requests of the 21st Century (Gunasekaran et al. 2017). This is important for investigating the potential in-store network of the board, which would urge associations to react to clients’ one-of-a-kind and quickly changing requirements and further develop income development.

The majority of research conducted on supply chain management focuses heavily on operational aspects. Studies by Apopa (2012), Blowfield and Dolan (2010), and Kasomi (2012) have discovered changed effects of production network the board on firm execution. A portion of the discoveries incorporate, yet not restricted to; progress and the board authoritative cycles and upgraded execution estimation. In any case, the circumstance on the ground is that administration of supply chains have not been all around covered among SMEs. SMEs require complete comprehension of the everyday exchanges to work together exchange chain and the works on empowering production network the executive’s offices and direct hierarchical execution. This has not been the situation in the SME area particularly in Bench Sheko zone in the new past.

Notwithstanding, because of their limitations in sizes, assets and other ordinary attributes, SMEs enjoy less serious benefits and are for the most part more helpless (O’Gorman, 2011). The pace of SME disappointment which as per measurements is three out of five organizations close down inside the initial not many long periods of activity, is higher in non-industrial nations than in created nations passing by the horde of difficulties that undermine their drawn-out endurance (Arainaitwe, 2012). Absence of preparation, ill-advised financing, helpless administration and an overall failure to offer quality types of assistance have been inseparable from SMEs. This is the motivation behind why bigger organizations are chosen and given business only for their clout in the business and name acknowledgment alone (Bowen, Morara and Mureithi, 2015).

The previous stems from potential customers seeing private ventures as coming up short on the capacity to offer quality types of assistance and not to fulfill more than one basic undertaking at the same time have been referred to as the primary driver of disappointment of little endeavors (Longenecker et al., 2016). Therefore, the current study assesses the supply chain management practice in micro and small-scale manufacturing enterprises.

**Literature Review**

Supply chain management is an extremely new field; it has its underlying foundations in each part of the associations. Past it was viewed as calculated and its capacities just streamed of products. With the progression of time, scientists and academicians add esteem like, showcasing, stock administration, money, advancements, or even new item improvement. As indicated by Shukla, Garg and Agarwal (2011) “Inventory network Management is the administration of material, cash, men, and data inside and across the store network to expand consumer loyalty and to get an edge over contenders”. It likewise incorporates providers, coordination suppliers, clients, and different individuals, so first it bargains supply as well as interest and different sides and furthermore, it’s anything but a basic chain yet has become an unpredictable organization (Shahbaz, Rasi, Bin and Rehman, 2017; Whitten, Kenneth and Zelbst, 2012). Consequently, for better agreement, it is fundamental to see all individuals from the inventory network that has either aberrant or circuitous impacts of execution.

Supply Chain Production networks are framed out of assembling organizations and specialist co-ops like crude material providers, unique gear makers (OEMs), coordination administrators, wholesalers, retailers and clients (Tehran, 2009). Inventory network the executives react to various prerequisites of every client. The store network idea has existed for quite a while. The store network is an arrangement of associations, individuals, advancements, exercises, data and different assets for conveying an item or administration from the provider to the client. The store network is characterized by five players: Inputs providers, makers, originators, and the preparing industry (Rósis and Mesquita, 2018). The store network is likewise characterized as an arrangement of incorporated business exercises throughout an item's life cycle that benefit partners and further develop People's well-being (Hussain, 2011).

The integrative methodology proposes that esteem creation for administration associations might be installed in an advancement esteem chain, comprising of creating thoughts, changing over them into items and dispersing practices and items got by the association (Jacintho et al., 2018). Van Hock and Erasmus (2000) show that green inventory network executives raises environmental productivity. This occurs through bringing down the natural
dangers and effects, subsequently accomplishing upper hand which thusly further develops the execution of the interaction and items as indicated by the necessities of the ecological guidelines. A positive relationship is in this way settled between GSCM practices and firm execution Srivastava (2007).

