

ROLE OF STRATEGIC PLANNING IN TRANSPORTATION MANAGEMENT TO IMPROVE THE PERFORMANCE OF TRANSPORTATION COMPANY

by

Hossein Ghazanfari and Shakib Zohrevandi

Department of Industrial Engineering,
Payame Noor University of Tehran, Iran

E-mail: hghazanfari.ie@gmail.com, shakibzohrevandi@gmail.com

ABSTRACT

The objective of this paper is to offer a strategic solution to administrative bottlenecks in internal structure of transportation companies. Analysis of data from a transportation Company revealed that strategic planning enhances a transit agency's ability to respond effectively to passengers' requirements and demands of host communities. This is particularly so when it is designed to consolidate the various unit action-plans into a system-wide strategic plan. The environment under which Raja Passenger Trains Company (which is our case study) is operating is dynamic. The over-regulation of Raja Passenger Trains Company should be reduced such that the initiative of the board members can have a place in the day to day running of the corporation. Furthermore, effective strategic planning requires involvement of employees, particularly those who will be responsible for the implementation of the resulting plan, and it must fit the management and decision making styles of the top and unit or division level managers. After the system implementation, a qualitative evaluation was carried out by a document analysis and questionnaire application. These roles are intended to provide guidelines to transportation companies intending to use strategic planning as a tool of effective strategic management.

KEYWORDS

Strategic Planning, Transportation Management, Transportation Planning

INTRODUCTION

The success of strategic planning in some private sector firms as well as interests of governments looking to tie their budgets to performance measures have spurred its use in public sector organizations as a tool of strategic management. The quality of life of any nation is partly determined by the quality and efficiency of that nation's transport system. A turbulent environment strategic planning is a constraint on the flexibility of an organization to adapt to its rapidly changing and uncertain environment¹. An efficient transport system is an axle wheel on which the economic activities of any nation revolve. Transport is needed to provide access to sources of existing and potential raw materials. It facilitates the collection and distribution of agricultural and industrial products and it encourages efficient allocation and utilization of some economic resources. It equally promotes the smooth administration of any country. It can therefore be regarded as the life wire of a nation's economic development. Transportation departments (including public transportation) have experiences with planning, data gathering and analysis, and "using this information to allocate resources and manage programs", thus making them good candidates for strategic planning².

In Iran, road transport dominates other modes of transportation in the movement of passengers and goods. This is because; road transportation has numerous advantages over and above other modes of transport. The Roles of strategic planning in transportation are the organizational environment in which strategic planning is applied (contextual), and how strategic planning is designed and implemented³. Over the years, 70% Iranian depended on public transport for their mobility; this has led to an acute shortage of public transport. The ever increasing demand for public passenger transport approached a crisis level in 2002 and the government had to intervene in order to reduce this serious mobility problem which is manifested in intra-city movement. The private sector dominated the business of mass transit in the past. Some State governments have attempted the mass transit system before, but they failed because of lack of strategic management.

Top management leadership involvement in and commitment to strategic planning, and the strategic planning process itself to the characteristics of effective strategic planning⁴.

Strategic issues in public transport include:

- Vehicle, selection and purchase.
- Type of buses in a fleet
- Operation of the buses.
- Maintenance and servicing.
- Examination of other issues.

Even when all these factors are taken into consideration for efficient mass transit system, the organizational structure, relationship between supervisory ministry and the government and Transport Corporation could hamper the achievement of the objectives of the corporation. These Roles are measured by the organizational contextual, design, process, top management leadership involvement and commitment dimensions of strategic planning systems of public transit agencies and are treated as variables. Then, using structural and measurement equations, the paper develops relationships between the measures, strategic planning characteristics, and internal organizational success of strategic planning, federal legislative requirements and community impacts. Those measures with positive coefficients are used as the Roles of effective strategic planning.

