Effective Supplier Development in the Achievement of Cooperate Goal

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Abstract

Studies have shown that the declining competitiveness of Ghanaian firms is related to lower investment than foreign rivals in intangible investments such as effective supplier development, and also showed that some of the companies fail in effective supplier development efforts. Since supplier development is not successful every time when undertaken. It is essential to examine supplier development factors which can impact the success of supplier development. This project work examines aspects associated with the success of effective supplier development strategies within the industrial sector. The purpose of the study is to determine what factors are required to make supplier development a success. Furthermore, it shows that some factors have more significant influence than others on effective supplier development. Data from the population of buyers was collected to test the extent of the relationship between significant factors and success if the effective supplier development process. Agreement was noted between dependencies of success of development process on several factors. Recommendations to supply managers and purchasing managers are provided regarding upper management involvement, enhanced communication with suppliers, recognitions of the suppliers and development of strategic processing instead of reactive processing

Keyword: Supplier Development, Managing Suppliers, Securing Supplier Development

I. INTRODUCTION

The study of supplier development is very important in this 21st century. Much attention is now on customer/supplier relationship. Developing a supplier is a means of giving the needed assistance to the supplier to be meeting the buying organization's requirements. Lyson 1998 says that, it involves any activity that a buying organization undertakes to improve a supplier's performance and capabilities to meet the buying organization supply needs. Such activities can take several forms including:

- Management supports such as advice on production control.
- to measure and monitor performance for the purposes of reducing costs, mitigating risk and driving continuous improvement
- to ensure a portfolio of best in class suppliers is available for use
- Financial support such as loan for purchase of equipment.
- Share facilities such as inspection equipment.
- Provide training programs and training time to suppliers
- Suppliers form an integral part of an organization success
- Hence he needs to get more attention

Supplier development requires both the supplier and buyer to commit to maximum efforts to achieve the greatest results out of the program. Even though both sides agree that a strong commitment is required, there is still no guarantee that the supplier development will be successful. In the early 90's companies started reducing the number of direct suppliers and started to maintain more cooperative relationships with the remaining suppliers (Hartley & Choi, 1996). Approximate one-third of the projects failed due to the supplier's underperformance. Thus the success in the supplier development is not a fore gone conclusion. Supplier development is considered a long term business strategy and there are various factors which affects this strategy. These factors not only affect the end result of supplier development process but also influence each other. This research establishes the critical success factors for supplier development and their inter-relationships with each other.

Moreover, multiple regression models helped to identify the interrelationship among critical success factors.

II. LITERATURE REVIEW

A. The Nature and Reasons for Developing A Supplier

Many companies develop their suppliers to enhance their working ability and to meet the target of the work. Developing a supplier by Unilever Ghana is part of a long-term policy and a strategic decision is probably taken as part of the overall corporate plan and reasons will be different from the short-term policies.

It might be useful at this state, to first consider purchasing objectives so far as supplier development is concerned. Below are the objectives of purchasing as expressed by various authors?
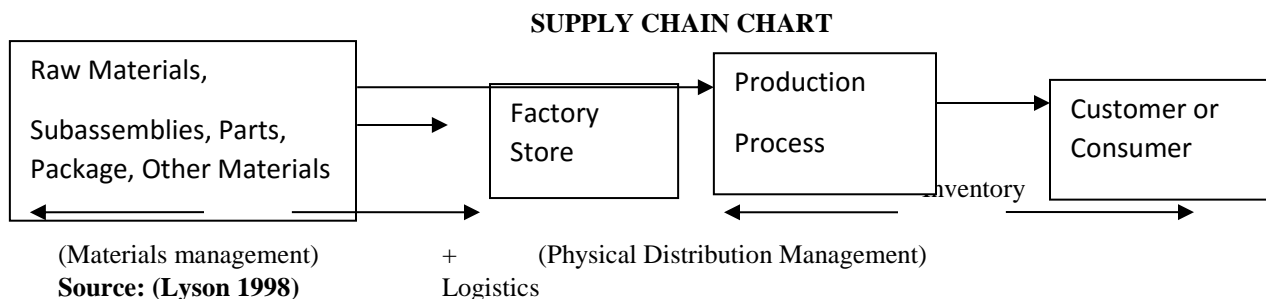
B. Supplier development/objectives

Supplier development is the process of working with certain suppliers on a one-to-one basis to improve their performance for the benefit of the buying organization. Private sector has become increasingly aware of the potential for impact on local economic indicators through various means of operations. Supplier development offers a natural intersection between continued company operations and the opportunities it can provide for local business sector. Also known as business linkages, local supplier development, local content or local sourcing, is increasingly favored as a strategic business tool by international companies.