Zhu et al., (2015) proposed that to remain serious on the lookout, the supervisors ought to further develop their ecological consistency which has been arranged by the power to cover the client and the climate in their creation interaction. Creating natural sound approaches and systems on the production network assists the association with tending to advertise needs and give an unmistakable comprehension of other production network part’s needs. GSM benefits range from cost decrease to coordinating providers in a participative dynamic interaction that advances ecological development (Hall, 2013).

A lithe Store network is market delicate and the production network individuals should show the eagerness to establish a climate where data can stream openly in the two ways in the chain for them to accomplish a more nimble provider base. Christopher (2010) contends that utilizing provider relations permits organizations to make light-footed stockpile chains by decreasing lead time between associations. The influence of individual qualities and capabilities of organization accomplices helps to accomplish more noteworthy responsiveness to showcase needs (Christopher, 2010).

Porter (2008) opines that the adoption of information technology will change the competitive environment in three ways, namely through changing the structure of the industry, changing the rules of competition, and giving businesses new methods to gain competitive advantage over the competition. Information technology help to communicate between upstream and downstream partners, creating a virtual supply chain that is information-based rather than inventory. Virtual supply chain ensures information is shared among partners, forming a process alignment through collaboration that is linked together as a network. Electronic Data Interchange (EDI) and the internet have made it possible for players in SCM to share the same data rather than waiting for that extended chain to transmit data from one step to another.

The company that are market-driven can easily realize agility by investing in product research and modern information technology that enables it to react quickly to fluctuations in product demand and sourcing problems. (2008) think that the reception of data innovation will change the cutthroat climate, thereby, specifically through changing the construction of the business, changing the guidelines of rivalry, and giving organizations new strategies by which to acquire upper hand over the opposition. Data innovation help to convey among upstream and downstream accomplices consequently making a virtual production network that is data based as opposed to stock. Virtual production network guarantees data is divided between accomplices consequently shaping an interaction arrangement through cooperation that is connected all together. Electronic data interchange (EDI) and the web have made it feasible for major parts in SCM to have similar information as opposed to trusting that a lengthy chain will communicate information starting with one stage then onto the next. Organization that are market-driven can undoubtedly acknowledge readiness by putting resources into item exploration and current data innovation that empowers it to respond rapidly to the vacillations in item interest and sourcing issues.

Besides, Abdala et al., (2018) concentrated on the triple primary concern in green store network the board: A substance industry study. The motivation behind this article is to distinguish economic practices utilized by synthetic enterprises of the triple bottom line. Semi-organized meetings were done with troughs of medium and private venture endeavors. Results show that supportability is available in both; nonetheless, not completely comply with the manageability mounts idea. The medium-sized organization has a higher advancement of its ecological practices and could be considered as a central organization between the store network and their providers.

Furthermore, Vafaei, S. et al. (2019) directed their examination on the examination of connection between the practical inventory network the executives and the feasible upper hand as per the interceding job of development and economic interaction the board.

The outcomes showed a positive and critical connection between the executives’ practical inventory networks and the feasible upper hand. Besides, it was discovered that advancement and supportable cycle the board factors play an intervening and directing job on the connection between feasible inventory network and the economical upper hand.

Loury-Okoumba (2021) examined the inventory network the board predecessors of execution in little to medium scale undertakings. The examination gives an investigation of the association between SCM methodologies, production network dexterity and store network execution among SMEs in South Africa. The consequences of the examination revealed that every one of the four SCM methodologies (provider cooperation, all out quality administration, innovation reception, and store network incorporation) related with and anticipated production network nimbleness. Innovation reception (β = 0.54) arose as the most grounded indicator of production network spryness. Thus, inventory network nimbleness corresponded with and anticipated store network execution. Gudda, K. O., and Deya, J. (2019) examined the impact of inventory network the board rehearses on the exhibition of little and medium measured ventures in Nairobi County, Kenya and the investigation demonstrated that green inventory network,
provider connections the executives, data innovation, and coordination's the executives have a positive relationship with execution of SMEs.

