

Research Article

A Proposed Frame Work for Enhancing Competitiveness of Small and Medium Enterprises (SMEs)

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Abstract

Small and medium enterprises (SMEs) are important agents of development throughout the world. Promoting a country's SME sector plays a crucial role in maintaining high employment and income generation and is therefore critical for achieving sustainable growth by enhancing SMEs competitiveness. The general objective of this paper is to develop a theoretical framework model for garment SMEs competitiveness that supports garment manufacturing small and medium enterprises (SMEs) to enhance their competitiveness by identifying the possible competitiveness factors. To achieve the presented objectives, a purposive sample basis on selected garments manufacturing SMEs found at three different clusters in Addis Ababa city administration is used. The data in this paper are both primary and secondary data. Primary data was collected through questionnaires, interviews and observations, while secondary data sources referred from company's documents and several articles from reputable international journals. Both qualitative and quantitative approaches are used to analyse the collected data using various statistical programs. The results of the paper found that in garment manufacturing SMEs the main difficulties faced in performance dimension which is divided into financial performance and non-financial performance are the lack of collateral, the lack of proven track records, the lack of proper business plans and the need to show good sales turnover are the major financial performance parameters that deters the competitiveness. The SMEs do not have well established system to support effective and efficient implementation systems for productivity improvement. Finally the garment manufacturing SMEs are potentially wasting valuable and scarce resources since they don't implement productivity improvement tools and techniques Lack of appropriate machinery and equipment are the main non-financial performance parameter that deters the competitiveness. To tackle the problems and enhance competitiveness of garment manufacturing firms, a theoretical conceptual model based on this requirement has been developed and the implementation requires a coordinated and well organized system among the actors (at macro and micro level) in the value chain. Some of the major problems such as lack of skilled manpower and infrastructure have to be tackled by the government and private sectors. And the other problems could be approached by using some modern management philosophies (such as just-in-time manufacturing, business process re-engineering, lean production) and scientific methods like production planning and control.

Keywords

Garment, SMEs, Manufacturing, Competitiveness, Performance

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1. Introduction

Small and Medium Enterprises (SMEs) are recognized across the globe to be important in nurturing entrepreneurial culture, employment creation, reducing poverty and play a critical role in the contribution to Gross Domestic Product (GDP) both in advanced countries as well as developing countries [1]. However, SMEs are still facing a number of challenges and constraints which limit their contribution to economic transformation in African countries [22].

Having understood the significant roles of SMEs, the Ethiopian government has given due attention to strengthen SMEs and took a decisive measure for the development of the sector. As a result of which, the Council of Ministers approved Regulation No.201/2011 and re-structured the Federal Micro and Small Enterprises Development Agency again to enable the agency achieves its objectives [11].

Small and medium enterprises (SMEs) are one of the principal driving forces in economic development. The SMEs also can generate employment opportunity through diversification of economic activities in the economy. However, there are several factors which must be addressed to ensure competitiveness of SMEs. Based on this fact the general objective of the paper is to develop a theoretical frame work model for garment SMEs competitiveness that supports garment manufacturing small and medium enterprises (SMEs) to enhance their competitiveness by identifying the possible competitiveness factors in selected garment manufacturing SMEs in Addis Ababa city administration.

2. Literature Review

2.1. Overview of the Ethiopian SMEs Sector

2.1.1. Definition of SMEs

From the literature review there is no universal definition for SMEs since the definition depends on who is defining it and where it is being defined. SMEs can be defined in two ways: based on the number of employees in an enterprise and/or the enterprises fixed assets. According to F. D. R. E council of ministers regulation no. 373/2016" SMEs in Ethiopia are defined and classified based on the size of cost of investment of the firm and its number of employees [10]. For this study this definition is used to identify SMEs sector from other sector.

2.1.2. Characteristics of SMEs

Easy of entry, reliance on local resource, family ownership, small scale operation, labor intensive, adopted technology and competitive market are among the major characteristics of MSE. key characteristics of SMEs as follows: personalized management, with little devolution of authority, severe resource limitations in terms of management, manpower and

finance, reliance on a small number of customers and operating in limited markets, flat, flexible structures, high innovation potential, reactive, fire-fighting mentality, informal, dynamic strategies, small scale productions and sales, low labor productivity and high labour intensity, lack of skilled labour and strong dependency on unpaid family workers and inadequate financial resources [14].

Similarly it is outlined that the common characteristics of SME like small scale operation, labor intensive mode of production, low fixed cost, reliance on family labor, use personal and informal source of credit, and lack of wage employment [7].

2.1.3. SMEs Contribution to Economic Development

There are two primary reasons that the garment industry continues to be the industry that is used to lead developing countries to the promise of a better tomorrow. The reasons are the industry continues to be labor intensive, and the barriers to entry are relatively low [7].

Ethiopian government has given special emphasis to the growth and development of Small and Micro Enterprises and they are now become the lifeblood of the Ethiopian economy [25].

The development of the sector in Ethiopia is believed to be the major source of employment and income generation for a wider group of the society in general and urban youth in particular. Citing the source from the Federal Micro and Small Enterprise Development Agency (FMESDA), the EEA Research Brief noted that a total of seventy thousand five hundred (70500) new MSEs were established in 2011/12 employing eight hundred six thousand three hundred (806300) people across the country.

As the contribution of SME sector in every major macroeconomic indicator became clearer, particularly with respect to the role of these enterprises in creation of new jobs, real GDP growth and development of entrepreneurship, SME sector became the center of socio-economic policies in Ethiopia economies, also causing an acceleration of research in this area. This is why this paper is conducted to develop a theoretical model to enhance the competitiveness of the garment manufacturing SMEs to increase their GDP share.

