

A Sustainable System Model by Using Strategic Management Tools for Restructuring a Firm to Enhance Decision Making and Process Improvement

Osama Yousof Rizg¹, Mohammed Abdullah Balubaid²

¹Master Degree Student, King Abdulaziz University, Industrial Engineering Department, Saudi Arabia

²Lecturer, King Abdulaziz University, Industrial Engineering Department, Saudi Arabia

(¹orizg0002@stu.kau.edu.sa)

Abstract- Strategic Management allows organizations to review their current position, enhance decisions, and make intentional decisions about a company's direction. Many organizations managements prefer the traditional way of management and do not fully understand strategic management goals or implement it in their organizational environment. Some of strategic management tools were used in this research such as SWOT Analysis, Balanced Scorecard, Key Performance Indicators, and Employee Job Guiding Model (EJG) modified by the author, in this research to study the influence of strategic management tools and to identify a sustainable model for enhancing decision making and process improvement. Furthermore, this paper includes restructuring and identifying rules of the organization's hierarchy to improving workflow and decision making.

Keywords- Strategic Management, Decision Making, Process Improvement, Organizational Change, Balanced Scorecard, SWOT Analysis, Key Performance Indicators

I. INTRODUCTION

In April 2016, Saudi Arabia launched a Transformation Vision. Vision 2030, which outlined the future goals for the country. Vision 2030 has been widely praised for its boldness and farsightedness [1]. While the primary goal is to diversify the Saudi Arabian economy from being oil-based to being one not based on oil. The 2030 transformation vision focuses on two main areas, which are decision making and process improvement (Organizational Change) for short-term and long-term applying. Strategic Management (SM) is one of the more popular management approaches in contemporary organizations, and it is consistently ranked among the five most popular managerial approaches worldwide [2], [3]. Nowadays, Industry, Academic, public, and private sectors need a perfect management system to enhance decision-making, process improvement, and increase the organization's productivity through their employees' abilities. Sometimes, the organization has very effective and efficient employees, but due to some management behavior and decision-making weaknesses, they got the drop in their performance. It is significant to note that

though efficiency and effectiveness are two mutually exclusive components of the overall performance measure, yet they may influence each other. More specifically, effectiveness can be affected by efficiency or can influence efficiency as well as have an impact on the overall performance. Figure 1 puts the argument in a proper scenario. Nevertheless, it is possible that an organization can be efficient in utilizing the inputs, but not effective; it can also be effective, but no efficient [2].

In this study, I will try to use my technical and management skills that I have learned from Strategic Management tools to have a flow of applying tools and techniques that could be applied in a certain way to achieve the research goals. This combination will let us see and measure organizational change and to have the best organization and employee's performance to enhance decision-making. This study will be conducted in a Glass Manufacturing Company in the private sector, and it is one of the biggest companies in glass sectors, with more than 1000 employees, it works 24 hours / 7 days. The Glass Manufacturing Company is a successful company, and they are making a good profit. At the end of this study, I will be able to measure and define specific strategic management flow combining with knowledge management to reach research objectives and goals. Moreover, in this research, I will identify a sustainable model system by using strategic management tools for restructuring a firm to enhance decision making and process improvement.

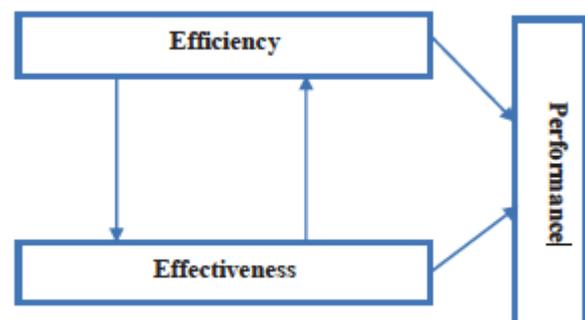


Figure 1. Components of Performance [4].

A. Problem Statement

The Problem statement and the reason for doing this study are to define a sustainable system model by using Strategic Management tools for restructuring a firm to enhance decision making and process improvement. This study could be implemented in different private and public sectors, large and small organizations. To prove the theory, this study was implemented in A Glass Manufacturing Company, one of the biggest companies producing glass in the middle east. This study was implemented in the short term, six months to one year. A Glass Manufacturing Company needs to improve internal processes to increase efficiency, improve productivity, and reduce wastage of time and cost. There is strong competition in the local and external markets, and the Company needs to be on the same track and keep improving. Sometimes employees and managers faced some issues related to the lack of planning and miscommunication between the employees. The Glass Manufacturing Company follows an old-style and traditional way of decision-making by relying on human opinion instead of data-analysis and system engineering.