Supplier development requires a real commitment from the company to work with and build capacity of local suppliers in a way that enables them to become more competitive and profitable. Typically. These suppliers will be small and medium enterprises (SMEs). To compete for bidding and contracting opportunities local SMEs will often need training to bring them up to the required operational, safety, environmental and technical standards.

C. Objectives of a supplier development

1. The basic objective of the Supplier development function is to secure competent supply sources that will provide an uninterrupted flow of required materials at a reasonable cost. This involves first the selection of competent suppliers in terms of technological, quality, delivery, and cost capabilities--and second, it requires working with them to upgrade their capabilities
2. A supplier development is to create and maintain a network of competent suppliers. In a narrow sense, it involves the creation of new sources of supply when there are no adequate suppliers to meet the firm's requirements.

For example the diagram below depicts an efficient supply management to meet the demand of the final consumer. This was produced by Lysons under the topic "Logistics" which is made up from the source of supply. These materials are managed through to the final consumer.

SUPPLY CHAIN CHART

(Materials management)　　　+　　　(Physical Distribution Management)
Source: (Lyson 1998)　　Logistics

The diagram above when all managed, the outcome will result what the buyer will like to gain after developing the supplier who intend supply the right quality of materials and use to produce to suit the customer requirements.

Another school of thought The National Institute of Standards and Technology (NIST) is an agency of the U.S. Department of Commerce, found that "Supplier development can be loosely defined as the process of working collaboratively with your suppliers to improve or expand their capabilities". An example may be teaching a supplier how to manufacture a type of item that never manufactured before for the purposes of giving you the option to buy, rather than make, that item. **Source: (N.I.S.T. 2000).**

Two researchers (**Krause & Ellram, 1997),** found that, supplier development may be defined as: Any effort of a buying firm with its supplier (s) to increase the performance and/or capabilities of the supplier and meet the buying firm's short-and/or long-term supply needs". Supplier development is not a new concept. For example, it was used by Toyota in Japan during and after World War Two (Wagner, 2006).

According to **Krause and Scannell (2002),** Supplier development is whereby "firms increasingly focus on their core competencies and outsource more component parts and services to suppliers, making the management of suppliers an important strategic issue for buying firms" From the definition of supplier development above, it is evident that the term "supplier development" covers a wide range of activities and strategies. On the one extreme, a firm may adopt a strategy involving no, or very limited, supplier development efforts, such as informal supplier evaluation or a request for improved performance (Krause, 1997). At the other extreme, a firm's strategy may involve extensive efforts, such as the training of the supplier's personnel or investment in the supplier's operation (Krause, 1997).

An important point to note is that a firm may choose to employ different intensities of supplier development with its various suppliers. For example, a firm may use less intense supplier development practices with suppliers of items that are readily available form a number of sources and not critical to the firm's own product or service. At the same time, the firm may choose to employ intensive supplier development practices with other suppliers, who supply critical component or where there are limited (or no) alternative suppliers.

Notwithstanding the above, **Wisner et al (2002), found that**, "Supplier development is any activity that a buyer undertakes to improve a supplier's performance and or capabilities to meet the buyer's short and/or long term supply needs". Supplier development requires financial and human resource investments by both partners and includes a wide range of activities such as training of suppliers personnel, investing in the supplier's operations, and ongoing performance assessment.

Another school of thought and **Chartered Institute of purchasing and Supply knowledge works found that**, "supplier development is the process of working with certain suppliers on a one to-one basis to improve their performance for the benefit of the buying organization" it is closely associated with supplier relationship management and partnering-Two separate subjects on which CIPS has similar documents.

The knowledge works went on by saying; there is no single approach to supplier development. Purchasing and supply management professionals must select the most appropriate approach to suit their relationship with the supplier that they have selected for development. There are different types of, and approaches to, supplier development that are appropriate for different supply market, Source: www.cips.org.

Three researchers **(Hunter et al. 1996, Dyer & Nobeoka 2000)** found that, Supplier development is "Investments by the buying firm may take the form of information sharing, assistance through training programmer and technical and managerial assistance". The supplier firm may also contribute resources to the development effort, such as sharing information and dedicating physical and human assets

D. *Collaboration, the Key to Supplier Development*
Supplier development requires a commitment to collaborate between the buyer and the supplier. The strategic intent is to create win-win opportunities wherein both the buyer and supplier gain.