2.2. The Concept of Competitiveness

Competitiveness of a firm is its capacity to achieve its targets. These targets are likely to be expressed in a variety of terms depending on the context. Objective criteria include return on investment, market share, profit and sales revenue, while subjective criteria include enhanced reputation with customers, suppliers, and competitors, and improve quality of delivered services [19].

Competitiveness of the firm as a result of its market position, resource-based theorists do claim that if firms within an

industry are doing well, the reason for this is their core competencies. "Core competencies are the collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of technologies as explained by the study of Garengo et al. [13]."

Enterprise competitiveness is the ability to sustain a market position by, inter alia, supplying quality products on time and at competitive prices through acquiring the flexibility to respond quickly to changes in demand and through successfully managing product differentiation by building up innovative capacity and an effective marketing system [2].

2.3. SMEs Performance and Competitiveness

A challenge for co-operatives in maintaining consistent quality in clothing manufacturing is that they lack certain resources which are important to implementing and for continuous monitoring of quality practices, these resources as already indicated include capable sewing machines, available technology, skilled labour, quality assessment standards, pre and post quality checks and the sewing process outline [23].

Over the past decade, governments and international donors have increasingly turned their attention from merely offering financial assistance to providing business development services (BDS) for SMEs, recognizing that financial support alone is not enough for achieving sustained competitiveness. BDS are all types of SME support services, including training, consulting, technical and managerial assistance, marketing, physical infrastructure and policy advocacy [21].

Standards may also positively contribute to the innovation performance of firms and consequently competitiveness. Furthermore, even when a certificate has been already obtained, the continuous improvement requirements common to most used international certifications like ISO 9001. Finally, the same adoption of superior quality managerial systems and operational practices may help firms build technological capabilities and strengthen their ability to develop and absorb knowledge and, thus, to implement technological innovations [3].

Competitiveness of a company is mostly dependent on its ability to perform well in dimensions such as cost, quality, delivery, dependability and speed, innovation and flexibility to adapt itself to variations in demand [4]. While alignment of the manufacturing function with strategic priorities is core to competitiveness, the continuous improvement of the manufacturing function plays a very important complimentary role in the quest of competitiveness in the long run.

Productivity improvement methods into the following categories: logistics, quality, production engineering and others. Many firms have tried the tools of quality and productivity improvements (e. g. Quality Circles, Kaizen, control charts, etc.) but with limited success in their organizations. They have observed how these tools work but do not understand why they work and thus are unable to construct a coherent system for improvements [10].

2.4. Factors for Competitiveness of SMEs

There are internal and external factors that affect the performance of the firm. Condition of production process, labor, management, firm level investment, marketing, organizational structure, firm intellectual property, and firm level technological capability and effort are typical internal factors. National infrastructure, trade policies, good governance, political stability, demand and inflation, national investment, national systems of innovation, and competition and intellectual property are external influences affecting firm's performance [15].

To transit the high road to competitiveness, firms both large and small in developing countries have to build and continuously enhance endogenous capabilities [17]. Ineffective management is the most significant factors that have strong impact on the less productivity followed by Outdated system, Inadequate Monetary and non-Monetary rewards, Unsafe working conditions and the insufficient and ineffective coworkers [23].

Several key issues for improving SME competitiveness in Indonesia; they are human resource, working capital, management and technological skills. These key factors are important to improve SME's business performance. SME business network has major contributions to their marketing performance [19].

Since 2001, micro and small enterprises (MSEs) in Ethiopia have been confronted with several factors that affect their performance. Major factors include financial problems, lack of qualified employees, proper financial records, marketing problems and lack of work premises [26].

Inadequate infrastructure facilities, inadequate finance, poor managerial and technical skills, and inadequate working premises were the major challenges to MSEs' successful operations followed by marketing problems, low support from respective institutions, inadequate supply of raw materials, and regulatory issues [22]. According to Commission on Legal Empowerment of the study, most MSEs in Ethiopia face critical constraints both at the operation and start-up level. Some of these constraints include lack of access to finance, access to premise, infrastructure, training in entrepreneurial and management skills, information on business opportunities, and social and cultural factors particularly related to deficient entrepreneurial culture and excessive corruption.

In spite of the enormous importance of the micro and small enterprise (MSE) sector to the national economy with regards to job creation and the alleviation of abject poverty in Ethiopia, the sector is facing financial challenges, which impeded its role in the economy [27]. Despite Ethiopian government efforts, it shows that there are a number of bottlenecks to address. These enterprises are still suffering from lack of initial and working capital, lack of premises, lack of market and unskilled labor force [6]. One of the leading factors contributing to the unimpressive growth and perfor-

mance of the enterprises is limited access to finance [27]. In a similar way, comparing small and large firms the World Bank finds that small firms face more challenges in obtaining formal financing than large firms; they are much more likely to be rejected for loans, and are less likely to have external financing [24].

The above studies conducted shows that SMEs competitiveness is affected by many internal and external factors this justify that the SMEs are not competitive enough since there production process is affected by the internal and external factors and they are not competitive. This is why this study is conducted. One of the pathways for achieving SMEs competitiveness is through enhanced performance. This study is purposed to identify factors of competitiveness and develop comprehensive theoretical model of SMEs competitiveness.

2.5. Measurements of Performance and Competitiveness

For sustainable growth in highly competitive global market, performance measurement has become an essential component of strategy development by SMEs. Effective performance measurement system plays an important role in supporting managerial development in the organizations [13]. Performance measurement is defined as the process of quantifying the efficiency and effectiveness of manufacturing system. Performance of an enterprise is often measured as a ratio of output to input. It is highly essential that all the factors, both tangible and intangible, should be included in analyzing organizations performance [5].

