



A Study of project management strategy of EV technology as an option for the Indian automobile industry to improve organizational performance

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Article History: Received: 01.02.2023

Revised: 07.03.2023

Accepted: 10.04.2023

Abstract — Electric vehicles are being introduced in India in addition to hybrid engine vehicles. There are existing project management strategies for the automobile industry to reduce cost and time but in the EV segment organizations need to update the structure of project management strategies (Initiation, Planning, Monitoring, and controlling Execution, and Closer). Now organizations are working on the skill updating of employees to develop the standard in the EV segment. In India, the EV adoption rate is increased due to fuel costs now the automobile industry has a very good opportunity to improve the performance of the organization and start making project management strategies to improve the adoption ratio. The Organizational structure and project management strategies are needed to improve in the automobile industry to increase organizational performance. The automobile market is now in the transformation phase and EV technology is the option for the Indian automobile industry. Nowadays EV sale is increasing in the worldwide automobile sector with an annual growth rate of 21.7 % by 2023 and it is expected to grow to 39.21 million units globally.

Keywords: Project management, Organizational performance, EV adoption, Strategic formulation.

Introduction

India is determined to achieve Net-Zero carbon emissions by 2070. The automobile industry is playing a very important role to achieve the target. In the automobile industry, EVs are supported by governments all over the world through subsidies and regulations and customers are also demanding low-emission commuting over the fossil fuel-power vehicles that are destroying the environment. The transport sector is very important to reduce carbon percentage in the environment. For Environmental conditions, the automobile sector is pushing for zero-emission vehicles by 2040. With significant support from the Government and Automobile organizations adoption of new EV technology is easy and profitable with the environment and cost-effective. With the help of natural resources, we will run the transport

sector. To achieve the 2040 goal of carbon emission we need to focus on product development and the need to create new project management strategies. The existing or traditional product development and resource management strategy need to improve for the new EV technology.

To improve the adoption ratio of EV technology need to focus on the development of the project management lifecycle for automobile organizations with real-time updates to all levels of management.

I. PRODUCT DEVELOPMENT AND SOURCING STRATEGIES

SOURCING STRATEGIES

The sourcing strategies are based on the product, Product development analysis, and it is also based on the region. For the adoption of a new product, territory product selling is also

important. Requirement gathering and analysis reports are playing important roles in sourcing strategies. The complex process is the comparison between the old technology and the new EV technology.

A. Product development strategy

To improve organizational performance with the adoption of EV technology in the automobile industry. Product data management for cost and supply chain management. Contract management for the raw material and supply chain is required.

Three level of EV infrastructure planning is required at the initiation level:-

1] community level -The roads or highways infrastructure for transportation.

2] Corridor-level – Planning considers the required infrastructure solution to meet the need of the region or town.

3]Site-level planning – Installation of EV charging infrastructure in predetermined locations.

Need for new product

Product is very important to the organization. The level of competition in the automobile market pressurizes the company for a new product or new series as per the market demand and profit ratio. New products are essential for organizations nowadays to grow in the specific market

a) It improves the profitability of the company
b) It improves the status of the company in the specific market.

c) It creates an impact in the consumer's mind and improves the demand in the market [1].

II. CONCEPTUAL FRAMEWORK FOR THE PROJECT MANAGEMENT STRATEGY FOR THE EV ORGANIZATIONS

STRATEGY APPROACH

The EV organizations required a conceptual framework for the project management strategies

to streamline the project flow of the project in a cost-effective manner.

In the last decade, Strategy is developed. In the last decade, it is developed the concept of strategic management, there is no specific way to define the perfect PMP strategy planning for the EV organization. But there are some generic strategic management approaches that manage to approach a good project management strategy and help to achieve the organizational goal.

-Generic strategy

The generic strategy is the direction for the project to run globally. To analyze and improve the

product performance and the product. Comparative analysis is important in the generic strategy to reduce the bugs in the product. Internal and External diagnosis is also important to improve the project management strategy for the upcoming project and the technology. If the strategic plan is defined at the initial level of the project, then the achievement of the goal is easy and steady.

This strategy plays a very important role to improve the hierarchy structure and the quality of the leaders in the organization. It is the continuous improvement process in project management with respect to upcoming technology and business factors.

It includes the four behaviors of intellectual stimulation, motivation, commitment, and effort, which culminate in better performance. With the help of the generic strategy, the organization will achieve the decided goal within the decided time and cost.

EV technology needs to improve the strategical approach with respect to the technology and the traditional method of project management in the automobile industry [3].

