# Enhance Small and Medium Enterprises Management as Perspective TQM

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### Abstract

Small and medium enterprises play an important role in economic development in the industrial world countries, and also the third world countries as the same level. Moreover, small and medium enterprises are considered the backbone to complete, and feed the large projects, especially the automobiles, garments, and textile industries. As general, small and medium enterprises (SMEs) in the third world face shortage in the productivity. Besides, the human factor represents approximately 60% of the essential properties for SMEs that represent the ownership, leadership, management, and workforces. The paper aims to enhance the role and support the planning, and implementation stages of SMEs, and apply its beneficiary's assistance program, especially in the first stage of enterprise's preparation which focuses on selection approach of enterprise's beneficiaries, especially managers, and owners to identify, and develop their skills as perspective entrepreneur's style to implement their enterprises. Furthermore, the paper adopts medium, small, and development (MSMED) enterprises management service to emerge it under unified management system as perspective total quality service (TOS). Moreover, MESs beneficiary's assistance program includes such stages as feasibility studies, products promotion and marketing, human resources development, quality control and upgrading, enterprise management and assessment. Furthermore, the paper puts forth a scheme such as flowchart, and fishbone (cause, and effect) to followup small enterprise and assesses the actual needs during implementation stages as perspective continuous improvement. Moreover the paper studies sample of small and medium enterprises (SMEs) which had been funded from Social Fund for Development (SFD) 1990 ago and it developed year 2017 to MSMEs agency to emerge all beneficiaries which are funded from another authorities and associations which is worked in this scope and is managed by the cabinet of Egypt as umbrella, and UNDP by cooperation with NGOs, and universities. Main findings eend-up with a major responsibility of mmanpower factor behind most small and medium enterprises problems. In addition, the mechanism of technical assistance for small and medium enterprise's beneficiaries must apply the scientific approaches during the planning and implementing of enterprise according to actual needs assessment of

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enterprise's beneficiaries. Thus, the integrating of all authorities and associations which is worked in micro, small, and medium enterprises under unified agency which is considered the backbone to support and improve the managerial performance and in turn the all items of productivity.

**Keywords -** Fishbone, cause and effect, flow chart. Productivity, need assessment, technical assistance, total quality management (TQM), medium, small, and micro development enterprises agency (MSMEA), total quality service (TQS).

#### I. INTRODUCTION

Small and medium enterprises represent a main concern of researchers where most enterprises feed and complete the large projects. However, it faces some basic problems such as management, marketing, financial, and production problems, which it influences directly on productivity (1, 4, and 5). Moreover, human factor often represents high percentage of heart these problems (6 and 9). These problems had been concentrated at entrepreneur style for enterprise's beneficiary, untrained labours, unqualified marketing personnel, inexperienced personnel for enterprises management, poor safety and vocational health for workforces (1, 2), and the false policy for employment. Besides, the researchers had studied a variable solution to solve these problems and they had found the education and training are the essential base to improve the human performance (3). Furthermore, TQM structure depends on both training and education to find the integral knowledge for the organization operations (8). On the other hand, the training is considered the developed approach for education. Furthermore, researcherrs overlook of both financial production problems based on a wrong assumption of inert behaviour of such problems over the planned service life of enterprise components (7 and 8). In addition, The universities in Egypt started to realize cooperation program with MSMDEA branches in the different governments to introduce reliable training programs by (international labour organization (ILO) according to the students such as generate your business idea and start your business (10). On other hand, the government of Egypt had established number of industrial regions to support and introduce the comprehensive services for some of SMEs