B. Methodology

In this study, I will collect the data from A Glass Manufacturing Company. I will look for different literature reviews of applying strategic management tools for the short-

term. I will meet some of the employees and managers before and after applying it to measure the differences and improvements in changing way management. I will also use the engineering management techniques and tools such as SWOT analysis, Balanced Scorecard, and Key Performance Indicators (KPI) to verify a specific tools flow application theory.

C. Research Questions

1. Is it valuable, and the result could be tangible for applying the strategic management tools for SME's improvement for the short-term?
2. Could there be a specific flow for applying strategic management tools and techniques?

D. Research Objectives

1. Investigate the effects of applying Strategic Management tools in enhancing decision making in SME's for short-term
2. Study the influence of Applying SWOT Analysis, Key Performance Indicators (KPI's), and Balanced Scorecard for short-term
3. Identify a sustainable model system by using strategic management tools for restructuring a firm to enhance decision making and process improvement.

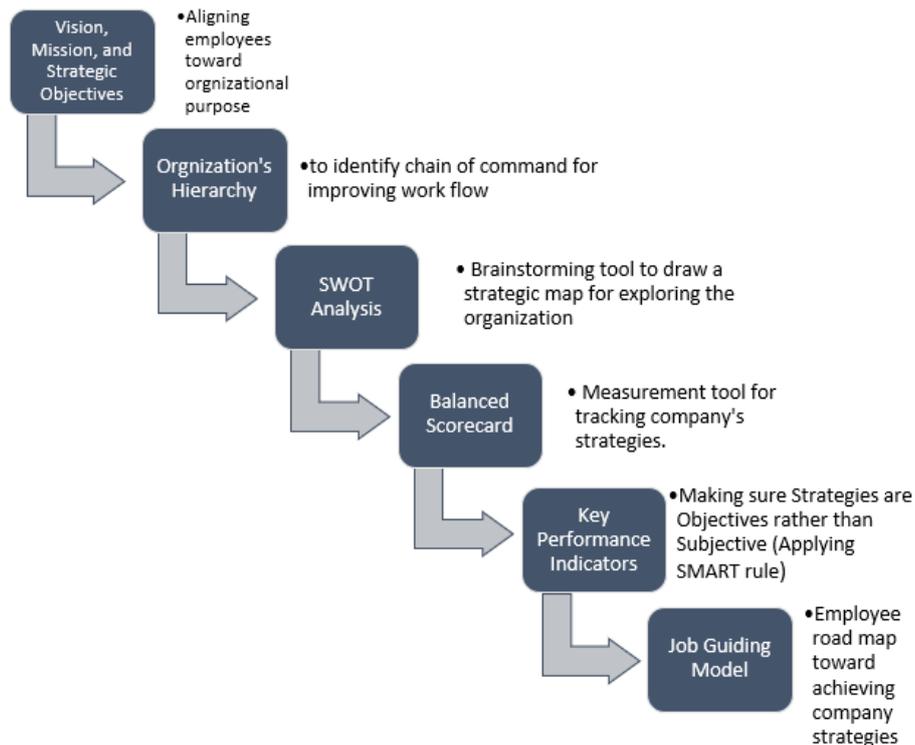


Figure 2. Flow of Applying Strategic Management Tools

II. APPLYING STRATEGIC MANAGEMENT TOOLS

A. Vision & Mission

Vision and Mission will guide the employees to align with the organization's goals and increase efficiency and productivity.

B. Hierarchy

Gaining an effective organizational structure in an organization leads to increased productivity, improving operating costs, and employee satisfaction. This will allow the organization to identify the positions and needs within an organization, determine management demands, and which departments define individual job levels and roles in the organization. Moreover, an influential organizational structure will facilitate strategic management applying.

C. SWOT Analysis

SWOT analysis tool to understand the organization's circumstances and study behavior that will clarify organizations' strengths, weaknesses, opportunities, and threats. SWOT analysis will draw a strategic map for exploring the organization. Also, SWOT analysis increases the possible advantage of success. Please refer to Figure 3 the SWOT Analysis Matrix. Stanford University professor, Alfred Humphrey, is credited with the SWOT analysis's origination though the name SWOT and its source are [9]. Several other researchers took the development of SWOT, further defining the strategic management analysis tool as "a systematic procedure for identifying a firm's critical success factors: its internal strengths and weaknesses and its external opportunities and threats" [5].