Dobler et al (2003) found that, collaboration must have the following:
- **Collaboration requires commitment:** a supplier development initiative may require supply managers to spend weeks or months in the supplier's facility working with the supplying firm's management and operating personnel. Commitment may require buying firm to provide financial, equipment and training needed. It requires that the savings from supplier development projects be shared in an equitable way.
- **Collaboration requires communication:** A well designed supplier development programme; its priorities, motives, and methods underlining the administration of the supplier development programme require the highest level of communication and understanding between both parties.
- **Collaboration requires measurement:** This requires both parties to open their financial records to one another. Because, they must be sure that suppliers are charging the right fees for their purchasing, processing, and conversion work.
- **Collaboration requires trust:** This requires trust between the two organizations and the involved personnel must be present before the necessary information sharing can or will take place. That is, a tremendous amount of information must pass through both companies to improve efforts.

E. *Generic Steps to Supplier Development*
No two companies approach supplier development in exactly the say way. However, according to (Nelson, et al 1998) most effective projects adhere to the following:

- Identify and review performance gaps.
- Discuss specifics about how the project will be approached and implemented.
- Work to achieve mutual agreement on project focus.
- Identify processes that result in waste.
- Compare performance gaps with the desired state
- Establish project metrics and metrics baselines.
- Gather and analyze data
- Develop improvement strategies
- Calculate the return on investment
- Create and review a proposal with the supplier's management
- Execute the improvement plan.

Notwithstanding the above steps**, Bailey et al (1994**), suggested that another steps but stated it does not encompass any other possible ideas since steps to supplier development varies and is subjected to the discretion of every company. Below are the steps;

- Identify willingness supplier and review performance gaps.
- Brainstorm and visualize on how the project will be approached and implemented.
- Teamwork to achieve mutual agreement on project intended.
- Identify processes and procedures that result in waste.
- Compare performance gaps with the desired state
- Gather and analyze data
- Develop continuous strategies.
- Review proposal with the supplier's management
- Execute the improvement plan
- Monitor performance and review where necessary.

Supplier Development Enablers
Many enables of supplier development exist.
According to Burt, Dobler, and Starling the most commonly used are:

- Developing a supplier development project charter.
- Implementing continuous improvement techniques using the Plan-Do-Check-Act

(PDCA) cycle.

- Focusing on elimination of waste.
- Conducting value analyses
- Providing forums for communication

F. Supplier Development Project Charter

The supplier development project charter is dynamic document that is continually updated during the planning, executing, and completion of a supplier development project. According to (**Dobler et al 2003), found that**, the supplier development project charter generally consists of the following sections:

a. Business case: The business case is a financial assessment of the project. In the assessment, the supplier development team documents the estimated savings from the development project along with assumptions used to create the estimate. According to the writers, the initial draft of the estimate will never be completely accurate, that is why the estimate must be updated as better information becomes available.

b. Situation and goals: In this section, they argued that, a qualitative and quantitative and description of the current situation and the goals for improvement are documented. Baseline data should be accumulated on the quantifiable metrics that will be used to gauge progress toward goals. A description should be included describing how the supplier can track the improvements after implementation.

c. Mission/Vision: the project's mission needs to be defined to be able to communicate quickly to others what the development team is trying to achieve. The mission provides a point of reference against which team members assess activities. "Does a particular activity help achieve the project mission"? If it does not, then there is a good chance the activity is wasteful effort or the group has strayed from its original goal.

d. Project scope: in this section, the development team clearly defines the project's scope. Clarifying the project scope helps to assure that the team has narrowed the project focus by refining its understanding of the activities required to complete the project.

e. Schedule and Deliverables: A common approach in this section, they suggested is to provide a print out of a Program Evaluation and Review Technique (PERT) or Gantt chart showing the relationships and deadlines of the activities required to complete the project. Completing this section of the charter reduces future misunderstanding and miscommunications.

f. Assignments and Roles: This section simply documents who is responsible for what activities. The schedule created in the previous section provides a logical format for assigning team members responsibilities for specific activities. Signatures – Signatures are required from the upper management of all participating companies as well as key participants when establishing the charter as an official document.

G. Plan-Do-Check-Act-Cycle
Supplier development projects usually involve improvement efforts. One of the most common approaches to accomplishing continuous improvement is the use of the Plan-Do Check-Act (PDCA) cycle. However, (**Dobler, 2003**) identified the following phases of approach to supplier development.

a. Phase 1 PLAN, is one of the selection processes, it involves deciding specifics about the focus of the project. The highest- yield project targeting a specific process generally is selected. Metrics must be agreed to so that those involved can measure their accomplishments create an environment of success and lay the foundation for addition projects.

b. Phase 2 DO, The largest percentage of work is usually required in phase two. This is where teams start to look for waste and develop improvements. All participants are familiarized with tools and techniques that will be sued throughout the project. Team members develop a thorough understanding of the supplier. Phase 3 CHECKS. The next phases are to check the results as the actual process has take effect. After the process has stabilized, the team gathers data to compare with the baseline and calculates data for each of the goals. The project team develops the long-term organizational plan and finally presents the result of the team's work.