As most small firms are privately held, it is unlikely that

their CEOs will be willing to provide detailed accounting data on the firm's performance. Therefore, they suggest the use of "subjective and self-reporting measures of performance." Performance of an organization relative to its industry standards is termed as its competitiveness [12].

Many excellence models and performance measurement frameworks, like the Kanji's business scorecard [17] balanced scorecard (Kaplan and Norton, 1992) and assets, processes and performance model [20] have proposed ways for analysing performance but gaps have been observed between strategy and performance measures [9]. Recommendation for taking steps to redesign the current performance measurement systems [14].

Four widely accepted competitive priorities are cost, delivery, quality and flexibility. Competitive priorities might be used as measures of competitiveness (external) and competence (internal). Organizations should optimize the quality/price ratio for operational excellence [8]. Advocating for linking of manufacturing improvement programs and practices with the competitive priorities of SMEs. Therefore, competitive priorities will have to be decided very carefully it will set the direction for adoption of different processes or management practices by the organization [18].

This is why this study is conducted. Therefore, the result can be used to increase the competitiveness by looking at all factors affecting garment manufacturing SMEs competitiveness. This study also provides recommendation for government to enhance government's role in supporting SMEs development. The recommendation is also addressed to institution that concern to do research about SMEs and entrepreneurship.

2.6. Sme Competitiveness Conceptual Framework

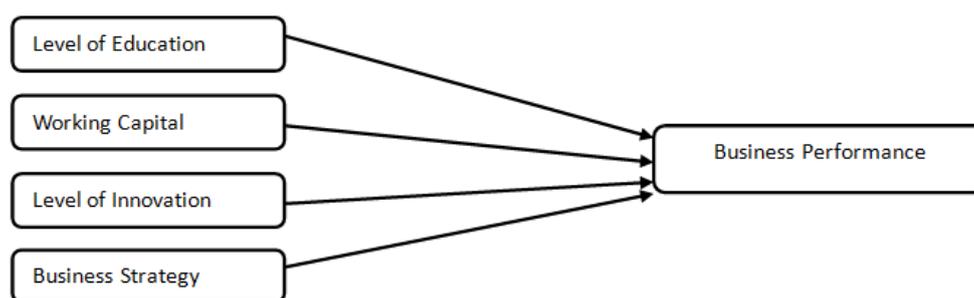


Figure 1. SME Competitiveness Conceptual Framework. Source: [16].

3. Research Methods

The paper, with the purpose of in-depth analysis of the garment manufacturing SMEs sector in three different cluster sites in Addis Abeba city administration uses Purposive sample base. To achieve the presented purposes primary and

secondary data are collected through questionnaires, interviews, observations and documents reviews. Both qualitative and quantitative approaches are used to analyses the collected data using various statistical programs. Primary data was collected though questionnaires, interviews and observations, while secondary data sources referred from company's documents and several articles from reputable international

journals. A structured questionnaire is used to collect data in the first phase followed up with interviews and observation in the second phase to conduct an in-depth investigation into the research problem.

The next decision in the framework of this research is to investigate the existing manufacturing performance of the SMEs. Having analyzed the existing manufacturing performance, its shortfalls are identified. Based on identified shortfalls a solution has been proposed by developing a comprehensive theoretical frame work model for garment SMEs competitiveness.

4. Results and Discussion

From literature competitiveness is viewed as a comprehensive concept. It can be accessed from the influences up to the results achieved. Three dimensions that are included in competitiveness concept are potential dimension, process dimension, and performance dimension. Potential dimension consist factors that are needed to develop the business, started from owner characteristics and company's characteristics that are influenced by internal capability and external environment. The second dimension named process dimension,

which is consist effective operation strategy and implementation and effective growth strategy and implementation. The third dimension is performance dimension which is divided into financial performance and non-financial performance. From the three dimensions this paper focuses on performance dimension to enhance competitiveness of garment manufacturing SMEs.

4.1. Assessment of the Performance Dimension of SMEs

4.1.1. Existing Productivity Measurement Practice of the Enterprises

The existing productivity measurement practice of the cause garment manufacturing SMEs, it has been observed that there is incompleteness in considering all productivity factors capital, labor, raw materials, machineries, energy and other utilities used in producing the final product of the firm. Ignoring one of these factors while measuring productivity of the entrepreneur, in fact, result in erroneous effect and misdirect the entrepreneur's productivity improvement effort.