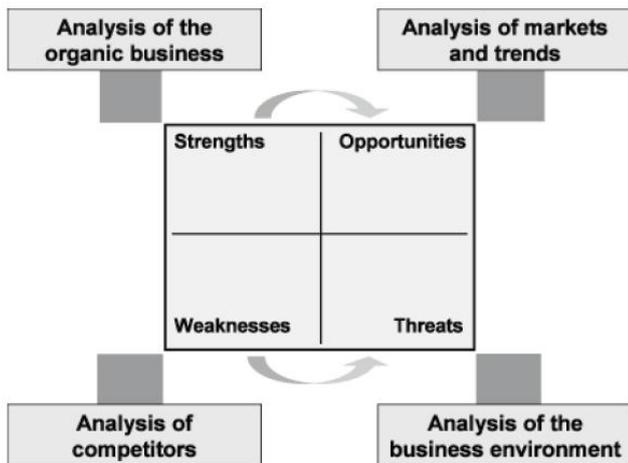


Figure 3. SWOT Analysis 2*2 Matrix [5].

D. Balanced Scorecard

Balance Scorecard (BSC), This is the second strategic management tool for studying and measuring the organization's

changes either if there is improvement or deterioration in organization performance directly influence the decision making. Moreover, Balanced Scorecard (BSC) provides a powerful framework for building and observing organization strategies. Balance Scorecard allows all organization staff to participate and observe the changes while applying the strategies. (Please refer to Figure 4)



Figure 4. Balance Scorecard Major Perspectives [6]

E. Key Performance Indicators

A Key Performance Indicator is a measurable value that demonstrates how effectively a company is achieving key business objectives. Organizations use KPIs at multiple levels to evaluate their success at reaching targets. High-level KPIs may focus on the overall performance of the business, while low-level KPIs may focus on processes in departments such as sales, marketing, Human Resource, support, and others [4].

- Oxford's Dictionary definition of KPI: A quantifiable measure used to evaluate the success of an organization, employee, etc. in meeting objectives for performance.
- Investopedia's definition of KPI: A set of quantifiable measures that a company uses to gauge its performance over time.
- Macmillan's Dictionary definition of KPI: A way of measuring the effectiveness of an organization and its progress towards achieving its goals [8].

In this study the KPI's were added to the Balance Scorecard table to measure the setting strategies in an objective way instead of subjective measurement. These KPI's will be set in the SMART rule, which is each KPI's must be Specific, Measurable, Achievable, Realistic, and Time-based. KPI's keep the organization's objectives at the forefront of decision making. KPI's enable to understand the performance of the organization and can make critical adjustments of strategies executions to achieve the objectives

F. Job Guiding Model (JGM)

The fourth tool is the Job Guiding Model (JGM), an internal document that clarifies all doubt for doing the daily job duties and responsibilities toward achieving organization strategies.

Internal Job Guiding & Evaluation is a model modified for two main reasons: to guide the employees toward organization goals and objectives. The second reason is to evaluate employee performance by each goal and Mission KPI's. Also, this model can utilize and guide the employee's effort effectively and efficiently. The internal Job Guiding & Evaluation model contains five objectives (G1, G2, G3, ...etc.) at maximum and under each objective, another five-primary mission (M1, M2, M3, ...etc.) with its KPI's. Internal Job Guiding and Evaluation (JGM) could be used for each employee's annual evaluation model.

Job Guiding Model will allow all organization staff to identify their responsibilities, toward organization strategies, objectives, and goals. JGM should be written after setting company vision, mission, and strategic objectives and after applying Balance Scorecard, to identify the main goals and mission for each employee toward its strategy.

Employee Job Guiding Model				
Employee Name	Department	Quality and Safety	Sub-Department	
Job Title	Employee #	1100	Supervisor	
#	Main Goals and Mission		KPI	Weight %
G1				
G1-M1				
G1-M2				
G1-M3				
G2				
G2-M1				
G2-M2				
G2-M3				
G3				
G3-M1				
G3-M2				

Figure 5. Employee Job Guiding Model

III. RESULT AND DISCUSSION

A. Applying Strategic Management Tools

Applying strategic management tools was helpful for the Glass Manufacturing Company. It changes many things in the organization's culture and the way the job gets done. Employees getting motivation, everyone in the organization is working to achieve the organization's vision, mission, and strategic objectives. Applying Engineering Management and Systematic Engineering tools in A GLASS MANUFACTURING COMPANY leads to utilizing

effectively technical, financial, and human resources. Also, applying engineering management ensures the right employee is doing the right job at the right time effectively and efficiently. Moreover, employees and managers know who's doing what, when, and how to enhance decision making and process improvement.