**Methods**

**Research Design**
The assessment employed a practical research approach to evaluate the effectiveness of supply chain management practices on small and medium-sized manufacturing businesses operating in the Bench Sheko Zone. The assessment has accepted qualitative investigation approach. According to Hoepfl (1997), emotional investigation procedure can be used to increment new perspectives on issues very few or little is as of now known, or to procure information that may be difficult to pass on quantitatively.

**Approach, Data Source and Collection Method**
The examination level is grouped by Gil (2008) on three levels: exploratory, explanatory, and informative. Following this model, the created research was done in two associated stages: The exploratory and the expletory stage.

Exploratory examination was important since the subject is minimal contemplated, and there are not many wellsprings of examination focusing on the advancement of an outline (Gil, 2008). This examination was applied to foster the writing audit, which permitted the exploration instrument improvement. After the exploration instrument approval, it was shipped off a gathering of experts to check their consistency.

From that point forward, explanatory research was done with the essential goal of portraying the qualities of the populace or the marvel that examined, permitting the foundation of connections between the examination factors (Gil, 2008). The unmistakable examination's primary target was to sort out the data identified with the contemplated subject, working with understanding the information (Kerlinger, 1988). During the examination's clarification phase, factor analysis was utilized to describe and summarize the tested characteristics, enabling a comparison between the findings and the literature. To this end, the motivation behind this investigation was on the evaluations of supply chain management practices on small and medium-sized enterprise. To accomplish this target the investigation used subjective exploration approach and essential information was done utilizing self-regulated review questions. The populace was comprised of 47 micro and small scale manufacturing enterprises in Bench Sheko zone and the investigation utilized population enumeration. The data's assembled using table, number, and percentages.

**Data Analysis and Discussion**

**Classifications of Respondents by Gender**
Figure 1 shows that 79% of the respondents are male and 21% female respectively.

**Classification of Respondents by Age**
Figure 2 shows that 6% of the respondents are 25 to 30 years, 19% are from 31 to 35, 26% are from 36 to 40 and 49% are above 40, respectively.

**Green Supply Chain Management**
To recognize where there is green production network the board or not this investigation formed the over four (4) inquiries in Figures 3-6 individually to the proprietors of the assembling ventures in Bench Sheko zone under green store network the executives.

Q1. Does your manufacturing enterprise incorporate environmental requirements during supplier selection?

Figure 3 beneath shows that 38% of the assembling undertaking in Bench Sheko zone joins ecological necessities during their provider choice; nonetheless, 62% of the undertaking doesn't join ecological necessities when they select a provider.

Q2. Does your manufacturing enterprise recycle waste products which minimize environmental pollution?

Figure 4 beneath shows that 26% of assembling undertakings in Bench Sheko zone reuses side-effects which limit natural contamination. Be that as it may, the leftover 74% of assembling ventures in Bench Sheko zone wouldn't reuse side-effects.

![Figure 1: Manufacturing enterprise owners gender classification](image1)

![Figure 2: Manufacturing enterprise owner's age classification](image2)
Q3. Does your manufacturing enterprise have a policy to dispose waste products?

Figure 5 underneath shows that 32% of the manufacturing undertakings in Bench Sheko zone have a garbage removal strategy, and 68% of the leftover venture have no garbage removal strategy.

Q4. Does your manufacturing enterprise prefer raw materials which consume less energy?

Figure 6 beneath shows that 49% of the manufacturing endeavors favor column materials which devour line materials in any case, 51% of the ventures not lean toward crude material which burns-through less energy.

![Figure 3: Manufacturing enterprise and environmental requirements](image)

![Figure 4: Manufacturing enterprise and their experience on waste product recycling](image)

![Figure 5: Manufacturing enterprise and their policy on disposal of waste product](image)

![Figure 6: Manufacturing enterprise and row materials used](image)
Figure 7 underneath showed that 15% of the assembling endeavors give motivating forces to their expected providers and the other 85% of the venture not give motivators to their providers.

Q6. Does your manufacturing enterprise frequently share information to the supplier?