Raja Passenger Train Company started their activity on Oct. 22, 1996 in the form of an independent governmental company, whose 100% shares belong to the Railway of the Islamic Republic of Iran, aiming at qualitative and quantitative growth in the field of passenger transportation⁵. This article discusses how strategic management could be used to sustain the operation of a public transport corporation. Public transportation companies encounter problems when carrying out their activities which creates difficulties in their work and their results, these problems are in Raja Passenger Trains Company too, therefore I use this strategic planning method in the Raja Passenger Trains Company that caused enhance productivity and improved of company performance in level of their organizational and their business.

Strategic Planning

Many researchers seem to agree that strategic planning is an effective tool of strategic management. Found positive 2 relationships between strategic planning and organizational effectiveness and performance and argued that methodological problems could explain the inconsistencies in past research results⁶. Strategic planning is not just planning like long-term financial planning or capital planning, but involves a thorough assessment of the environment and organization to develop broad strategies for resolving important issues facing the government⁷.

Pointed to design and process flaws as possible explanations of failure of strategic planning in many cases⁸. He argued that, the fact that an organization practices strategic planning does not mean that it is done well. The question therefore, is what characteristics of strategic planning are related to its effectiveness.

Transportation Planning

Transportation planning is a continual process of examining the transportation challenges facing and identifying a plan of action to improve transportation system performance⁹. Transportation planning is a process that develops information to help make decisions on the future development and management of transportation systems, especially in urban areas. It involves the determination of the need for new or expanded highways, transit systems, freight facilities, and transportation terminals, their location, their capacity and the management of their demand. Typically transportation planning involves a forecast of travel patterns 15 to 25 years into the future with an aim to develop a future transportation system that will work effectively at that time. Transportation can have significant effects on mobility, economic development, environmental quality, government finance and the quality of life. Wise planning is needed to help create high quality transportation facilities and services at a reasonable cost with minimal environmental impact and to enhance economic activity¹⁰.

The transportation planning process involves an interconnected group of transportation officials and transportation agencies, relying on plans made by the federal government, the state, counties, cities and other transportation partners. It is driven by national, state, district, metropolitan and local plans and priorities¹¹.

Transportation Management

A Transportation Management is a system designed to manage transportation operations. In more recent times, we have seen that the Transport Management is being offered in many different types of licensing arrangements. These different arrangements have given shippers who otherwise would not be able to afford sophisticated software the opportunity to utilize Transportation Management to better manage this vital function. Transportation Management is really meant to increase efficiency of your logistics company and has become a mandatory element for an effective

logistics management. The transportation management helps you make your logistics management more organized and accurate¹².

The goal of a Transportation Management Program (TMP) is to reduce trips and/or parking impacts of a development project through the implementation of physical improvements and operational measures¹³. The management of transportation operations of all types, including tracking and managing every aspect of vehicle maintenance, fuel costing, routing and mapping, warehousing, communications, EDI implementations, traveler and cargo handling, carrier selection and management, accounting¹⁴.

OBJECTIVES OF THE STUDY

The performance of any corporation is measured in terms of contribution to standard of living of the people, profit return, cost effectiveness, market penetration and corporate image. The normative view of strategic planning is that organizations that do formal planning have a higher probability of success than those that do not. If planning is so fundamental to organizational success, this article looks at how strategic management of a public enterprise can ensure its continuity. The paper is also aimed at offering strategic solutions so as to improve the performance of Raja Passenger Trains Company.

LITERATURE REVIEW

The Government Performance requires agencies to prepare three strategic planning documents. The first is a strategic plan covering a period of five years and reviewed every three years. The second document is an annual performance plan for each program activity. The third document is a program performance report that compares the performance indicators established by each agency with its actual performance to assess strategic planning's failures and successes.