-Company strategy

Company strategy is part of the generic strategy.

The role of the higher management . The role of the management strategy is part of the organizational strategy. The higher-level management always performs the important role. And also it is support various functions like support in various important decisions. For the EV automobile sector, it is important now to take new decisions and also accept new decisions from management and various departments as compatible with new technology and use full for the updating of the automobile industry. Companies need to analyze the market area and provide services for EV users. To provide EV services company needs to implement the EV charging infrastructure strategy to improve sales and reduce fear of charging infrastructure issues in users' minds. To grow business in the proper way and the predictive analysis of the growth rate of the business strategic planning of project management is very important. Company strategy needs to follow a hierarchical structure [3].

FORMULATION OF STRATEGIES

The most important thing is to find out the strategic problem and it is called a strategic GAP. There is a strategic GAP when an objective is set for the future but it is not achieved with the current strategy. Strategic management consists of different stages. The following figure shows the Stages of the strategic formulation [2]

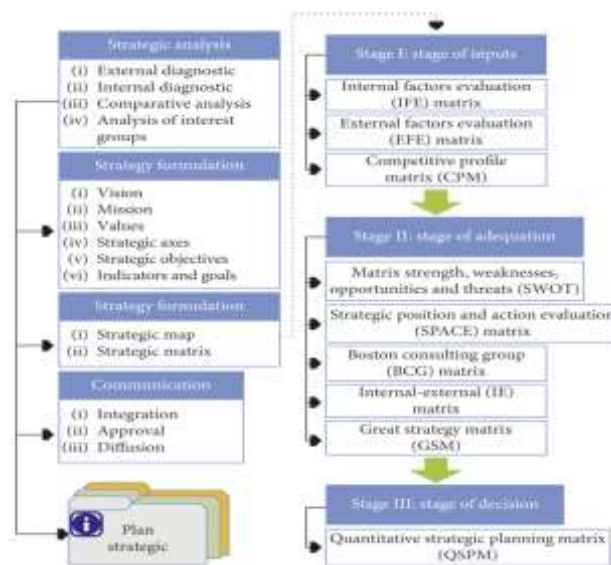


Figure 1: Stages of the strategic formulation[2]

With the help of the formulation of the strategy to achieve the organization's goal with respect to time and budget strategic planning is very important and also to improve the performance of the organization.

MEASURING AND EVALUATING ORGANIZATIONAL PERFORMANCE

-Growing Pains and Financial Performance

Organizations in the long term create their own problem sets with previous experience and the latest research. The growth pain describes that something is going wrong or anything in the organization's impact on the organizational performance and creating barriers to achieving the organizational goal. They are the indications of the future consequences

and the financial issues which will be faced in the future by the organization. As shown in Figure 2, is an 'organizational development gap,' (that is, a gap between the organization's actual infrastructure and that

required at its current size or stage of development) that produces the growing pains. As a standard rule, organizations as measured by revenues. It is mandatory to develop the new infrastructure to support its operations. organizational growing pains can be used to predict the financial performance or so-called 'bottom line' of enterprises, especially future organizational distress. In this section, we shall present a study of growing pains and financial performance or the so-called 'bottom line[4].'

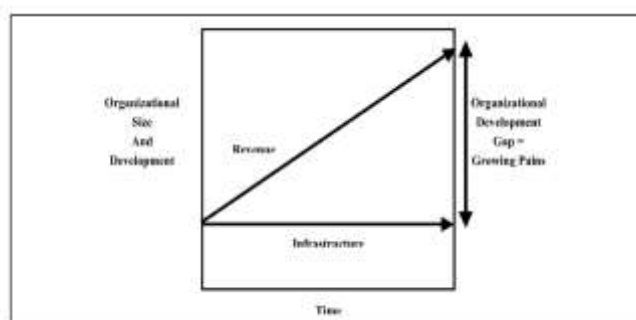


Figure 2: Organizational performance GAP [4]

Conclusion

This article has examined the relationship between project management strategies and the relation with the growing pain and financial performance of the Indian EV industry. Identified the most common organizational performance GAP and gave the step-by-step execution to overcome the problem with an effective strategy. Some variations exist here, but organizations of all sizes are experiencing growing pain and which impacts the organizational pains so the EV industry in India's developing stage so step-by-step execution of strategic planning is required to improve the organizational performance and make the product available in a cost-effective manner and as per the demand also. In India, the EV organization required new project management strategies and Predictive analysis for demand analysis and product development.

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