industries such as furniture, leather. The present all problems have been taken consideration where it was generating sources since the early stages for small and medium enterprise establishment. Surrounding circumstances activate one or two of the enterprise problems towards enterprise failure. Data collection is suggested for 100 industrial enterprises and problems analysis is then undertaken according to some TQM tools by using cause-and- efffect diagram (fishbone)(1). The features of fishbone are suitable to determine the relation between a problem and its potential causes. In addition, the paper puts forth a mechanism of the technical assistance to improve, and develop SME through its life cycle, especially in planning, and implementing stages. Moreover, the present paper uses another TQM tool such as flow chart to identify, manage selection approach of enterprise's beneficiaries in the planning stage for the small enterprise according to the entrepreneur style. On the other side, the paper adopts the business management program for universities and higher institutes to enhance the entrepreneur style for their students especially in their final study years to motivate the establishing of SMEs to realize new employment opportunities. Besides, the paper uses flow chart as TQM tool to identify, and manage technical assistance approach in the implementing, prestart up, operation , and marketing stages for SME as perspective continuous improvement, especially for nonfinancial and financial sides through life cycle for SME. In other words, flow chart is an important tool for technical assistance to improve, and develop SME mechanism where the process can be simplified.

## II. MSMED MANAGEMENT SERVICE APPROACH AS A STRUCTURAL ORGANIZATION

Small enterprise is an indispensable part of the business process and plays an important role in an organization's success and survival. The main purpose of small enterprises management service during life cycle is to ensure the value added for the productivity of economic development at its original optimal level [8]. Moreover, service management is similar to the manufacturing model and it has two elements, service efficiency and service effectiveness [1, 10, 11, 12, 13] Through 2017 year the Government of Egypt decided to develop SFD which had established 1991 ago to integrate the medium, small, and micro enterprises development (MSMED) unified agency to enhance and support its productivity. So, the paper adopts an effective management service system for MSMED which is worked in this scope where it can be considered as an integrated system with a set of interconnected activities carried out in parallel with service systems [1, 11].

Fig. 1 indicates e MSMED management process with a set of interconnected activities carried out in parallel with it where any change in one element causes changes in other elements. Moreover, this system will be affecting with the social, economic, technology, and political environment. In addition to, MSME management service for number of customers must be work effectively to realize the actual needs for clients as perspective total quality services (TQS) (1).

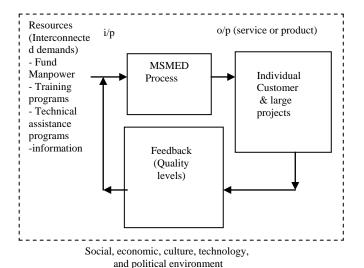


Fig.1 The medium, small, and micro enterprises development management service system

# III.THE DEPOT MODEL OF ACCUMULATED PROBLEMS

Small enterprise is similar to a basket (hierarchy) where problems are continuously accumulated since the early financial stage, the funder's draft may include a series of such defect constrains (unsuitable capital, shortage of risk insurance, and misuse for available fund). In subsequent production stage, the production capabilities are efficiently implemented to comply with the fund and marketing constrains towards achieving the product or service as designed. Unintentionally however, production also adds a number of problems, namely, raw material properties, old methods and technology, old m/cs, unskilled labours, and poor quality control. The third problem category is the marketing defects, such as false pricing policy for product or service, unadvertising, and unpromising, weak competitive, poor quality, no exhibitions, unqualified salesmen and ineffective marketing personnel, and lack of market places. The forth problem category is the management defects which is the common for all small enterprises problems such as lack of experience for project up for business management, weak follow performance. distorted organization, employment policy, poor safety and vocational health and no training programs.

Figure 2 shows a scheme of this proposal model. In the depot model, a fixed-thickness layer of the financial mistake rests in the bottom. Another fixed-thickness layer of production errors stacks up. Finally there are two variable layers of both marketing and management defects.

Surrounding circumstance & customer

Surrounding circumstance & customer

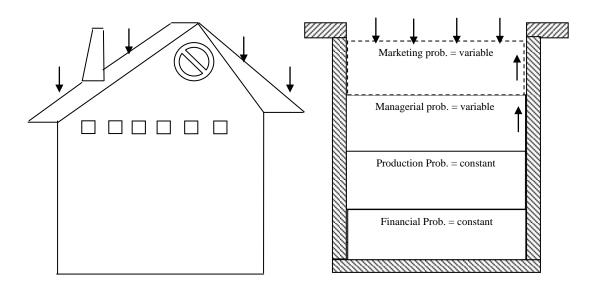


Fig. 2 Enterprise Model as a Depot with Ceaseless Accumulated of Problems

### IV.THE FISHBONE REPRESENTATION

Fig. 3 shows a fishbone scheme of problems (1), which may have to failure. The main Spain has four branches, two of which have a fixed structure, and constant data. The two another branches, marketing and management have a varying structure and continuously update data. From data (100) industrial enterprises which had funded from SFD, the problems were collected such as the financial, production, marketing, and management problems. From analysis of the collection, it can be summarizing that manpower problem as follows:

