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EXPLORING THE IMPACT OF ENVIRONMENT MANAGEMENT SYSTEMS ON ORGANIZATIONAL PRACTICES

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Abstract: Organizations can support sustainability and guarantee regulatory compliance by implementing an Environmental Management System (EMS), a framework for strategy that helps them methodically manage their environmental implications. People may occasionally just call EMSs "EMS." EMS is a methodical cycle that aids businesses in setting environmental goals, allocating resources efficiently, and continuously improving their eco-friendly performance. A more sustainable future can be achieved through the integration of environmental concerns into an organization's core activities. This can lead to cost savings, reduced hazards, and a stronger reputation as a responsible steward of the environment.

Keywords: Regulatory Compliance, Cost Savings, Stakeholder Engagement, Risk Management

I. INTRODUCTION

The rising worries over the deterioration of the environment and the immediate need for sustainable practices have driven organizations all over the globe to create efficient techniques to control the environmental implications of their operations. In response, the idea of Environmental Management Systems (EMS) has arisen as a complete framework for methodically tackling these difficulties. EMS stands for "environmental management system." An EMS is a proactive method that gives organizations the ability to identify, analyses, and manage their environmental obligations in an organized way. It fulfils this role by serving as an environmental management system (EMS). In this introduction, the core concepts of environmental management systems (EMS) are dissected, as are the system's significance in advancing the cause of ecological sustainability and its function as a compass pointing enterprises in the direction of a more sustainable and accountable future. Organizations are able to successfully traverse the complicated terrain of environmental rules, improve their efficiency, decrease their costs, and make a contribution to a healthier world when environmental concerns are woven into the fabric of their operating processes.

II. RELATED WORKS

Several nations, notably more developed ones, have started building EMSs to achieve the aims of EMSs and sustainable development (Pun et al., 2002). ISO (1996a) defines an EMS as "an essential part of any management system that provides the framework for developing, implementing, achieving, maintaining, and evaluating environmental policy." An EMS includes the structure, planning, activities, responsibilities, procedures, processes, and resources necessary to develop, implement, attain, maintain, and evaluate environmental policy. According to the source material provided by Pun et al.

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(2002, p. 690), an EMS is also known as an environmental management system.

Environmental programme management (EMS for short) is the process through which an organization oversees the environmental impacts of its operations. An organized method for planning and carrying out environmental protection measures is provided by the Environmental Management System (EMS).

Environmental norms and organizations may have diverged because of legal systems in different nations. This is due to the fact that varying national and regional situations in various nations have resulted in distinct legal limits. Many impediments to commerce have emerged as an immediate result of this complexity. The inconsistencies across nations prompted the development of a universal emergency management system (EMS). Standardized EMSs include the ones listed below.

There is no question that the production of automobiles has greatly aided in bettering people's standard of living. The global economy has been profoundly impacted by this issue in the business sector. Automobile production, however, has also altered the natural environment and its ecology. To put it in perspective, consider that in 2011, 80,1 million autos were produced throughout the world (Blain, 2012). Nunes and Bennett (2010) predict that if manufacturing continues at the present pace, there will be close to two billion automobiles on the road, which would increase pollution, environmental harm, energy usage, and resource use. Automobile manufacturers are especially susceptible to power and material shortages. Therefore, environmental consciousness will influence how the car industry approaches these issues:

