ORGANIZATIONAL CHANGE FOR THE ENVIRONMENTALLY SUSTAINABLE AIRPORT MANAGEMENT

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Abstract

Air transportation industry is a globally growing industry. As an inseparable part of this industry, airport management is also becoming more crucial issue to be dealt with. Airports offer economic and social benefits to the society, but also environmental impacts of airport operations are increasing due to high traffic growth. While airport capacity is increasing, airport operators are being responsible for mitigating environmental constraints. Today to implement airport environmental management system is seen as a critical way of solution. To ensure effective implementation of this system, an organizational change with definite roles, responsibilities and structure are needed. This study illustrates a way of organizational response to market forces and national regulations guiding the achievement of sustainable airports by determining the structure and the roles in an airport organization..

Keywords: Airport management, sustainability, organizational change

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I. Introduction

Today's business environment produces change in the workplace more suddenly and frequently than ever before. The ability to adopt the changing environment is a key for organizational survival (FNL, 2009). Explaining how and why organizations change has been a central and persistent theme among scholars in public administration, sociology, psychology, and other social science disciplines. Many researchers have examined the organizational change theories; organizational and environmental factors; capacity of organizations to readily and successfully change (Kasten, 2006). Competitive pressures caused by globalization, deregulation, and discontinues technological changes seem to have forces many organizations into considering radical change as a way of surviving and growing (Huy, 2002). Although much research has been done on organizational change, little has been done on changing organization to reach environmentally sustainable airport management.

II. ORGANIZATIONAL CHANGE

Every organization needs to change to survive in a developing and competitive environment.

In the past, managers aimed for success in a relatively stable and predictable world. However, in the hyper turbulent environment of the 21st century, managers are confronting an accelerating rate of change. They face constant innovation in computing and information technology and a chaotic world of changing markets and consumer lifestyles. Today's learning organization must be able to transform and renew to meet these changing forces (Oswick et.al., 2005).

Organizational change can simply be defined as new ways of organizing and working (Dawson, 2002). The concept of organizational change is in regard to organization-wide change might include a change in mission, restructuring operations (e.g., restructuring to self-managed teams, layoffs, etc.), new technologies, mergers, major collaborations, "rightsizing", new programs such as Environmental Management System, Total Quality Management, re-engineering, etc. (McNamara, 2009).

As a growing area of study, organizational change consists of elements both within and outside an organization. Some of the main external factors are; government laws and regulations (world agreements and national policies on pollution and the environment), globalization of markets and the internationalization of business (the need to accommodate new competitive pressures both in the home and overseas), major political and social events (for example, September 11), advances in technology (new generation aircraft), organizational growth and expansion (increasing air travel demand causes the need for increasing capacity and expansions). Four internal triggers to change that are generally identified as; technology (computerization of management accounting, scheduling, and information systems), primary task (for example, in shifting away from the main service of a company into a new major field of core business), people (development of new human resource management or training programmes), and administrative structure (restructuring authority relationship and responsibilities) (Dawson, 2002).

Change management becomes increasingly important for organizations in an environment where competition and globalization of markets are ever intensifying. It could be argued that many organizations face a problem situation in which they either "change or die" (Cao & McHugh, 2005). Changing could have two meanings; first the changes to be managed lie within and are controlled by the organization. The second, is the response to changes over which the organization exercises little or no control (e.g., legislation, social and political upheaval, the actions of competitors, shifting economic tides and currents, and so on) (Nickols, 2007).

During the last decade, researchers concerned with organizations and the natural environment have investigated why firms respond to ecological issues. Several studies have identified motives for corporate greening such as regulatory compliance, competitive advantage, stake pressures, ethical concerns, critical events and top management initiative (Bansal & Roth, 2000).

III. SUSTAINABLE AIRPORT MANAGEMENT

Growing travel demands have resulted in many airports reaching capacity, leading them to initiate expansion plans. It is, however, becoming increasingly difficult to secure planning approval for new infrastructure airports because of the many conflicts with the requirements of environmental regulators and concerns of local residents. Growth in airports means more pollution and energy consumption, leading to greater operating costs and new emerging capacity threats. Hence, it is necessary to look for new measures to reduce the environmental impacts and improve energy efficiency for future developments (Avail Corporation, 2008).