B. Results, Comparison between Traditional and Strategic Management

As we can see from below results, the differences between Traditional Management and Strategic Management in enhancing decision making and process improvement. There are seven significant differences become visible after applying strategic management tools in this research, which are:

1. Decision-Making: The Glass Manufacturing Company used to take actions and decisions by the manager's opinions without any strategies. However, after applying Strategic Management, The Glass Company is making strategic management applications in an engineering and systematic way.
2. Setting Plans: The Glass Company used to set plan by assumption, while after applying strategic management tools, the Glass Company is using data-analysis on setting plans by defining the needs to reach organization goals and deciding which initiative should be applied to achieve the goals and working on the SMART rule
3. Process Improvement: The Glass Company had resistance to change their way to work because the Glass Company was satisfied with their revenues and results. Still, The Glass Company were losing opportunities and were not utilizing their resources. After applying strategic management tools, the Glass Company is looking for continuous improvement.
4. Sharing Information: The Glass Company had a threat to sharing problems by monopolizing critical work by employees. After applying the Quality Management System (QMS) as one of the Strategic Management tools, essential information is shared by collaboration between employees under Knowledge Management.
5. Assigning Tasks and Objectives: The Glass Company used to distribute the employees' tasks by random. The Glass Company used to give the expert employees more tasks and fewer tasks to the junior employees and not involve them in critical tasks. This leads to not gaining enough experience
6. Actions and workflow: Due to the employee working in large groups and under each head department were more than thirty employees, the Glass Company workflow was horizontal and led to employees' wrong decisions without the management's supervision. The Glass Company restructured its hierarchy and assigned coordinators with specific rules.
7. Achieving Organization's Mission and Vision: Employees used to work separately with unclear objectives and goals. The Glass Company built Job Guiding Model (JGM) to clarify each employee's duties and responsibilities, and it is yearly updated according to company objectives.

IV. CONCLUSIONS

Applying strategic management tools was helpful for a manufacturing class company. It changes many things in the organization's culture and the way the job gets done. Employees getting motivation, everyone in the organization is working to achieve the organization's vision, mission, and strategic objectives.

Applying Engineering Management and Systematic Engineering tools in a manufacturing class company leads to utilizing effectively technical, financial, and human resources. Also, applying engineering management ensures the right employee is doing the right job at the right time effectively and efficiently. Moreover, employees and managers know who's doing what, when, and how to enhance decision making and process improvement.

Overall, organizations can benefit significantly from implementing strategic management analysis tools into their organizations but determining which tool to use can be complicated. Therefore, a synthesis of the devices will be examined to help organizations decide which strategic management analysis tool is best for their organization.

V. RECOMMENDATIONS

In this study, I investigate the impact of applying strategic management tools in SMEs for the short-term. And I recommend the following points:

1. The private and Public sectors should work in system engineering by applying strategic management tools to utilize their resources.
2. Responsibilities and duties should be written in the Employee Job Guiding Model (EJG) to make all employees' duties toward organizational objectives and goals. After applying the Employee Job Guiding Model, it will divide Responsibilities, duties, and work equally between the employees.
3. Strategies and decision making should not be in assumption and the manager's opinion. Strategic management tools and data-analysis should set strategies. Also, strategies should always be objectives based on Key performance indicators and SMART rules.
4. An organization should keep improving and should not have resistance to change. However, engineering management tools and techniques are changing and improving. Therefore, organizations should be up-to-date on the latest ways to improve organizations.
5. Knowledge Management and information sharing between the employees is one of the important points of organization success. It could be achieved by applying the Quality Management System (QMS) in the organizational department.

6. Company hierarchy is one of the important methods of achieving organizational goals and objectives. An organization's hierarchy must be built under rules and conditions defined in this research.

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Osama Rizg born in 1993, Saudi Arabia. Majored in Industrial Engineering, King Abdulaziz University, Saudi Arabia. M. Sc. student in Industrial Engineering department, King Abdulaziz University, Saudi Arabia.

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