

Risk Management – An Important Aspect for Manufacturing Industries

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Abstract

In today's fast-paced world, industrial sectors are already confronted with a slew of internal and external factors that impede their operations. Aside from numerous internal and external causes, other elements have evolved at a rapid speed. These considerations provide a significant challenge to all industrial firms attempting to thrive in this competitive period. Manufacturing sectors must deal with methods and strategies for dealing with all of these types of risk. Thus, risk management becomes a critical duty of any manufacturing unit. Taking these aspects into account, we have brought to light the genuine problems that have lately surfaced, and have compelled manufacturing businesses to cope with these concerns. The report goes into a comprehensive review of several elements and their impact on the manufacturing unit. The article also focuses on how manufacturing sectors may adapt to changing environments through risk management.

Keywords: *Factors, Risk Management, Manufacturing Industries.*

INTRODUCTION

The rapid growth of technology poses a risk not only to professionals but also to many manufacturing companies. Risk management has evolved as one of the most important components in company

organization these days, owing to the many risk dynamics that occur on a regular basis. Confronting and controlling these risks is a task for the production unit. There are several sorts of risk, and many of them are intertwined. Risk is seen as an

essential component of every business organization for the following reasons: Businesses with a higher risk appetite will have more prospects for growth. Identifying, assessing, examining, prioritizing, and managing risk is becoming increasingly important as a means of strengthening business units' competitiveness in an ever-changing business environment. Risk management is characterized by the purpose and competitive strength that each manufacturing industry has today and in the future. Risk management is defined as ongoing activities in manufacturing units that keep track of fundamental internal and external risks, as well as numerous live wired risks that the manufacturing units confront on a daily basis. Essentially, all industrial units strive to establish and adhere to Hopkins' core risk management framework, which comprises Risk Strategy, Risk Architecture, and Risk Protocol. Thus, risk management benefits manufacturing sectors by striving to create a framework for an organization that can recognize and manage risk autonomously.

Risk Management Matrix for Manufacturing Units and the Industry as a Whole.

Manufacturing units continuously work to excel in achieving competitive advantage.

The aim is to maximize return on investment. With these motives every manufacturing industry has to face various ups and downs in terms of changing technology, product acceptance, consumer taste and preference and much more. Manufacturing industries now manufacturing units are always striving to achieve a competitive edge. The objective is to maximize the return on investment. With these motivations, the manufacturing business must deal with a variety of ups and downs in terms of evolving technology, product acceptability, customer taste and preference, and other factors. Manufacturing firms increasingly invest much in research and development so that all of the elements impacting their smooth operation may be readily identified and handled. When diverse causes constitute a gap in an industry's advancement, the task of risk management comes into focus. So risk management is a crucial function for every company since the risk that may be generated by impending events may be controlled or eliminated using the risk management tool. A variety of factors fall within the risk management category, prompting industries to use risk management as a growth shield. A few of the variables are described further below:

Supply Chain: This chain is the most important link in the survival of any industry. Supply chain management is a root-to-tree concept since it includes tracking raw material availability, work in progress, completed goods inventories, transportation, and distribution. The supply chain connects all of the personnel that work in a manufacturing unit. Because of the difficulties in sustaining connections, worldwide exposure, cyber theft, and numerous pandemics that are on the horizon, supply chain management is critical to handle in the current context. All of these things impede the flow of products in and out. As a result, the manufacturer faces losses not just in terms of commodities but also in terms of the unit's goodwill. Units that implement risk management strategies at the appropriate moment to control and formulate things appropriately can limit their losses.

Product Revoked: Surviving in the market with a certain product is challenging in this day of competition. Constant R&D is carried out in order to produce a new product or to prelaunch the same one with improvements. It is not easy for any manufacturer to just introduce a new product into the market since there is the risk of a product recall. Risk management assists the unit in establishing

the standard error so that if any consequences occur and the product is revoked, prompt action can be made. Thus, developing a risk management model assists the unit in determining the best time and circumstance to launch or re-launch its product in the market, so minimizing risk.

Manufacturer Consumer Based Models:

With trending e-business it is important for any manufacturing unit to build up a model which not only consists of dealers and distribution partners but involves direct dealing with consumers. Going and serving consumer directly leads to dual benefit to an industry i.e. it increases profit by eliminating middleman and can know preference of consumer immediately and can change accordingly. On the other hand this model can bring in high risk to the manufacturing unit because it leads to being transparent in all the activities that are carried out by the unit, along with that it also deteriorate the relationship with the middlemen. Thus proper risk analysis is needed to be done before constructing and implementing MCB model.

Intellectual Property Rights: It includes patents, copyrights and trademark, ample of business hose spend billions of rupees to secure their product or process from speculative activities. But manufacturing

units have to involve huge to avoid these risk. Thus risk management in these area is useful only if there is long period of success.

Unavailability of Skill Labor: India the country of youth- but still it is difficult to find labor in the manufacturing industry. This is due to basic reason that one who is well educated cannot survive in the market with the amount of salary being paid to them and secondly major of skilled youth are draining themselves out in foreign countries. Here risk can be managed if manufacturing unit thinks actively. Talent hunting and succession planning proves to be the best tool for manufacturing industry these days. It facilities them with the availability of labor along with development of labor already working in their units.