Congestions, attributed to airport capacity constraints, result in extra energy consumption and generate unnecessary increases in aircraft emissions. Expansion is often fraught with additional costs such as relocation compensation, environmental degradation and land limitations etc. Hence, apart from meeting future growth in air traffic, good long term planning is necessary to minimize the impact and costs of current and future expansions, especially on the environment. Thus, cost efficiency and addressing environmental needs share a common platform where strong correlation amongst the two entails that success in either goals is not mutually-exclusive, but rather, is mutually reinforcing (CAI, 2008).

Sustainable airport development is an exercise in balancing the demands of the varied strands of sustainability – i.e. economic, social, environmental and ecological. It falls within the overall concept of sustainable transport, can be defined as 'satisfying current transport and mobility needs without compromising the ability of future generations to meet these needs'. It is a concept that broadly applies to all areas of effectively running an airport – including finance, operations, human resources, community and investor relations, the environment et cetera. To attain its goals, sustainability as applied to transport has to meet the following basic conditions: (1) the rates of use of renewable resources not exceeding their rates of generation; (2) the rates of use of non-renewable resources not exceeding the rate at which sustainable renewable substitutes are developed and (3) the rates of pollution emission not exceeding the assimilative capacity of the environment (Amaeshi & Crane, 2006).

Airport sustainability practice is a broad term that encompasses a wide variety of practices applicable to the management of airports. Such as: (ACRP, 2008)

• Protection of the environment, including conservation of natural resources.

• Social progress that recognizes the needs of all stakeholders.

• Maintenance of high and stable levels of economic growth and employment.

The growth of air travel and the consequential need for expansion of many airports, together with heightened press and public awareness of environmental issues mean that the aviation sector is under heightened scrutiny; day-to-day activities as well as more ambitious projects often become high profile. However, the industry has proactively responded through individual activities as well as through the development of the sustainable aviation initiative, which is an industry endorsed comprehensive program to reduce aviation's negative impacts (AOA, 2006).

Airport operators around the world share the same business goals – to provide a safe, secure and sustainable operational efficient environment. On the one hand they want the capability to detect and respond to threats more quickly; to mitigate risk. On the other, they want to drive productivity improvement and reduce costs. Regardless of location and size, airport operators share the same business agenda - how to do more with fewer resources? (HAS, 2007)

Airports are now aware of the importance of being environmentally friendly. The major forces driving the environmental programmes at airports can be divided into three categories –community, government and internal. And although all are very different, none can really be viewed without taking into account the context of the others and different pressures tend to act on different environmental issues (Oh, 2008).

Neighbouring communities: In some regions, communities and society at large can have a very keen sensitivity to environmental issues and may take a proactive stance against developments perceived to make a significant contribution to an environmental issue. Such environmental pressure on an airport operator is usually most prevalent when planning permission is required for infrastructure development, such as a new terminal or runway. Recent developments, such as anti-climate change protesters may adversely affect airport operations (ACI, 2009).

Aircraft noise when it comes to environmental pressure from the community; it remains the primary concern for most people living near airports in all regions of the world. Most airports have dedicated call lines for noise complaints and many have dedicated staff and sophisticated noise management schemes. The community is an important stakeholder and a level of partnership must be fostered on an on-going basis. Internet tools were also developed to allow residents to examine flight patterns and noise levels in fine detail.

The importance of neighbourhood and properly informed community are more likely to take into account the benefits of aviation when it comes to assessing aviation infrastructure proposals (Oh, 2008).

Government pressure: Mandatory requirements and other regulation can take a variety of forms from international agreements and national legislation to conditions attached to local planning permission permits. At the time of writing, regulations in many jurisdictions are evolving and substantial development should be expected in upcoming years. A range of regulatory requirements mandates an airport operator to tailor the airport's program according to international, national and sometimes local requirements (ACI, 2009).

As regulators, governments often target airports for environmental effects that are not apparent to the public. Pollution of the air, water and soil are generally in the forefront of concern and are subject to standards and laws on local air quality and water and soil contamination. Governments can require that airports demonstrate compliance with local pollution limits, impose penalties for non-compliance and require the implementation of mitigation programmes (Oh, 2008).

Internal pressure: Airports operating under a responsible business model also set their own environmental targets and strive to achieve them. Saving energy and the associated emissions can be a direct cost saving and the implementation of smart building technology might mean reductions in whole-life-cycle costs. In many cases there is a strong economic case for using environmentally friendly technologies. Wildlife mitigation and water management programmes, equipment modernisation and habitat land-care work can require significant spending without financial returns. These may be needed as a result of government requirements or as environmental conditions attached to a planning consent, but in today's environmentally conscious world, an ever-increasing number of airports are volunteering such mitigation programmes as an integral part of a project proposal (Oh, 2008).