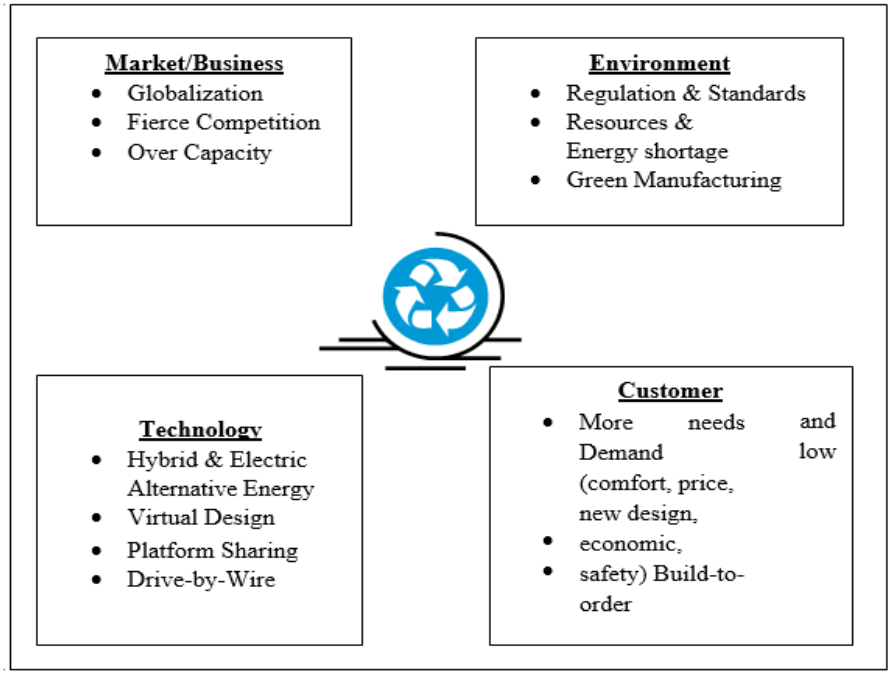

Figure 1: Environmental Impacts to Automotive Industry (Source: Poon, 2009, p.2modifiedfromDemirci,2011).

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Vehicle construction, production procedures, and final disposal all contribute to severe environmental challenges (Nunes and Bennett, 2010). In addition, the use of automobiles necessitates the use of a sizeable amount of fossil fuels, and the many hazardous substances that automobiles immediately release into the atmosphere contribute significantly to the problem of air pollution. Some of the emissions that are in play here include Carbon Dioxide, Carbon Monoxide, Nitrogen Oxides, Sulfur Oxides, Ozone, Aldehyde Compounds, Special Material, and Hydrocarbon Particles (Nunes and Bennett, 2010). It is widely accepted that dangerous compounds like these are one of the key contributors to the issue of global warming. The manufacturing phase is responsible for a number of harmful environmental consequences, including a significant amount of energy and water consumption, the generation of solid waste, and the emission of organic compounds. (2010) Nunes and Bennett.

2.1 Sustainability in Automotive Industry

As recent events at Japan's nuclear power plant and the massive oil spill in the Gulf of Mexico illustrate, corporations may be a source of environmental distress. In addition, the instability of political systems in oil-producing nations like Libya, Iraq, Venezuela, and others increases the appeal of renewable energy sources as a complement to traditional energy sources.

The car industry has been facing serious difficulties for a very long time owing to environmental concerns. The automotive industry has been implementing green manufacturing practises since 1980; however, despite these efforts, the industry still faces environmental issues and a lack of green supply chains (Orsato and Wells, 2007, p.991). Toyota is one of the greatest instances of this principle in action; the company employs lean manufacturing practises as part of its Toyota Production System in an effort to eliminate waste across the board. The subject of how to best dispose of and recycle old cars remains unresolved (Orsatoand Wells, 2007, p.991).

While many experts in the auto business may believe that hybrids and EVs are too expensive, the reality is quite the opposite.

The supply chain's long-term viability will improve thanks to this solution's widespread adoption. Natural fibres, as opposed to glass fibres, have been recommended by Zah et al. (2007) as having positive economic, social, and environmental impacts for the automobile sector. If natural fibres were utilised instead of glass fibres, then yes (Zah et al., 2007). Because of its low life cycle cost and high added value to the automobile sector, this will have far-reaching effects for the economy and society at large (Zah et al., 2007).

However, businesses are increasingly interconnected with customers throughout the world (Koplin et al., 2007). Globalisation and internationalization's implications on businesses' capacities to collaborate with many vendors Conversely, this complicates waste disposal whether or not the goods in question constitute a threat to human health or the natural world (Koplin et al., 2007).

As a result of globalisation, companies are under increasing pressure to strengthen their supply networks. Because of this, inventory-related costs are wasted, the bullwhip effect occurs, and the overall

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cost increases. The supply chain will collapse if suppliers aren't helped and R&D costs aren't split evenly. All across the globe, carmakers encounter difficult situations like this. However, issues in the social, economic, and environmental spheres are considered in the management of sustainable supply chains. More than any other aspect of a sustainable supply chain, environmental considerations get press attention. Due of its importance, the GSCM (the SSCM's environmental component) is receiving a lot of attention in this study.

However, if just environmental considerations are taken into account, supply chain sustainability will not be attained. The social and economic factors of the issue cannot be disregarded. Therefore, it is incumbent upon corporations to investigate issues of both social and economic significance.