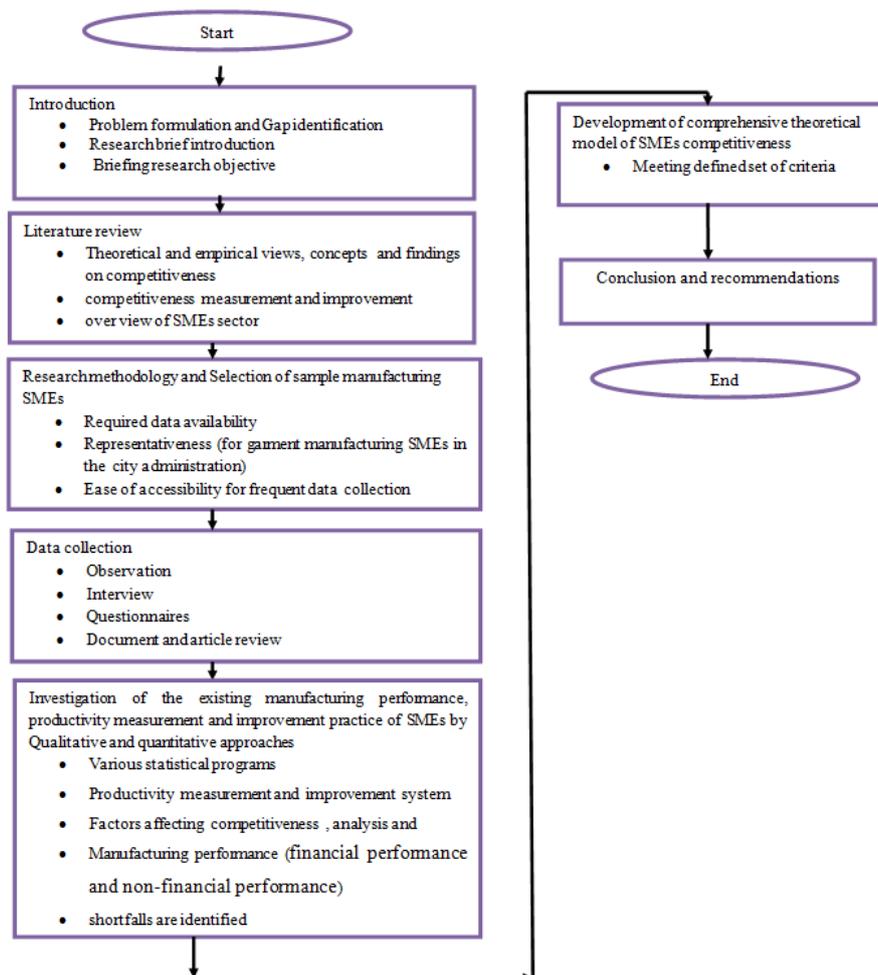


Figure 2. Research framework.

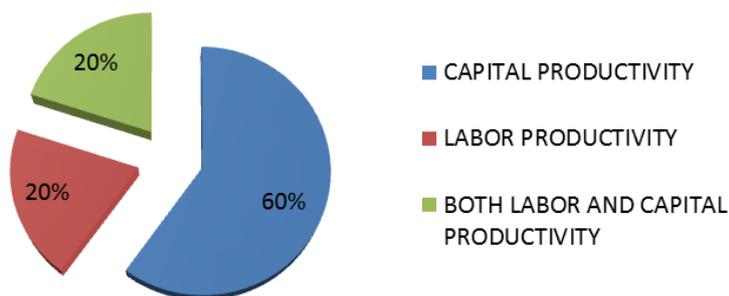


Figure 3. Pie Chart illustrating types of existing productivity measurement practice of SMEs.

From the garment SMEs having productivity measurement culture 60% use capital productivity, 20% used labor productivity and 20% used both labor and capital productivity for their productivity measurement practices. But this doesn't show the overall firm productivity (multi factor productivity), it gives productivity information only about the labor and capital (partial productivity), this by itself affects the SMEs productivity since they doesn't have full information about all the measures.

4.1.2. Existing Productivity Improvement Techniques of the Enterprises

From literature firms that achieve dramatic improvements in performance are those that take a systems approach and make the necessary culture change in their organization in order to improve their productivity. From literature reviews

above several productivity improvement techniques are available and among them technology based techniques, material based techniques, product based techniques, employee based techniques, task based techniques and management based techniques for productivity improvement are used to assess the garment SMEs in the city administration.

From the interview with the entrepreneurs majority of the respondents have knowledge of productivity improvement tools through awareness training. The finding is not surprising since government has been providing productivity awareness training to the sector through industry development office, ETIDI and FeMSEDA. Judging from the productivity problems still affecting the sector, this may indicate that the productivity campaign is not producing the desired results and needs improvement.

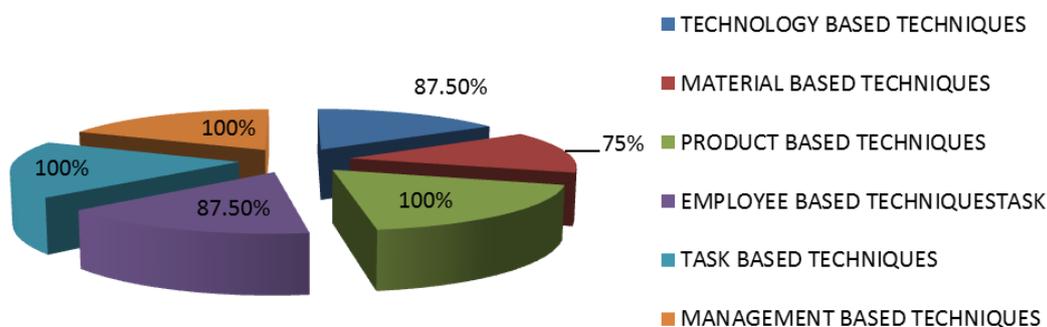


Figure 4. Pie Chart illustrating productivity improvement techniques.

On the subject of technology based techniques, 87.5% of respondents mentioned that introduction of new production line, computer aided pattern design and new machine were the top technology based techniques used for productivity improvement. But since all the above productivity improvement techniques requires capital in order to introduce the SMEs can't implement them as a productivity improvement techniques since they have capital problem due to collateral requirement for loan.

On the topic of material based techniques, 87.5% of respondents mentioned that introduction of raw material quality control and material handling improvement were the top material based techniques used for productivity improvement.

On the other hand, 75% of respondents showed that inventory control and 50% of respondents showed material reuse were also material based techniques used for productivity improvement.

From the analysis of collected questionnaire it is understood that, 100% of respondents mentioned that product standardization and product reliability were the top product based techniques used for productivity improvement. But since there is no standard at national level for garment manufacturing, SMEs are not manufacturing according to standard this in turn reduce their garment product reliability in the market.

Moreover from the research 100% of respondents men-

tioned that working conditions improvement was the top employee based techniques used for productivity improvement. On the other hand, 87.5% of respondents showed that financial incentive and job evaluation are employee based techniques used for productivity improvement. Almost all SMEs use financial incentive productivity improvement techniques by giving financial incentives for best performing employees. This creates competition between employees. The other employee based productivity improvement techniques used by SMEs to enhance their productivity is education and training of employees and 70% of respondents showed training and education were employee based techniques used for productivity improvement respectively.