IV. RESEARCH

The goal of this paper is to make airport operators to understand the role of air transportation in a sustainable society. This paper could be a guide to the achievement of environmentally sustainable development at air transportation by setting a standard for airports in relation to environmental issues; stimulating further improvements in environmental performance by determining the roles and responsibilities in an airport organization. The aviation sector has been relatively free of major environmentally driven regulation, in part because the sector is considered a key contributor to driving the global economy and the only mode of rapid trans-national travel on offer to customers. Projected growth in air travel and the associated environmental impacts mean that policy makers are turning their attention to the aviation sector (AOA, 2006).

In this study, data were collected via semi-structured interview with the responsible person at State Airport Authority and the İstanbul, Atatürk Airport executive. Questions were try to evaluate how much the airport operators aware the changing world needed organizational adaptation and to illustrates the structure of organizational change for environmentally sustainable airport either mandated by legislation or market forces.

Management of Turkish airports and mission of regulation and control of Turkish airspace are performed by General Directorate of State Airports Authority (DHMI). DHMI that has to perform its undertaken tasks according to international civil aviation rules and standards is in this sense a member of International Civil Aviation Organization (ICAO), which was launched according to Civil Aviation Agreement that entered into force to ensure safety of life and property at international aviation and to provide regular economic working and progress (DHMI, 2010).

Directorate General of State Airports Authority (DHMI) provides necessary terminal and passenger services to about 35 million domestic and international flights passengers preferring airway for their travels, and air traffic services to local airline companies as well as more than 361 foreign commercial airline companies. As part of air navigation and airport management services by General Directorate of State Airports Authority (DHMI), traffic of airplanes and passengers, which are offered service, has increased significantly in recent years. Especially, there has been significant progress at international flight airplane and passenger traffic of the international airports. DHMI operates 40 airports, as seen in Exhibit 1, Istanbul/Ataturk Airport is among the leading airports of Europe due to increase in the international traffic (DHMI, 2010).

EXHIBIT 1 Airports Operated by DHMI

Source: www.dhmi.gov.tr

The research results show that, airports under the control of DHMI does aware of the importance of to be environmentally sustainable. However, today they focus on economic prosperity, quality improvement; in the future they are planning to identify environmental sustainability and corporate social responsibility practices.

As environmental issues are voluntaryand airports have monopolistic power in their region, internal factors are not encourage the airport operators to change their organizations structure focusing on environmental practices. If they are affected to cgange by internal factors the changes can be under the control of the organization. The external factors, especially government regulations, may force the airport operators to the organizational change for the environmental performance.

Airport operators do not have a department specifically responsible for the environmental programs. Aircraft noise, wildlife protection, water and soil resources protection issues are accomplished under the different departments' responsibilities. The implementation of sustainability practices at airports is needed to be determined for each operation and given under the responsibility of a department with specialized personnel.

The answer for the question of the reasons behind the no/slow implementation of environmentally sustainable practices are given as; first lack of funding, then lack of management support and the lack of trained personnel. As a result of this situation the organization does not train its staff and tenants yet. Additionally, they do

not have environmental (annual) report for the airport operations' environmental performance.

It is found that the regulatory adoption is the key factor for the organizational change at airports for the environmental performance implementation.

V. CONCLUSION

The global trend of privatization and commercialization rises the growing awareness among airports of the concept of sustainable development with environmental programs.

It is found that organizational response to environmental impacts of the airport operations including the market forces on organizational change mandated by national /international regulations.Organizational change driven by regulatory agencies is relatively easy to accomplish because of the direct effects of policies on organizations. Organizational resistance to change may be caused by poorly planned implementation of change initiatives, funding barriers, lack of staff, lack of environmental culture, time and technology.

For the future, not only regulatory forces but also global issues, community/stakeholder pressures, ethical concerns and top management initiatives will be the motives for organizational change with responsible roles at appropriate departments. When the airport operators have a department with overall responsibility for environmental sustainability they will have environmental manager, environmental program, environmental culture, environmental training program, environmental reports to the stakeholders and research and development contributions. These changes are essence for the environmentally sustainable airport management.

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