2.2 Sustainable Supply Chain Management

The beginning of industrialization, followed by changes in the character of the business environment, was the impetus behind the creation of supply chain networks, which now form a significant area of concern in light of the current situation of the economy. Many companies now place a larger focus on the management of their supply chains as a direct consequence of the increased competitiveness brought about by globalisation and the widespread use of outsourcing across all industries. Up until this point, a number of tendencies that have been seen in the supply chain have been discovered. Just-in-time manufacturing was the key innovation of the 1980s, according to David Simchi-Levi, an expert on the supply chain. Supply chain collaboration and the outsourcing of logistical chores were the key innovations of the 1990s. Internet application was the key innovation of the 2000s (cited in Xia et.al 2011, p.496). Hopkins (2010) claims that "in the 1980s, it was a Just-in-time manufacturing was the key innovation of the 1980s. To ensure that the supply chain can be maintained for the long term sustainably is the current trend that has to be followed. According to Seuring et al., the definition of sustainable supply chain management is "the management of material and information flows as well as cooperation among companies along the supply chain while taking goals from all three dimensions of sustainable development, i.e. economic, environmental, and social, and stakeholder requirements into account." In other words, sustainable supply chain management is "the management of material and information flows as well as cooperation among companies along the supply chain while taking goals from all three dimensions of sustainable development into account." "the management of material and information flows as well as cooperation among companies along the supply chain" (2008, p.1545) is what sustainable supply chain management refers to, in other words. As was said before, these aspects include thinking about how the economy, the environment, and society all interact with one another.

2.3 Green Supply Chain Management (GSCM)

Recently, a number of research projects and inquiries that have been published in the appropriate academic literature have centred on the GSCM idea as their primary area of investigation. According to McKinnon et al. (2010), the study on reverse logistics studies that was carried out in the 1990s gave as impetus for the history of the greening of the supply chain.

According to Wang and Luo (2010), the phrase "green supply chain management" was first used in conjunction with a study titled "environmentally responsible manufacturing" that was carried out in

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1996 by Michigan State University. Van Hoek (1999) widened the scope of the study to include the whole chain after discovering a connection between environmental studies in logistics and reverse logistics. This was done after he found that there was a connection between the two. This was done in order to take into consideration the effects that both sorts of research have had on the surrounding environment (McKinnon, 2010). Hsu and Hu state that "GSCM is a method for boosting performance of the processes and products in accordance with the requirements of the environmental standards" (2008). According to Hervani et al. (2005)'s definition of GSCM, which can be found in their article (cited in Luthra et al., 2014, page 23), "GSCM is the conclusion of Green Purchasing, Green Manufacturing/Materials Management, Green Distribution/Marketing, and Reverse Logistics." This is the citation that we found in Luthra et al., (2014). In a nutshell, GSCM is comprised of established techniques of supply chain management programmes that comply to specific environmental requirements (Gilbert, 2000). In other words, the term "nutshell" doesn't do GSCM justice.

Even though the GSCM idea has been present since the 1990s, emerging nations such as China, Turkey, India, and others still perceive it to be a fresh theory even though it has been around for over two decades. If one wishes to get insight into the degree to which these nations are successfully using GSCM in the primary facets of their economies, it is very necessary to carry out an investigation into the many instances in which GSCM has been put into practise there. The scope of this research is an investigation of the automobile firms that are located in Turkey.

2.4 Performance Measurement for GSCM

GSCM Assessing a company's success is a very difficult and time-consuming endeavor for enterprises. Comparing the environmental practices of many companies is a far more difficult task than evaluating the environmental practices of a single company (Hervani et. al, 2005). Because of factors such as a lack of procedures, inconsistent data, poor integration of technology, and variations in culture and organizational structure, evaluating the environmental performance of a business may be a difficult task (Hervani et. al, 2005). Measurement of performance is necessary for environmentally responsible supply chain management due to the presence of rules, competition, and marketing (Hervani et. al, 2005).