4.1.3. Top Management Commitment

Results from both interview and observation indicated that there is poor top management commitment when it comes to application of productivity improvement techniques. Studies in the area of productivity improvement adoption indicate that top management is vital to the success of productivity improvement techniques. Indeed, the lack of top management commitment in productivity improvement techniques application has been attributed to the low level of awareness among managers of the existence of these productivity improvement techniques, as well as their limited faith in the usefulness of these tools which result in poor tool implementation is also the major constraint of the SMEs in the city administration observed.

4.1.4. Training

From the responses lack of training is the main reason for the productivity improvement implementation failure. The entrepreneurs also pointed out that the government agent's industry development office and TVET doesn't have enough competence to give practical skill training. They further stated that some of their positions remain vacant for long periods of time because they cannot find skilled manpower to fill the positions. They also highlighted staff turnover as one of the reasons for lack of skills as employees tend to migrate to other organizations leaving them short in manpower hence rendering them to produce below their set standards.

4.1.5. Machinery and Equipment

Regarding manufacturing machine/equipment utilization except one garment in all garment SMEs, all machines are not run all the time because the garment SMEs doesn't have continuous job order. Since there is no continuous production most of the time machine/equipment are idle. Due to shortage of working capital, the current political unrest of the country, shortage of raw materials (resulted from shortage of hard currency), bureaucracy of developmental bank of Ethiopia for loan, market and electric power shortage due to this they are not producing in accordance with their schedule and most of the production machines are idle for days or weeks

without any work.

The respondents have also indicated the major reasons for machine failure, which includes: improper handling of machines, maintenance problem, depreciation, old machines, due to improper handling of machines, machine quality problems, using machine for long period of time without maintenance, electric power fluctuation, and shortage of operator's skill, spare parts problem and motion of machines from one place to another.

According to the interview with the entrepreneurs, absence of modern machines, tools and equipment's have hindered them to produce products in a better quality and much quantity. The regular payment for machines bought by credit made them lead a subsistence life having no significant improvement in their growth. Moreover, respondents replied that, if new and appropriate technologies obtained, the presence of them will result in fundamental growth of their business and enhance their performance.

4.1.6. Production Processes

The general trend of the production processes are such that there is no separate sections for cutting/sewing/finishing rooms exist which is difficult to manage and improper as utilization of resources. In addition position of departments, especially in case of warehouses, is not according to a general flow leading to extra material handlings and transport. In cutting sections, accumulations of fabrics are observed, due to missing correct flow and limited skills of operators for the spreading and numbering operations. Furthermore intermediary between cuttings and sewing is missing, where mostly it is done directly in lines leading to poor utilization of available machines and personnel. Besides supplying accessories with fabrics according to the cut quantities are not done and all accessories are delivered directly to line generating waste and errors. Most of the garments SMEs are not using their production capacities due to raw material shortage.

4.1.7. Quality Improvement

In garment manufacturing SMEs, the quality awareness is very low. Most of the firms do not even clearly identify their customers. They produce their products without considering customer needs/requirements. The production system is traditional and it is not quality and market-oriented. Hence, the enterprises should make use of quality control tools for measuring, prioritizing, and improving their processes.

Quality control system should be implemented to measure the percentage that deviate from the acceptable in order to prevent the reoccurrence of a defect garment. Quality control techniques should include monitoring incoming raw material quality levels as well as utilizing statistical quality control methods to reduce garment variability.

Garment SMEs must have quality improvement plan to improve the productivity where it should include a quality policy that contains goals and methods to achieve it. They should implement and maintain a documented quality system

as a means of ensuring quality. Implementation of the quality systems, together with an intensive training over the handlings, methods, records and data analysis is necessary for all.

4.2. Conceptual Frame Work

The main components to enhance competitiveness for garment SMEs are identified based on the research analysis, intensive literature surveys and previous similar research works. These are; paradigm shift for radical change, management commitment, supply chain improvement, intensive education and training, continuous improvement and improved government support. Based on main components of competitiveness enhancing method a theoretical model for the garment SMEs is developed. The proposed theoretical model has been stated considering the specific nature of the garment SMEs, present technology, culture, financial ability, organizational structure and personnel involved.

4.2.1. Paradigms Shift

Paradigm shift is a continuous task that needs consistent updating to catch up the unprecedented global competition. An old long traditional industrial working trend has existed in garment manufacturing SMEs. Through time, individuals and the firms as a whole have adapted a traditional working culture. Most of the workers in these firms are not aware of the competitiveness, performance, productivity, productivity measurement and improvement tools and techniques of their firms.

They are not ready to make a change. Similarly, the firms accept this trend and they do not have vision to change their firms. Most of the firms are not ready to practice the modern management philosophies to improve their performance. To change attitude of both management and employees of the garment SMEs and enhance competitiveness Paradigm shift of management and employs attitude is required. Therefore paradigm shift (for radical change) is required from the government support system, entrepreneurs management commitment and employees attitude.

4.2.2. Management Commitment

Moreover to be competitive, it requires industries to perform a continuous improvement of their process, hence continuous improvement should always be an elusive goal for garment SMEs in order to improve the performance and competitiveness in the current market. Management commitments are also required for allocating budgets and resources and monitoring progress. Particularly management commitment needs to improve regarding training system and motivational system. The management should give attention for customers and must recognize that the purpose of all work and efforts to make improvements are to serve the customer better. Therefore, garment manufacturing SMEs shall focus their manufacturing efforts on the value added activities.