No training for labours ------85% Undeveloped methods -----85% Shortage of performance control -----75% Lack of Safety and vocational health precautions-93% Lack of essential knowledge for accountancy ----90% Unqualified personnel at sale and marketing ----- 87%

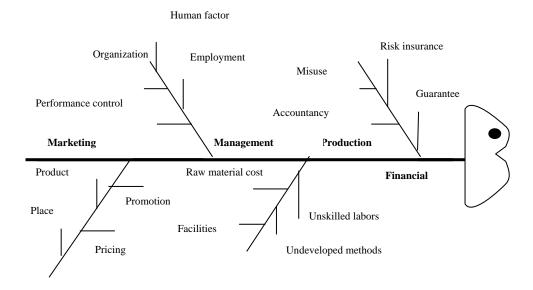


Fig.3 Fishbone Representative of Accumulated Problems

#### V.THE FLOW CHART REPRESENTATION

From problems analysis for small enterprises, it is found that managerial problems represent approximately 60 % as human factor for both owner and manager, especially in identification and formulation stages. So, it is essential to identify, develop the entrepreneur style to achieve successful small enterprise. Moreover, it is essential to follow up and control small enterprise to introduce the support and technical assistance through life cycle especially, implementation stage to achieve the continuous improvement and productivity of small enterprise as perspective TQM.

# A. Technical Assistance Mechanism in the Planning Stage

Fig. 4 shows the technical assistance approaches through identification and formulation stages to achieve optimum planning for small enterprise. Besides, the entrepreneur will be qualified by basic and training paths to achieve financing stage. In addition, an appraisal committee studies the project and decide whether to approve it or not.

# B. Technical Assistance Mechanism in the Implementation Stage

Fig. 5 shows the technical assistance mechanism in the implementing stage to support nonfinancial and financial services for small enterprise. Field officers at the district level in SFD, Egypt offer business support services through the planning and implementation of small enterprise. On the side, SFD had established limited number of the incubators by

coordination and cooperation with governorates and universities in Egypt, as means of promoting small businesses to provide collective services.

Besides, SFD had established small enterprise development organization (SEDO) with certain objectives as follows:

- Promote the employment and income generating opportunities in the small and micro enterprise sector, by encouraging the creation of new business and the expansion of existing productive activities.
- Provide small businesses and potential entrepreneurs with credit, technical assistance, and training and know how.

The Government of Egypt decided in September 2106 a certain law to establish small and medium enterprises development organization to include all current organizations in SMEs to work under the unified umbrella for strong organization to enhance the development of projects and create small industries entities to realize the integrity and coordination with the large industries. Besides, the Egyptian Central bank assigned 20% the available fund in banks. In addition, the government of Egypt through 2017 issueed decision to emerge medium, small, micro enterprises in Egypt under unified agency to realize its reliability, continuity, and the value added for economical development. Moreover, the technical assistance mechanism in this study will be continued through prestart up, operation, and marketing, growth and development stages as perspective continuous improvement to achieve high productivity and in turn comprehensive optimum revenue.