Tax and Tariff Barriers: The tax implication in our country has changed drastically. Implementation of GST has vivid effect on various manufacturing units. Introduction of various slabs of tax payment depending upon the material used and finished product developed has caused chaotic circumstances in manufacturing industry. Moreover employing Make in India concept has given peak to tariffs levied on good imported from various foreign countries. Managing this risk is boosting up the cost area of the manufacturing units. In order to save tax units hunt for supplier from tax free zone which in turn harms the existing relation with suppliers, affecting this part of business leads to worries regarding entire supply chain management. Thus this risk has disrupted the manufacturing units in ample of ways.

Analysis and Interpretation of Data



Fig 1: Ranked the hierarchy of manufacturing units regarding accountability and answerability of risk occurrence being hindrance in working of units.

A very modest survey was undertaken to analyze the risks that arise regularly and the strategies that are used to deal with them in order to determine the degree of risk and risk management approaches used in various production units. The inquiry also addressed an individual's accountability and answerability inside the unit. To determine the incidence level of the common types of risk outlined above, ranks were assigned to them. As a result, the varied replies are graphically illustrated here.

Interpretation of data

We may deduce from the above graphical depiction of Fig 1 that the fundamental hierarchy that is followed inside the manufacturing unit is BOD-HOD-Supervisors-Workers, and that HOD of various departments are at the top in terms of accountability for the occurrence of any risk. These personnel are held more

accountable for the danger that has happened and harmed the organization, whereas workers are less concerned with responsibility and answerability.

According to Figure 2, risk and its incidence are unpredictable. A specific type of risk can occur at any time within the unit; the primary risk matrix outlined above is divided into five categories based on their frequency of occurrence: yearly, half-yearly, quarterly, often, and seldom. According to the responses in this category, the bulk of the risk happens over time, i.e. yearly or more. The reason for this is because the sector is always conducting research and development. Furthermore, the incidence of any danger that is uncontrollable is extremely unlikely. Risk management has grown into a concept that focuses on mitigating all risks and losses.

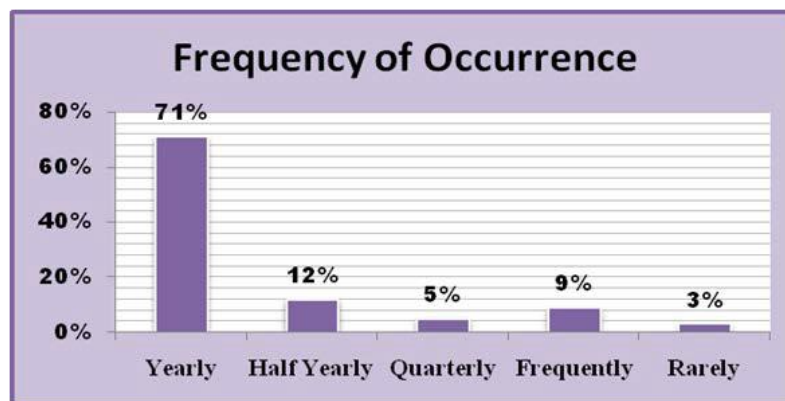


Fig 2: Identifying, Analyzing and managing risk occurrence level.

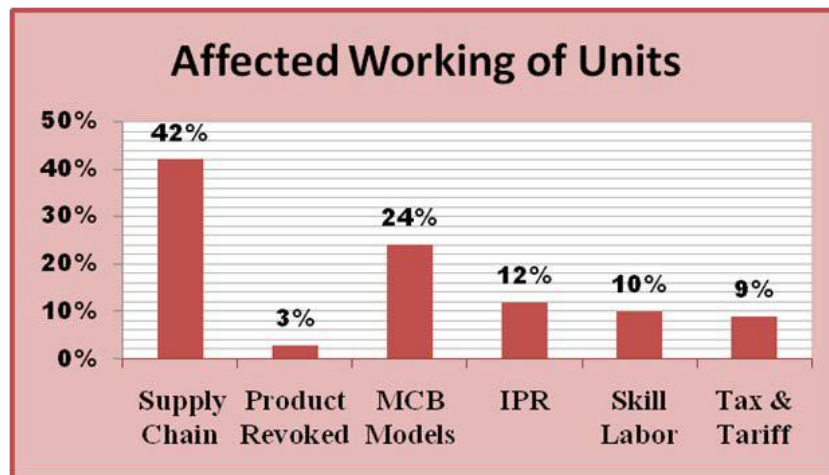


Fig 3: Percentage of risk effected manufacturing units:

Figure 3 depicts several bases that include a risk management matrix as well as the proportion of risk or impediment that it creates in the smooth operation of various industrial units. As previously said, supply chain management has a significant level of risk since it acts as a crucial link between the manufacturing unit and all of its processes. Aside from these manufacturer consumer models, the current state of unit operation is also hampered. Various speculative operations and duplication endanger the production unit and take attention away from IPR. Taxes and tariffs have the least impact because it is now a single-window payment system.

CONCLUSION

Manufacturing units have faced a variety of problems and possibilities since the

Industrial Revolution. To capitalize on these obstacles and possibilities, Manufacturers conduct risk assessments on a regular basis. Because risk is an inherent aspect of any organization, each industry considers how effectively it can detect and manage specific types of risk. Manufacturing units must have a standardized approach to risk and risk assessment. Thus, it is critical to detect the risk in its early phases; otherwise, it will be impossible for units to minimize it in its later stages. Continuous risk management leads to value enhancement and aids in the stability of industrial units. We may infer that risk management allows industrial units to reinforce their roots in this competitive environment while also making them capable of incorporating changes flexibly.

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