The identified problems could be approached by using some modern management philosophies (such as business process re-engineering, lean production) and scientific methods like production planning and control etc. In order to implement the modern management philosophies and scientific methods the SMEs management must be committed. Finally the government must undertake different package of measures to support SMEs to improve their management skills and enable local networks for benchmarking best practice where SMEs can learn from one another.

4.2.3. Continuous Quality Improvement

Quality has become one of the most important drivers of the global competition today. Intensifying global competition and increasing demand for better quality by customers have caused more and more companies to realize that they will have to provide high quality product and/or services in order to successfully compete in the marketplace.

There are many methodologies of continuous improvement. The two that can be adapted to the garment SMEs condition are kaizen (Continuous improvement) and lean manufacturing. The frequent decline of garment SMEs in customer satisfaction due to poor quality could be solved using this tool.

4.2.4. Improved Government Support

To date, there are government efforts to address the major performance and productivity problems of the garment SMEs. But It is noted that there are policy and institutional constraints such as (i) coordination failures; (ii) lack of enforcement; (iii) insufficient policy alignment; and (iv) poor implementation of government support packages (SMEs access to technology, capital goods and machinery delivery, infrastructure, access to credit, market linkage, promotion, incentives packages, BDS and industry extension supports). This suggests that horizontal interventions, such as improvement of government support, are a key part in addressing SMEs performance and productivity. Government's role in enhancing SME productivity has to be improved.

In order to solve such problems of the government support system, several solutions have been proposed as follows: (1) Technology promotion system, Therefore, the government must support SMEs access to technology which has high contribution to productivity improvement.(2) The government must improve its current enforcement, support policy and system. The government must review and dramatically change the current support system provided for SMEs, The current support system which is not efficient, effective and well organized (3) Improving the support provided by government agencies for the garment SMEs like national development bank of Ethiopia, quality infrastructures and industry development office for SMESs (4) Improving the finance support system, access to credit and working capital problem, by revising its collateral requirements for bank loan (5) The government must establish a detailed strategy for SMEs' (6)

Introducing effective and efficient incentive mechanism, that privileged that garment SMEs (7) Programs must be expanded to equip SMEs with new and improved management and business practices methods in production, quality improvement, marketing and productivity improvement; and further development of technical skills amongst SMEs.

To achieve a higher rate of success the government support approach has to be systematic and coordinated.

4.2.5. Intensive Education and Training

Ethiopian government is expanding educational institutions such as TVET (Technical and Vocational Education Training) colleges to fulfill the demand of technical skills by garment manufacturing firms. This program is encouraging. But the implementation process is not yet effective. Moreover, intensive training of the existing staff (top management, middle management, and shop floor workers) in the sector is also very essential. Therefore, TVET colleges should focus on practical training program. The Government must provide support for leadership and management training.

Training is the critical element for the success of garment

enterprises. It enables the workforce to acquire the skills needed to improve and maintain the quality and productivity of the production process. Education and training should be given in the garment enterprises on continual basis to improve the productivity of workers which enhance SMEs competitiveness.

4.2.6. Supply Chain Improvement

From the analysis the primary cause of poor quality products in garment enterprises is poor quality fabric. The selection of suppliers should not solely depend on price but should mainly focus on quality. In addition, the enterprises must assess the reputation of the supplier and investigate supplier manufacturing facilities before sourcing the supplier and purchase any fabric. The enterprises should frequently evaluate the quality of products received and provide feedback for improvement.

Select the best marketing strategy, to carry out efficient marketing channels according to consumers' demands and Utilize the varied promotion and market activities for enhancing marketing linkage.

4.2.7. Coordinated Development Plan for Garment SMEs

Table 1. Coordinated development plan of garment SMEs.

Sub-sectors	Time span Garment SMEs
Short term	<ol style="list-style-type: none"> 1) Improve quality, productivity and performance 2) Develop technical skills among SMEs 3) Improve coordination failures among government support agencies 4) Improve current enforcement system 5) Technology promotion 6) Delivery of capital goods and machinery
Mid Term	<ol style="list-style-type: none"> 1) Review and dramatically change the current support system and support packages 2) Improve support provided by government agencies like development bank of Ethiopia, ETIDI, TVET, FEMSEDA and industry development office 3) Improve bank collateral requirement 4) Ensure continuous improvement 5) Seating minimum wage 6) Introducing effective and efficient incentive mechanism 7) Provide efficient infrastructure
Long term	<ol style="list-style-type: none"> 1) Develop detailed strategy for SMEs 2) Introduce effective and efficient incentive mechanism 3) Improve current enforcement support policy 4) Review and dramatically change the current support system and support packages 5) Perfect SMEs policy 6) Industry park development for the sub sector

Source: Own work

Since it is difficult to give solution for all identified problems of garment SMEs at the same time developing a strategy is a must. The proposed three-step development strategy of the garment SMEs shown on table 1 describes the coordinated development plan in short (up to 1 years), medium (up to 2 years) and long (up to 5 years).