Following the Government, many states passed legislations or issued Executive Orders (e.g. Arizona, New Jersey, Texas, Wyoming, Delaware, Hawaii, Florida) to require similar results oriented measures on their agencies (Berry & Wechsler¹⁵ 1995, Broom¹⁶ 1995; Melkers & Wiloughby¹⁷, 1998; Aristigueta¹⁸, 1999). Companies that engage in strategic planning out-perform those that do not use strategic planning, meaning that strategic planning has some dividends¹⁹. The advantages of strategic planning as follows:

- It improves company's chances of doing the right thing at the right time for the most part because, it has a better understanding of its business and its environment.
- It has more time and accurate information for forecast.

State agencies to determine the extent of their use of strategic planning, 60 percent of the agencies responding, i.e., 255, used some form of strategic planning and attributed the large percentage of use to possible overrepresentation of adopters of strategic planning in their sample and less experience with strategic planning²⁰. Plan in means an active conscious and rational role played by managers in formulating the organizational strategy²¹. Strategic management therefore entails planned management activities engaged in, so as to realize pre-determined objectives outlines for a particular organization or business.

Some apprehension about the use of strategic planning, these authors conclude that strategic planning has produced "very little disillusionment among those who have used it"²². The interest of managers in strategic planning was its apparent prospect that they could now control the destinies of their organization and achieve corporate stability no matter what happen in the external environment²³. Strategic planning gives tunneled vision and does not allow management to take note of other possible approaches to problems²⁴. Despite these arguments recent increases in the adoption of strategic planning in the public sector at a time when the private sector seems to reduce its use makes its study in public transit agencies ever more important.

According to previous literatures, Public transportation companies encounter problems when carrying out their activities which creates difficulties in their work and their results, these problems are in Raja Passenger Trains Company too, therefore I use this strategic planning method in the Raja Passenger Trains Company that caused enhance productivity and improved of company performance in level of their organizational and their business.

Strategic planning in Raja Passenger Trains Company

The principal sub-activities of strategic formulation as a logical activity includes identifying opportunities and threats in the company's environment and attaching some estimate or risk to discernible alternatives. Before a choice is made, strategic planning will ensure that the Company's strength and weaknesses are appraised with the resources available. The strategic alternative, which results from matching opportunity and capability at an acceptable level of risk, is what is regarded as economic strategy.

In Raja Passenger Trains Company, Strategic Planning covers route planning, pricing, subsidy, maintenance, training and purchasing and supply of spare parts and petroleum products. Each level Manager directly connected with any of the strategies above is usually an input into the strategic planning process. But the adoption of such strategic Planning depends to a large extent on the approval of the Supervising Ministry as well as the State Government.

RESEARCH METHOD

This paper first reviews the literature that was carried out to identify studies of strategic planning in transportation, then identify Strategic Planning, Transportation Planning and Transportation Management, next I determined a method to used of strategic planning in transportation management, and finally using a case study method. Data were collected from both primary and secondary sources. The primary data were those collected from the Raja Passenger Trains Company through personal interviews while the secondary data were obtained from published materials that proved to be relevant among which are the Company journals, Magazines, Newspapers different seminars on Urban passengers Transportation in Iran. Observations were made at the corporation premises and at some of the loading points. The method of analysis is both descriptive and quantitative. The scope of the study is the performance of the corporation from 2002-2012. Data collection was carried out through interviews and document analysis. In questionnaires were used a research question: Did the system improve the performance of the transportation company strategic planning in transportation management?

DATA ANALYSIS AND DISCUSSIONS OF RESULTS

The Raja Passenger Trains Company recorded a 53% increase in fleet size in 2003 which resulted in about 43% increment in revenue generated in 2002. This period coincided with the introduction of Federal Urban Mass Transit plan of the Federal Government. By 2005 the number of vehicles in the fleet, reduced from 82 to 50. Despite this reduction by 26% in the fleet the revenue generated in 2005 increase by 14%. Between 2008 and 2010, there was no reduction in the fleet size but revenue generated was in the decline. The researchers found that there were other extraneous factors responsible for the decline in the revenue generated over the years for which the vehicles in the fleet were constant. With a fleet size of 33 in 2012, N32.7m was generated as opposed to N20m generated when the number of vehicle in the fleet was 100.