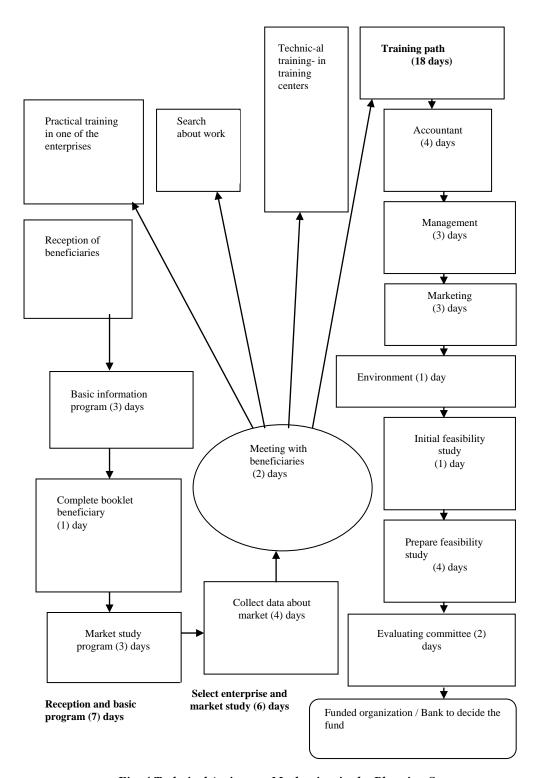


Fig. 4 Technical Assistance Mechanism in the Planning Stage

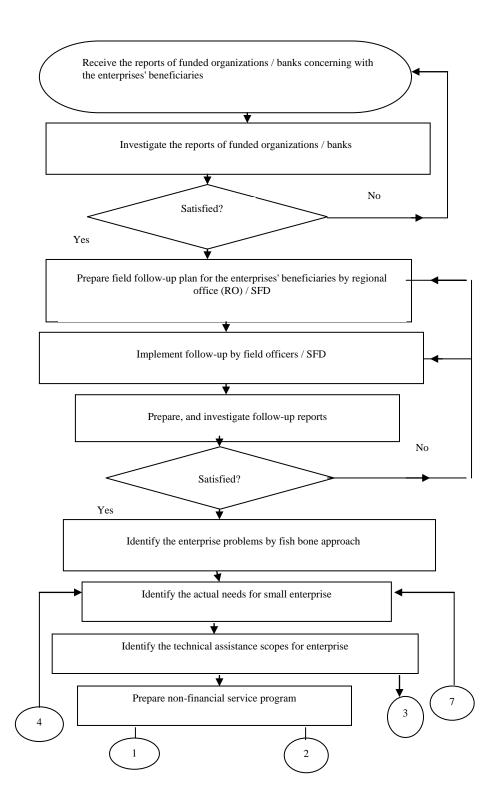
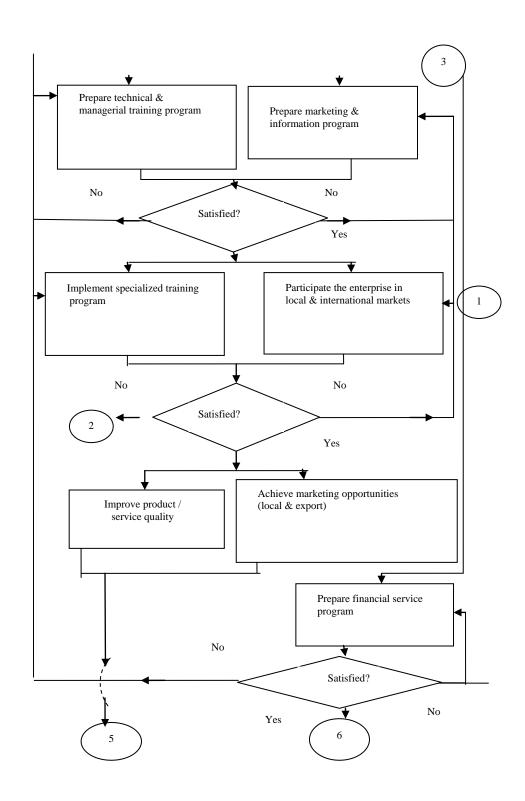
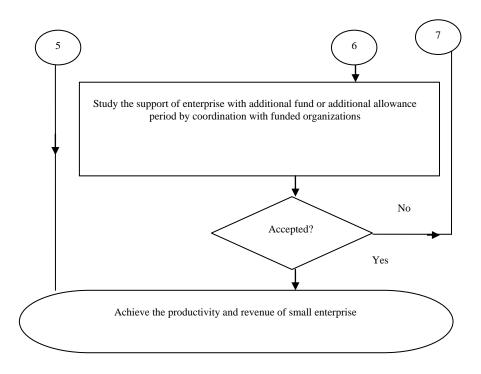