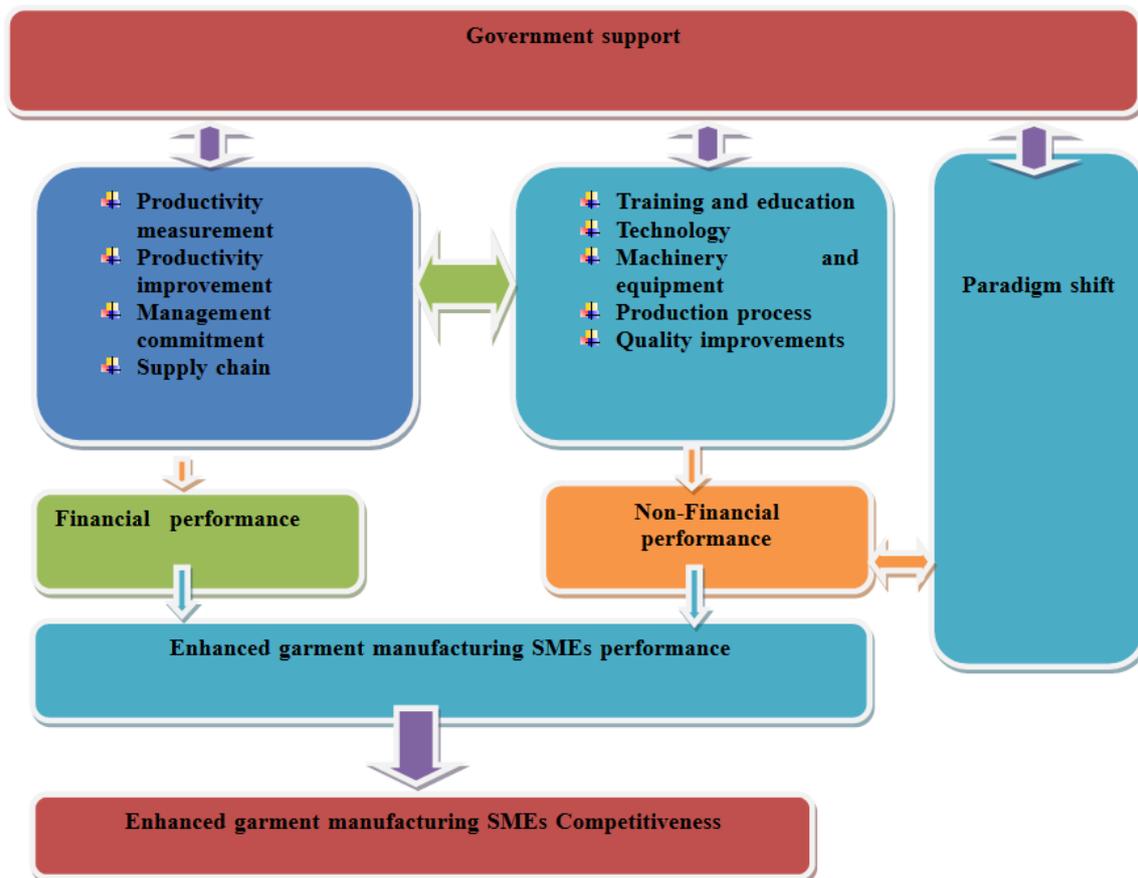


Figure 5. Theoretical framework model for garment SMEs competitiveness.

5. Conclusion and Recommendation

5.1. Conclusion

In today's global market, success and survival of manufacturing firms demands on competitiveness. Performance is one of the major determinants that enable manufacturing firms to compete in the global and local market. So, improving performance can be taken as critical task of a manufacturing firm. The results obtained from the assessment of garment SMEs show that they possess low performance since, most of the performance indicators of the garment SMEs show poor status. This low performance makes them to face challenges in market competition. Therefore, using different methods of productivity measurement method, productivity improvement techniques, new machinery/equipment technology, improved production processes, quality management, training and other resources in the enterprise can significantly save money and increase productivity.

Increasing performance is one of the most critical goals in business. If the performance improvement is carefully planned and executed, the painstaking investment is the initial cost and effort, and the reward is overwhelming result. To achieve continuous performance improvement through the utilization of improvement tools, all barriers that lead to their implementation failure have to be overcome. Also, unlike large companies, small companies have limited resources and this act as an implementation barrier.

In order to solve the identified problems of garment SMEs, several solutions have been proposed as follows, proper utilization of employee, hiring necessary employee based on human resource planning, conducting training to upgrade skills of employee and the management staff, preparing job description for individual employees, creating conducive working areas, follow up the proper implementation of human resource management policies, procedures and manuals, identification and implementation of appropriate productivity improvement techniques and tools, performance appraisal of each department and individual employees and Establish good reward mechanism and welfare system for employees

on weekly, monthly and yearly base.

It was noted that the general awareness of quality in the enterprises is low, especially in the shop floor. Therefore, quality awareness education should be provided to ensure that employees have a common understanding of the importance of quality. The quality awareness program should aim to ensure that employees know their roles within the firm, and build a desired organizational quality culture.

5.2. Recommendation

Based on the findings of this study, it is recommended that:

- 1) Performance is one of the major determinants of competitiveness. Therefore, the garment SMEs should manage their performance in organized and sustainable way so that to compete in the market place.
- 2) With regard to business factor for SMEs, Ethiopian government should revise the tight regulation of financial institutions on collateral requirements so that SMEs will have equal and fair funding sources like their large counterparts.
- 3) To increase the labour productivity in apparel SMEs, an appropriate recruitment procedure should be created after job analysis. To achieve positive results motivation tools such as training, appropriate wage structure and incentive along with annual productivity linked bonus can be provided.
- 4) Currently the garment SMEs in the sub city apply single partial productivity indicator (i.e. human productivity and capital productivity) only. The garment SMEs, should focus on, total productivity.
- 5) In order to enhance competitiveness, workers skills need to be improved in designing, pattern making and grading as well as marker making and cutting. Hence upgrading technology and moreover adopting CAD.
- 6) With regard to technology for manufacturing, Adapting more efficient new technologies for boosting productivity of the garment SMEs is recommended like, modern swing machines.
- 7) Currently garment SMEs uses disorganized and reactive problem solving approach even though there are multidimensional productivity factors needing organized and sustainable productivity improvement program. So, the case company is strongly advised to use the PIM by involving all its employees.
- 8) Thus to reduce production costs, resource utilization should improve i.e. wastage of fabrics and accessories, reworks, quality degree. The study also recommends that SMEs should establish quality management systems for overall success of the enterprises productivity.
- 9) The garment SMEs should follow modern management practices, adopt flexible manufacturing, kaizen and lean manufacturing.
- 10) Therefore, the Ethiopian government should work hard to bring a paradigm shift at all levels of garment manu-

facturing firms, considering it as one of the development strategy tool.