Performance evaluation for green supply chain management should primarily focus on internal control and analysis in addition to external reporting. These are the major objectives (Hervani et. al, 2005). These external reporting, control, and analytical actions are essential in order to achieve enhanced firm management and continual business improvement. Environmental Performance Evaluation (EPE), also known as "an internal process and management tool designed to provide management with reliable and verifiable information on a continuing basis to determine whether an organization's environmental performance is meeting the criteria set by the management of the organization," is a method for evaluating environmental performance. EPE is described as "an internal process and management tool designed to provide management with reliable and verifiable information on a continuing basis to determine whether an organization's environmental performance is meeting the criteria set by the management (Jasch, 1999, p.79). According to Simpson et al. (2007), one of the challenges of a

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green supply chain is "the significant potential of the customer to force improvements to its suppliers' environmental management practices, introduce environmentally sound technologies, and collaborate with suppliers to share knowledge and jointly develop more sustainable products and processes." From the perspective of the consumer, the issue of supplier greening may need a more hierarchical approach, which would include the anticipation that some suppliers would be more or less responsive than others. From the perspective of a supplier, this may offer both advantages and problems in their attempts to fulfill an unique and maybe undeveloped set of environmental performance criteria. This might be because these standards are still in the process of being defined. Dealing with this situation may call for a more collaborative effort on the part of the government.

Enterprises in light of the increasing difficulties of accomplishing the objectives of global sustainability (p.29).

2.5 Traditional Supply Chain Management and GSCM

As was said earlier, the activities that take place within the supply chain have progressed as a direct consequence of an increasing attention given by all organisations to concerns that are related to the environment. According to Luthra et al. (2011), the old ways of managing supply chains are no longer appropriate in today's highly competitive market. According to Luthra et al. (2011), legislative responsibilities and the expectations of customers are two more aspects that contribute to GSCM.

The conventional approach to managing supply networks places an emphasis on achieving cost savings as one of its key goals. On the other hand, as was said in the parts that came before this one, GSCM prioritises the environment more than economics as a goal. This is in addition to the objective of achieving sustainability. This is due to the fact that GSCM sees the environment as a primary factor in driving sustainable development. In traditional supply networks, human toxicological effects are not taken into mind; however, in green supply chain management, which is healthier for the environment, these implications are taken into consideration (Luthra et al., 2011). In today's highly competitive climate, the conventional method of supply chain management, which basically included managing manufacturing and distribution from the point where raw materials are sourced all the way to where the finished product is delivered, is insufficient. The typical method of managing supply chains does not focus on the environmental consequences of potentially destructive manufacturing and distribution activities. The major goal is to keep a close watch on and maintain control over the finished goods at all times.

The approach of literature review has been decided upon for the process of writing the thesis. The primary purpose for using this technique is to get a comprehensive understanding of the subject matter that we are concentrating on, as well as to demonstrate the results that will finally assist us in drawing conclusions about the subject matter. According to Hart (1998), a literature review is a collection of materials that have been published or unpublished that are accessible on themes that are relevant to the study being conducted. The facts, information, thoughts, and evidences that are included in a literature review are those that have been taken from a certain vantage point on the subject matter that is being

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discussed. The viewpoint need to have a particular objective, and it ought to provide some insight into the manner in which the subject matter will be explored.

The theories that are used in this study are primarily concerned with the management of supply chains and the environmental aspects of these chains. In addition to this, the study focuses on a variety of journals that are associated with green manufacturing systems, green production systems, green supply chain management, lean supply chain management, and the integration of lean and green management systems.

An extensive examination of the prior research in the field of GSCM and the associated relevant literature was carried out before the interview questions were framed. This was done before the first phase of the interview. This study was carried out in order to obtain a better understanding of the concept as well as to make the discussions that took place during the interview more interesting and interactive. The Swedish reference study that was indicated on the theoretical backdrop would serve as a reference for any and all small-scale enterprises who are interested in incorporating GSCM within their respective organizations.

III. CONCLUSION

In conclusion, Environmental Management Systems (EMS) are an important instrument that should be used in the effort to create a more ecologically responsible and sustainable future. EMS provides a methodical strategy for identifying, evaluating, and mitigating environmental consequences, which is becoming more important for businesses as they come under growing pressure to reduce their ecological footprint. Businesses may not only achieve compliance with laws by integrating eco-conscious practises into their core operations, but they can also drive innovation, boost efficiency, and strengthen their image as advocates of environmental stewardship in the process. This is all in addition to achieving compliance with legislation. The incorporation of EMS is a symbol of a dedication not just to the bottom line but also to the well-being of our planet. It reflects a collective resolve to find a way to bring economic progress and environmental preservation into harmony with one another. EMS shines a guiding light for us as we negotiate the complexity of a world that is always changing, lighting the road that leads to a future that is greener and more sustainable.

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