Phase 4 ACT, at this phase, the lessons learned are disseminated throughout the organization and to relevant supply chain members. The goals are to use the information to document and follow up on the process to maintain and increase its yield.

H. Supplier Development Process
According to (**Dobler et al, 2003), found that**, a generalized process for managing supplier development projects have been laid down. Before starting the process, the following individuals should be committed to the development process.
A project champion, he or she is the key liaison to upper management and must be designated from both the supplying and buying firms. The development team members from both the supplying and buying firms, to create self-sufficiency in the suppliers ability to develop its own process in the future, that is the primary goal of including supplier's personnel on the development team.
The process owners, they are the individuals who actually interact and operate the processes that are under investigation for improvement.
Finally, upper management from both the firms must be committed to the project or failure is inevitable.

The supplier development processes are as follows:
a. Initiating the Projects: In the first phase, the main activities are to: develop and confirm a preliminary supplier development charter, define the supplier's processes, assess the customer's needs, and assess the business environment. The supplier development charter is a firm definition of project scope and expectations for both the buying firm and the supplier.
After developing the charter, the next step is to define the supplier's processes. In doing this, the team assesses customer needs, expectations, and requirements for the areas of project focus and translate them into project metrics.

The team then assesses the business environment surrounding the processes and analysis how it affects the areas of project focus.

b. Mapping and Measuring: In this phase, the tam maps the supplier's process and determines the measurement required. Deliverables from this phase include: process maps, a final project charter, and a baseline of before process improvement status. In this phase the team undertakes the following:

- Map / Analyze supplier process – metrics that will be used to gauge progress toward project goals are agreed upon.
- Collect Baseline Data – data defining the current process status is gathered. This data helps establish baseline metrics.
- Analyze Baseline Data- gaps in the current process are identified through study of the collected data. Opportunities for improvement of manufacturing cycle time, quality, delivery, etc are prioritized.
- Document the Baseline – baseline metrics are documented to establish the before project status.>Identify Process Metrics that will be used to gauge progress toward project goals are agreed upon.

c. Developing the Process: Deliverables from this phase include a project implementation plan that addresses performance gaps in current processes and derives result. The plan is used to track and manage project progress, define the project's critical paths, and detail the project's activity interdependencies. The project implementation plan uses management software. The following critical activities occur in this phase:

d. Create Solution: the team brainstorms potential solutions and conduct benchmarking analyses where applicable.

- **Select Solution:** The solutions that provide the greatest potential for reducing manufacturing cycle times, improving quality and delivery or reducing costs derives selection of solutions.
- **Develop New Process:** Detail the new process further through study and brainstorming. The outcome of this activity is a new process
- **Plan Implementation:** The team works with relevant personnel to develop and propose a detailed implementation plan.

e. Achieving Result: In this phase, the project team executes the implementation plan, conducting any necessary simulations, pilots, and releases. Relevant personnel, such as engineers or information technology specialist from the buying firm, are made available to assist the implementation team in keeping the project on schedule. Directions and resources are provided as required by the project champions. Project progress is communicated to upper management, champions, and process owners at designated milestones as defined by the supplier development team. The process is documented for clarity and consistency.

f. Controlling the Process: In the phase, plans and documentation are created to ensure consistent implementation of the process with minimized variation. A closed – loop corrective action procedure system is installed to review the process, address gaps in performance, and continuously improve performance. The corrective action plan addresses what occurs in the event of a nonconformance in the process so that the nonconformance is eliminated and recurrence is prevented, with verification that proposed corrections are effective. The control plan is used to ensure that activities in the process are executed correctly at all times and that critical elements of the process are always addressed.

g. Recognizing the Team: The final phase provides team recognition. Activities are organized by the project team, project champions, and process owners to promote the success of the project. In this phase, the team shares the lessons learned and best practices with the supplier's organization.

III. RESEARCH METHODOLOGY

This study deals with the methods and procedures used in the collection, analyzing and presenting data.
The study sought to determine the extent of local suppliers' development in an organization with particular reference to Manufactory Industry. Using Unilever Ghana as a case study area.

A. Sources of Data

a. Primary Data: This refers to the original data gathered specifically by the researchers for the current investigation and it was gathered directly by visiting the source.