Figure 8 beneath demonstrated that 43% of the assembling ventures in Bench Sheko zone don’t every now and again share data to the providers. Nonetheless, 57% of the assembling undertakings in the zone often share data to the providers.

Q7. Does your manufacturing enterprise promote strategic supplier relationship?

Figure 9 beneath shows that 64% of assembling endeavors in Bench Sheko zone don’t advance key relationship with the provider the excess 36% of the assembling g ventures advance vital relationship with provider.

Q8. Does your manufacturing enterprise promote supply chain integration?

Figure 10 underneath shows that 38% of the assembling endeavors in Bench Sheko zone advance store network mix and the leftover 62% of the assembling undertakings wouldn’t advance inventory network coordination.

Firms deliberately examine every provider to figure out which providers are best situated to give the best re-visitation of the organization through nearer joint effort, other than having a ‘one size fits all’ technique for provider the board. An organization’s capacity to deliberately section providers so as to understand the advantages of both the a safe distance just as the accomplice models might be the way to future upper hand in inventory network the board (Dyer et al., 1996) and consequently addresses an essential methodology for organizations with an extraordinary number of providers. Zsididin and Ellram (2001) contends that relationship with specific providers bring about common benefits like decreasing generally cost, upgrade consumer loyalty, adaptability to adapt to changes, usefulness improvement and long haul upper hand in the commercial center.

As indicated by Gadde et al. (2010) numerous associations presently need to separate among its providers to deal with the assortment, intricacy and heterogeneity in the stock base. Assembling firms manages a wide scope of providers with various degrees of significance and which requires differential treatment that will drive a firm to its strategic advantage.

Firms can stay aware of its provider connections well then it is fit for having an additional standard presentation coming about because of better labor and products with the firm client base Wilson (1995). Li, Raju Nathan and Subbarao (2006) guarantee that for an association to accomplish and support upper hand it should have a solid relationship with its numerous providers. Cousins and Lawson (2007) utilized assembling firms as an example and presented that collective relationship are fundamental for keeping up with
execution level. Koury (2008) all around fabricated provider relationship guarantee high overall revenue. The finding of this investigation uncovered that the assembling ventures in Bench Sheko zone are powerless in provider relationship the executives which brought about breakdown of the business. The outcome doesn’t uphold the experimental finding of Gudda, K. O., and Deya, J. (2019) that delighted supplier connection the board has a huge impact on achieving upper hand and keeping a decent monetary presentation.

**Logistics Management**

At long last, to explore the assembling endeavors coordination’s the executives the investigation formed three inquiries in Figure 11-13 separately.

Q9. Does your manufacturing enterprise have quality logistics?

Figure 11 beneath shows that 32% of the assembling endeavors in Bench Sheko zone have quality coordination’s and the leftover 68% concurred with the subject of having quality coordination’s.

Q10. Does your manufacturing enterprise have electronic logistics management that reduces cost and time?

Figure 12 underneath showed that 27% of the assembling undertakings in Bench Sheko zone have electronic coordination’s and 73% of the ventures have no any electronic coordination’s the executives.

Q11. Does your manufacturing enterprise have logistics time line?

At last, Figure 13 underneath shows that 34% of assembling undertakings in Bench Sheko zone have coordinations timetable. In any case, 66% of the endeavors haven’t coordinations timetable.

The persistent change and improvement of cycles is a vital system for the working of the undertakings in current conditions and a huge upper hand. Production network the board rehearses sway by and large authoritative execution, yet additionally upper hand of an association (Karimi and Rafiee, 2014). The appropriate store network the executives is a cycle that diminishes expenses and expands the intensity of the organization (Kumar et al., 2006). Henceforth, the coordination’s needs to regard the way toward arranging, execution and control of the acquisition, stockpiling, transport and data and with the sole reason to further develop them. Each organization ought to foster a fitting mission and vision to carry out its business coordination’s.