TABLE 1
FLEET SIZE AND REVENUE GENERATED (2002-2012)

Year	Revenue Generated(ME)	fleet size
2002	865	60
2003	1245	92
2004	1367	32
2005	1564	50
2006	1470	72
2007	1626	100
2008	1668	93
2009	1885	93
2010	1910	93
2011	1989	70
2012	2080	33

Source: Corporations audited accounts (2002-2012)

Correlation analysis between revenue generated and fleet size of Raja Passenger Trains Company between 2002 and 2012 Correlation is the measurement of the degree to which changes in one intervallic-scaled variable (Revenue generation) are associated with changes in another intervallic-scaled variable.

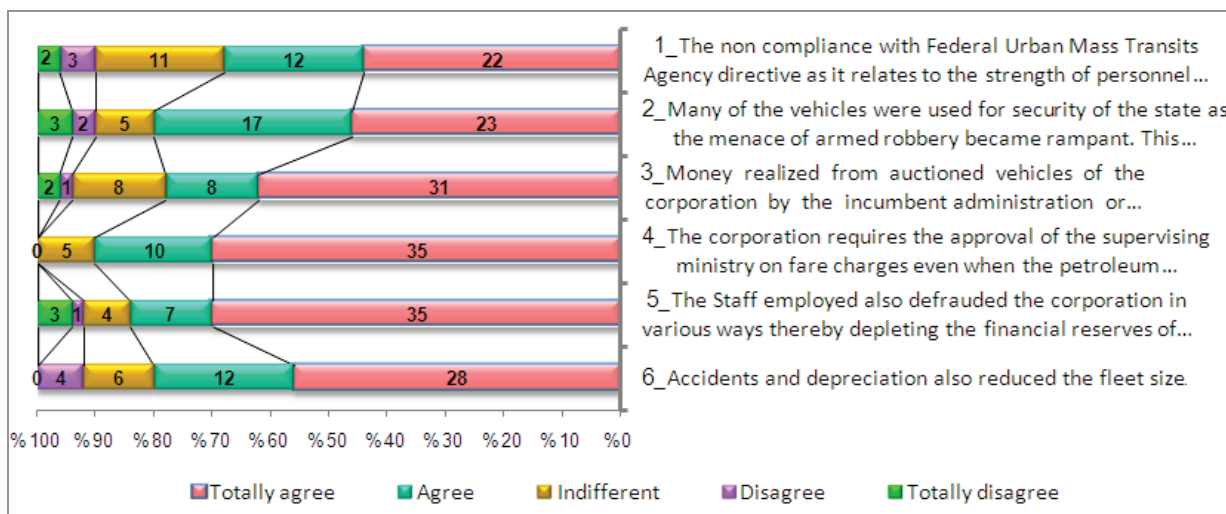
The correlation coefficient is a measure of linear relationship between the two interval variables. Hence, given the figure on Table 1, we can compute the correlation coefficient of the data as shown below with the aid of the Eq. 1.

$$r = \frac{n\sum xy - \sum x \sum y}{\sqrt{n\sum x^2 - (\sum x)^2} \sqrt{n\sum y^2 - (\sum y)^2}} \quad (1)$$

This gave a negative correlation of -0.0335 between fleet size and Revenue generated. This is because many of the vehicles were used by the state government at will. In some other instance, fiat government orders were issued by the state government to the corporation on route scheduling to fulfill political pledges which are usually contrary to revenue generation drive. From the statistical evidence above there is a low negative correlation between fleet size and revenue generation. The following are the findings from the corporation’s survey research.