Fig.5 Technical Assistance Mechanism in the Implementation Stage



Cont. Fig. 5 Technical Assistance Mechanism in the Implementation Stage



Cont. Fig. 5 Technical Assistance Mechanism in the Implementation Stage

#### VI CONCLUSIONS

1) From Fig. 1, the integrated service system for medium, small, micro enterprises development under unified management agency with a set of activities carried out in parallel with service systems will enhance the its performance effectively for individual customers and to feed and complete the

large project as perspective total quality service (TQS).

- 2) From figs. 2 and 3, the findings end up that fishbonee (Cause-and-Effect). Diagram shows that, it is a powerful tool to analyse and assess small enterprise problems.
- 3) From fig. 4, technical assistance mechanism in the planning stage shows the selection approach for the entrepreneur to achieve identification, and formulation until financing stage for small enterprise.
- 4) From Fig. 5, technical assistance mechanism in the implementation stage shows that flow chart diagram is the easier and quicker tool used to manage and improve financial and nonfinancial service. Besides, this mechanism is the backbone of technical assistance process and must be continued to improve and develop life cycle

of small enterprise through stages marketing, growth, and development.

5) Achieve the high value added, innovative products and services from o/p of MSMED management process as a structural organization by establishing linkages between MSMED agency and other agencies such as universities, large industries, and research institutions through technological incubators to feed and complete some of the industries such as the automobile assembly, and textile and garment to achieve its productivity and revenue for the domestic and international marketing.

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#### REFERENCES

- [1] Mohamed Reda Ramadan Gomaa, Integrated quality and safety in maintenance as perspective TQM, SSRG International of Journal of Industrial Engineering (SSRG-IJIE) – volume 4 Issue 1 – Jan to Feb 2017, pp 8-13.
- [2] Walker, D. and Tait, R. Health and safety management in small enterprises: an effective low cost approach, Safety Science, 42, (2004), pp. 69-83.

- [3] Bates, S. October Accounting for people, HR Magazine, 47 (1), (2002), pp. 30 -37.
- [4] Oliver, R. The return on human capital, the Journal of Business Strategy, 22, (4), July/August (2001), pp. 7-10.
- [5] Schomewiile, Mark. Does training generally work? Explaining labour productivity effects from schooling and training, International Journal of Manpower, .22 (1), (2001).
- [6] Hill, R. and Stewart, Human resource development in small organizations, Journal of European Industrial Training, .24 (.2), (2000).
- [7] Elmuti, D. S. and Kathawala, Y., Small service firms face implementation challenges, Quality progress, (April), (1999), pp. 67-75.
- [8] Mc Camey, DA., Boggs, R W., and Bayuk, L MMore, Better, Faster from Total Quality Effort, Quality Progress, (August), (1999), pp.43-50.
- [9] Tamimi, L., and Sebastianelli, RThe barriers to total quality management, Quality Progress, (June), (1998), pp.7-60
- [10] Start and improve your business, ILO, Geneva, Switzerland, 2014.
- [11] Ron Basu and J.Nevan Wight, "Total operation solution", UK, 2005.
- [12] Md. Rubel Miah1, Hemendra Nath Roy, Sohel Parvez, Abdun Noor, and Md. Sadequr Rahman, "Total Service Management (TSM) for Ensuring the High Level Performance of the Service Organizations", International Journal of Scientific Research Engineering & Technology (IJSRET), Volume 2 Issue 5, August 2013, pp 289-295.
- [13] Atul Gupta, Jason C. McDaniel and S. Kanthi Herath, " Quality management in service firms: sustaining structures of total quality service", Emerald Group Publishing Limited, Vol. 15 No. 4, 2005 pp. 389-402.