The mission of the business coordination’s is to guarantee accessibility of the right item in the right amount, on the correct spot, at the ideal opportunity and to the perfect purchaser at the perfect cost. The vision of the business coordination’s is to guarantee maintainable turn of events, or to set coordination’s exercises and tasks to get the end-product with the most un-conceivable degree of coordination, greatest cooperative energy and least expenses as per all ecological and purchaser laws. Mentzer and Konrad’s (1991) meaning of coordination’s adequacy is the degree to which the coordination’s capacity’s objectives are cultivated.

Coordination’s is deliberately significant in numerous businesses as it is integral to accomplishing upper hand (Kenyon and Meixell, 2007). In any case, organizations should react to changing client needs, and coordination’s adaptability is a significant piece of the reaction (Zhang et al., 2005). Each organization should create or make own calculated qualities will be fused into the item, or its worth being used. In the present powerful cutthroat climate, coordination’s the board procedure has a huge impact in the generally speaking corporate administration, particularly in the space of resource the executives and monetary progressions of the organization. At the end of the day, the utilization of strategic investment funds will permit the arrangement of lower costs, longer installment terms, and more significant level of administration to clients and accordingly, expanded working effectiveness. Nonetheless,
This examination found that assembling endeavor in Bench Sheko zone are frail in encountering coordination's inventory network the board practice that influences the general development and execution.

Conclusion and Implications

Conclusion

The enhancement of profitability and the ability to stay competitive have made supply chain management an essential approach for companies in recent years. The objective of this investigation was to evaluate the supply chain management practices within micro and small-scale manufacturing enterprises in the Bench Sheko zone. According to the results, it can be concluded that the supply chain management practices of the manufacturing companies in the Bench Sheko area are lacking.

First in regard to the green supply chain management exercise only 38% of manufacturing businesses in Bench Sheko region contain environmental requirements in deciding on providers, 26% recycle waste product, 32% of the organizations have waste recycling policy and 49% of the enterprises used raw materials that requires much less power. Consequently, the look at concludes that manufacturing organizations in Bench Sheko area are not environmentally friend. Secondly, in terms of provider courting control practices, the examine observed that 15% of the producing agency gives incentives to the ability providers, 43% of the companies proportion statistics frequently to the providers, 36% of the organizations’ promotes strategic dealer courting, and 38% of the organizations sell supply chain integration. Therefore, it’s concluded that the producing organizations’ in Bench Sheko region are weak in supply relationship management. In the end, the take a look at unearths that 32% of the producing corporations in Bench Sheko sector have first-class logistics, 27% of the establishments have electronic logistics management and 34% of the organizations’ have logistics timeline. Then again the take a look at concluded that the manufacturing enterprises in Bench Sheko region faced the problem of logistics control.

Policy Implications

In order to survive and thrive in the competitive manufacturing industry of Bench Sheko area, it is imperative for the producing organizations to prioritize the implementation of sustainable supply chain management practices. This will ensure that their products are environmentally friendly and align with the growing demand for eco-conscious options. Additionally, the manufacturing companies should allocate more resources towards effective supplier communication to minimize procurement costs through unnecessary reworks. By doing so, they can ensure that professional suppliers deliver the desired results on the first attempt, saving both time and money. Furthermore, it is crucial for manufacturing establishments to consistently allocate a significant portion of their resources towards activities that require a substantial amount of total assets, particularly in the realm of logistics functions. Lastly, the practice recommends that procurement teams within these organizations strictly adhere to procurement procedures to guarantee that the goods supplied meet the required standards in terms of quality, quantity, timeliness, and source.

Limitations and future research suggestions

The study has several limitations. Firstly, the findings of this study are only applicable to micro and small scale production companies in the Bench Sheko area, excluding other sectors. Secondly, the study relied on qualitative data, which did not address the need for quantitative information. Thirdly, the study focused on a limited range of supply chain management practices. Therefore, further research is needed to assess supply chain management practices in manufacturing companies, incorporating a wider range of practices and including other regions in the southwest. Additionally, there should be investigation into the assessment of supply chain management practices in micro and small enterprises, as well as in other sectors.

References


Büyüközkan, G. (2011). Designing a sustainable supply chain...