- The non compliance with Federal Urban Mass Transits Agency directive as it relates to the strength of personnel required increased the number of personnel and consequently the wage bill.
- Many of the vehicles were used for security of the state as the menace of armed robbery became rampant. This reduces the number of vehicles for commercial purposes and hence led to the reduction in revenue generated.
- Money realized from auctioned vehicles of the corporation by the incumbent administration or government were not ploughed back in to the coffer of the corporation, hence the inability to meet its request. There was a time in 1992 when the corporation requested for twenty J-5 buses (22 seaters), the response from the State Government was the supply of (seven seaters) Peugeot 504 station wagons.
- The corporation requires the approval of the supervising ministry on fare charges even when the petroleum products were scarce in the era of the military.
- The Staff employed also defrauded the corporation in various ways thereby depleting the financial reserves of the corporation.
- Accidents and depreciation also reduced the fleet size.

FIGURE 1
RESULTS OF THE ANSWERS FROM THE DATA INTERVIEW REPORTS



We used 50 people that had applied the method for presenting a questionnaire. Fig. 1 shows the percentile frequency of the answers regarding to the criteria. Has the system number 1? 34 people of the respondents agreed that “the non compliance with Federal Urban Mass Transits Agency directive as it relates to the strength of personnel required increased the number of personnel and consequently the wage bill” there is in the system. But 16 people were indifferent or disagreed. 40 people agreed that the system has number 2, and 39 people agreed with number 3 that “Money realized from auctioned vehicles of the corporation by the incumbent administration or government were not ploughed back in to the coffer of the corporation, hence the inability to meet its request”.

Number 4(The Corporation requires the approval of the supervising ministry on fare charges even when the petroleum products were scarce in the era of the military), the graph shows that 45 people of the respondents agreed with that. Number 5 (The Staff employed also defrauded the corporation in various ways thereby depleting the financial reserves of the corporation) 42 people agreed that there is in the system and 40 people agreed with number 6 that is “Accidents and depreciation also reduced the fleet size”.

CONCLUSION AND RECOMMENDATION

The environment under which the Raja Passenger Trains Company operates could hardly be said to be stable as it is constantly being affected by the development in the immediate and remote environment. Such a dynamic situation requires a more adequate and responsive management of the corporation for values to be effectively appreciated. However because of the nature of organization and ownership, the management approach is reactive rather than proactive. Even where the board has come out with a good strategy the supervising ministry the Ministry of Works may make the strategy little or no effect.

After a consideration of strategic planning activity in Raja Passenger Trains Company, the following problems were identified:

- Limited financial resources, as a problem should be tackled through expansion of financial base. The genesis of any success in strategy planning would begin with determining the strengths and weaknesses vis a vis the environment and competition.
- An appropriate and clear mission is necessary in order to provide unity of efforts towards a common goal in the organization. Mission statement should be reviewed periodically between ten or twenty years and the objectives must be finite, feasible, suitable, acceptable and achievable.

For operation efficiency, a definite stand should be taken on the maker of buses to be purchased for operation. The practice whereby transport corporations have a mixture of various types of buses in their fleet is for all intent and purpose counterproductive. It also poses an additional burden in the corporation in terms of spare parts.

The issue of federal character or quota system in the appointment of level managers should be avoided. This is because a level manager appointed by politics is not likely to fall in line strategically in thoughts with those who were employed on merits. Essential and genuine spare parts and components should be stocked so that the rate at which the buses are grounded will be reduced. The life span of any bus depends on the handling of the bus by drivers. Hence, sound training should be given to them. Reckless and unmarried person rarely makes good driver.

The conductors and conductresses serve as public relation officers. Therefore, periodic refresher courses should be organized for them to boost their efficiency in attending to passengers. The success of the private sector group in transport industry can be attributed to the measure of powers and authority given to the General Manager and Chief executive. This freedom does not exist in government run transport agencies like Raja Passenger Trains Company. This is why government interference in State transport companies should be reduced to barest minimum to enable the company operating in the same footing with their private sector counter parts. I use this strategic planning method in the Raja Passenger Trains Company, we could specified above results and if we can follow all them in the company, caused enhance productivity and improved of company performance in level of their organizational and their business.

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