The main primary source used for this work was questionnaires.

b. Questionnaires: These are series of structured questions which are related to a research topic and to be answered by groups of persons with the aim of gaining first knowledge on the topic posed to the persons. Questionnaires were used because it is simple and the method of collecting the data is easily understood by the respondents, both closed and open ended questions were used. Two set of questionnaires were administered.

One set to purchasing department and another to user department.

The researchers administered 20 item designed questionnaires to gather information on the research topic. The questionnaires were sent personally to both the head of purchasing department and the purchasing staffs as well as the user department.

The researchers administered 20 item designed questionnaires to gather information on the research topic. The questionnaires were sent personally to both the head of purchasing department and the purchasing staff as well as the user department.

The researchers first explained the objectives and purposes of the research to the respondents. This actually helped the respondents to understand the questions and answer them quite.

c. Secondary Data: This refers to existing data and represents data collected from already existing published and unpublished data. These were from textbooks, directories, journals. The data helped the researchers to make use of information already known and available. Apart from visits, questionnaires and interviews, some data were collected from the annual Production publication of Unilever Ghana. Referenced were also made at the library; internet, relevant materials were read and reviewed. This method also allowed the researchers to obtain more information about the chosen topic.

B. Sampling Method

The researchers used purposive sampling method. This method of sampling was used because the questionnaires were demarcated into two main parts since the researchers believe that purchasing and supply department has much knowledge about supplier development and also to get an idea from the other user department to solicit our information.

C. Population Sample and Their Characteristics

The researchers were able to gather data from twenty employees, of which fifteen were junior staff and five were senior staff. The questionnaire was made up of twenty questions.

D. Method of Data Analysis

The method used to analyze the data was a descriptive approach. Statistical tables were drawn based on the percentages corresponding to absolute figures. The tables were

Prepared after answered questionnaires had been audited and tallied. Thereafter, percentages were used to come out with findings about the research topic. Response to all questionnaires will be presented and disused in the next chapter giving a valid reflection of the information collected.

IV. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

In the data presentation, the researchers analyzed only one set of questionnaires. The researchers further examined ten key questions that were critical to the study, and drew relevant conclusions for all key questions selected. The study presents the summary of the research and draws logical conclusions and makes recommendations and suggestions based on the findings of the research.

A. Summary of findings

The research focuses on supplier development in the Industry sector with Unilever Ghana Limited-Head Office and Tema Factory, Unilever as the case study.

B. Conclusion

In conclusion, it became obvious that supplier development contribute meaningfully to the running of the organization and therefore cannot be underestimated. From the analysis and findings, the following conclusions were made:

- All the materials are acquired in the local market
- Purchasing is seen as a middle management function in the organization
- There is cordial relationship between the organization and the suppliers
- There is some degree of defects in materials supplied at times.
- Suppliers conform to the organization specified lead-times
- The organization has established suppliers on record.
- Management is not concerned about supplier development.
- The organization has limited capabilities to develop suppliers in terms of financial, technical and managerial.
- The researchers observed that there is only one professional purchasing personnel at the purchasing department and she is not invited to senior management meetings.
- The research found out that there is a communication problem due to mistrust and also suppliers are only contacted when a need arise.
- The researchers observed that, the organization structure drawn by the Ministry of trade and industry is not being followed, because in the organizational structure purchasing should be placed at the senior management level.
- The researchers observed that the purchasing department is not autonomous one.

C. Recommendations

In most organizations and institutions suppliers development is scarcely considered in selecting potential suppliers as well as buying materials especially capital equipment such as plant and machinery for operations. This idea should be erased from every organization, be it manufacturing or service.

Purchasing on the other hand know the commercial and legal aspect in dealing with suppliers. It is therefore recommended that team work comprising various department professionals, which purchasing should be centre at each meetings.

Interactions prepare the way for strategic collaboration opportunities, with this the researchers recommend suppliers involvement in the early state so as to enhance effective communication to enable them do way with mistrust and to review information as and when it is required and if necessary adjustment is done on both sides.

Furthermore, organization must assist local key suppliers who produce materials on their own such as sheanut manufacture etc, with the needed finance, technical and managerial capabilities. This will enable key suppliers to meet lead-time, supply high quality materials at very competitive prices.

Subsequently, the firm should employ more purchasing professionals to enhance work performance and also, they should not be denied with the level of placement within the organizational structure.

Conclusively, we believe that whatever approach to supplier development is employed, purchasing and supply professional should ensure quantifiable and measureable results that lead to business benefits. Supplier development is, therefore, a significant opportunity to raise the profile of purchasing and supply management in an organization and should be utilized by all purchasing and supply management professionals.

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