Author Contributions

Henok Tamirat is the sole author. The author read and approved the final manuscript.

Conflicts of Interest

The authors declare no conflicts of interest.

References

- [1] Abor, J., & Quartey, P. (2010). Issues in SME Development in Ghana and South Africa. *International Research Journal of Finance and Economics*, 39, 218–228.
- [2] Altenburg, T., Hillebrand, W. and Meyer-Stamer, J. (1998): *Building Systemic Competitiveness: Concept and Case Studies from Mexico, Brazil, Paraguay, Korea and Thailand*. German Development Institute, Reports and Working Papers 3/1998, Berlin: German Development Institute.
- [3] Bernardo, M. (2014). 'Integration of Management Systems as an Innovation: A Proposal for a New Model'. *Journal of Cleaner Production*, 82: 132–42.
- [4] Carpinetti, L. C. R., Gerolamo, M. C. and Dorta, M. (2000), "A conceptual framework for deployment of strategy-related continuous improvements", *The TQM Magazine*, Vol. 12 No. 5, pp. 340-9.
- [5] Choudhary, B. V. (2001), "Flexibility and related issues in evaluation and selection of technological systems", *Global Journal of Flexible Systems Management*, Vol. 2 No. 2, pp. 11-20.
- [6] GebrechristosNuriye, (2014), policy direction and performance evaluation of micro and small enterprises in southern nations, nationalities and people's (S. NN. P) state of Ethiopia. Ethiopian Civil Service University, Addis Ababa, Ethiopia.
- [7] Rajesh Bheda: *Managing Productivity in the Apparel Industry: First Edition*, CBS Publishers and Distributors, New Delhi, 2003.
- [8] Fleury, A. and Fleury, M. T. (2003), "Competitive strategies and core competencies: perspectives for the internationalization of industry in Brazil", *Integrated Manufacturing Systems*, Vol. 14 No. 1, pp. 16-25.
- [9] Frigo, M. L. (2002), "Nonfinancial performance measures and strategy execution", *Strategic Management*, August, pp. 6-9.
- [10] F. D. R. E council of ministers regulation no. 373/2016".
- [11] FeMSEDA information technology and directorates, (2015). *Annual statistical bulletin (2010/11-2013/14 fiscal year)*. Addis Ababa, Ethiopia.

- [12] Garg, V. K., Walters, B. A. and Priem, R. L. (2003), "Chief executive scanning emphases, environmental dynamism and manufacturing.
- [13] Garengo, P., Biazzo, S. and Bitici, U. S. (2005), "Performance measurement systems in SMEs: a review for a research agenda", *International Journal of Management Reviews*, Vol. 7 No. 1, pp. 25-47.
- [14] Hudson, M., Smart, A. and Bourne, M. (2001), "Theory and practice in SME performance measurement systems", *International Journal of Operations & Production Management*, Vol. 21 No. 8, pp. 1096-115.
- [15] F. K. Yamfwa: *Improving Manufacturing Performance in Less Developed Countries-The Case of Zambia*: University Press Facilities, Eindhoven University of Technology, 2001.
- [16] Karaev, A., Lenny Koh, S. C., & Szamosi, L. T. (2007). The cluster approach and SME competitiveness: a review. *Journal of Manufacturing Technology Management*, 18(7), 818–835. <https://doi.org/10.1108/17410380710817273>
- [17] Kanji, G. and Sa', P. (2002), "Kanji's business scorecard", *Total Quality Management*, Vol. 13 No. 1, pp. 13-27.
- [18] Lagace, D. and Bourgault, M. (2003), "Linking manufacturing improvement programs to the competitive priorities of Canadian SMEs", *Technovation*, Vol. 23 No. 8, pp. 705-15.
- [19] Lamprinopoulou, C., & Tregear, A. (2011). Inter-firm relations in SME clusters and the link to marketing performance. *Journal of Business & Industrial Marketing*, 26(6), 421–429. <https://doi.org/10.1108/08858621111156412>.
- [20] Momaya, K. (2000), *International Competitiveness*, Hindustan Publishing Co., Delhi.
- [21] OECD (2017c), *Enhancing Productivity in SMEs*, OECD Working Party on SMEs and Entrepreneurship, Paris, October 201.
- [22] Mekonnen D et al (2013) Deterrents to the success of micro and small enterprises in Akaki-Kality Sub-City. *J Bus Adm Stud* 5: 1–33.
- [23] Saha, S. M. (2015). Impact of Working Environment on Less Productivity in RMG Industries: A Study on Bangladesh RMG Sector. *Global Journal of Management and Business Research*, 15(2).
- [24] World Bank (2015) *Labour Standards and productivity in the garments export sector: A survey of managers and workers, Poverty Reduction and Economic Management Sector Department*, World Bank East Asia and Pacific Region.
- [25] Wolday Amha and Gebrehiwot Ageba, (2006) "Business development services (BDS) in Ethiopia: Status, prospects and challenges in the micro and small Enterprises.
- [26] WerotawB (2010) *Entrepreneurship: an engine for sustainable growth, development, prosperity and good governance; genius training and consultancy service*. Amen Business Group press, Addis Ababa, Ethiopia.
- [27] WoldayAmha, GebrehiwotAgeba, (2006) "Business development services (BDS) in Ethiopia: Status, prospects and challenges in the micro and small Enterprises.