



FOOD SAFETY STANDARD PRACTICES, SUPPLY CHAIN AND BUSINESS PERFORMANCE: ISSUES AND PROBLEM PRE AND POST-PANDEMIC

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ABSTRACT:

Food safety has always been an important issue, but the profile of health and safety at the workplace is growing. Ensuring food safety has become more complex with new ready-to-eat products being sold in many new international markets, new production technologies, extended supply chains, a diversity of ingredients and suppliers, and a growing potential for malicious behavior. The immediacy of the media and social media means that a local incident can be globalized overnight. The food industry plays an essential role in providing essential and necessary support for various human activities and behaviors. Once the food is harvested or produced, it should be stored, delivered, and sold in such a way that it can reach the final customers by the due date. For example, fruits and vegetables, it was wasted 492 million tons worldwide in 2011 due to the inefficient and ineffective management of the food supply chain. However, food security and food safety issues have also affected the performance of the supply chain in one way or another. One must, therefore, explore the impact of food safety management practices in the supply chain on the sustainable performance of small and medium-sized enterprises.

KEYWORDS:

FOOD SAFETY, SUPPLY CHAIN, PERFORMANCE, ISSUE, PANDEMIC.

INTRODUCTION

Food safety has always been an important issue, but the profile of health and safety at the workplace is growing. Ensuring food safety has become more complex with new ready-to-eat products being sold in many new international markets, new production technologies, extended supply chains, a diversity of ingredients and suppliers, and a growing potential for malicious behaviour. The immediacy of the media and social media means that a local incident can be globalized overnight.

The food industry plays an essential role in providing essential and necessary support for various human activities and behaviours. Once the food is harvested or produced, it should be stored, delivered, and sold in such a way that it can reach the final customers by the due date. Evidence has been found in previous research reports that about one-third of the food produced has been abandoned or has been wasted every year (approximately 1.3 billion tons) (Zhong et al., 2017). The wasted foods had been in the processing, shipping, and storage stages. For example,

fruits and vegetables, it was wasted 492 million tons worldwide in 2011 due to the inefficient and ineffective management of the food supply chain.

Food safety issues are easy to harm a company's credibility. It takes a lengthy and costly task to regain consumer credibility and confidence. Food safety, once a field of technical and production functions, has become a company-wide, end-to-end business responsibility and must, therefore, become part of the board of directors responsible for company activities and performance (Aotearoa, 2018). Food quality and safety are, therefore, always, critical factors in the management of the food supply chain. How to guarantee the quality and safety of food has been extensively studied in the relevant areas.

Food safety and quality can be monitored by looking at the difference between the concept of supply chain management and the traditional concept of logistics. Logistics typically refers to activities that take place within the confines of a single organization, and supply chains refer to networks of companies that work together and

coordinate their actions to deliver the product to the market. Traditional logistics also focuses its attention on activities such as procurement, distribution, and maintenance and inventory management. Supply chain management recognizes all conventional logistics and also includes activities such as marketing, new product development, finance, and customer service (Kot, 2006).

In the broader view of supply chain thinking, these additional activities are now seen as part of the work needed to fulfil customer requests. Supply chain management considers the supply chain and its organizations as a single entity. It provides a system-based approach to understanding and managing the different activities needed to coordinate the flow of products and services to serve the ultimate customer. This system approach provides a framework in which to respond best to business requirements that would otherwise seem to conflict with one another.

The business community in the food supply chain sees the call for safety on the part of its customers, consumers, government, and other stakeholders as an important driving force for continuous innovation. These innovations focus on implementing systems to improve the quality of the product and ensure its safety, while at the same time making it transparent at the level of the supply chain (Beulens et al., 2005). Furthermore, the development of in-company safety systems has reached a sophisticated level, and companies are well able to guarantee the safety of their products between their front and back doors. However, to regain consumer confidence and establish overall food safety, a chain approach is needed, forcing companies to cooperate in closed chains or supply chain networks. Until now, we have only seen the first steps on this road, but there is a high sense of urgency and, practice is moving fast.

PROBLEM AND ISSUE

From the problem statement above, it is evident that there are limited studies of supply chain management, particularly in the areas of food security and food safety, and a widespread lack of understanding of how sustainable performance affects small and medium-sized enterprises.

Traditionally, marketing, distribution, planning, manufacturing, and purchasing organizations along the supply chain operate independently. These organizations have their objectives, and they are often conflicting. The marketing department's aim is, therefore, to offer a high level of customer service and to expect maximum sales performance, which conflicts with the production and distribution objectives. Manufacturing operations are often designed to maximize throughput and lower costs, with little consideration for the impact on inventory levels and distribution capabilities. On the other hand, purchase contracts are often negotiated with very little information beyond historical purchase patterns (Matta, 2014). In general, the result of these factors is that there is no single integrated plan for the organization. There is a need for a

mechanism through which these various functions can be integrated.

With the development of state-of-the-art technologies, supply chain management has been widely recognized by both practitioners and academia. Information technology (IT) has significantly improved the supply chain in terms of automatic food processing, such as cleaning and packing, as well as freshness storage (Wong et al., 2011). However, the discipline of supply chain management is still incapable of addressing many practical, real-life challenges in a satisfactory manner. Inadequacy factors have been identified due to low levels of farm operations, information barriers between different stakeholders, and inefficient decision-making systems/models (Zhong et al., 2017). Strategic decision-makers require comprehensive models to increase overall profitability, while data input into these models is usually ignored in most traditional myopic models.

Supply chains cover companies and the business activities needed to design, manufacture, deliver, and use a product or service. Businesses depend on their supply chains to provide them with what they need to survive and prosper. Every business fits perfectly into one or more supply chain functions and plays an essential role in each of them (Sharma et al., 2012). The supply chain consists of all stages involved, directly or indirectly, in the fulfilment of the customers' request. The supply chain includes not only manufacturers and suppliers, but also transporters, warehouses, retailers, and customers themselves (Chopra & Meindl, 2006). Customers now have so much choice from the vast field of competitors that delays in supply mean delays for customers who are probably not willing to wait until they can obtain the same or similar alternative product elsewhere.

Sustainable performance in food enterprises can be harvested in the future by reducing environmental impacts, improving the recycling of food waste, and strengthening the sharing of facilities. New mechanisms and coordinated development are essential to support for sustainability along with other industries such as manufacturing, services, and logistics (Iran & Sharif, 2016). Also, it is noted that supply chain management has become one of the main factors that lead to making profits for all these industries, in addition to the literature that shows that supply chain management practices have a positive impact on organizational performance. However, food security and food safety issues have also affected the performance of the supply chain in one way or another. One must, therefore, explore the impact of food safety management practices in the supply chain on the sustainable performance of small and medium-sized enterprises.

LITERATURE REVIEW

A PERSPECTIVE FOR SUPPLY CHAIN MANAGEMENT

Within the conceptual framework depicted by previous researchers, this section presents the perspectives relevant to SCM (cited in Chen & Paulraj, 2004). This

framework is focused on a supply chain theory model that emphasizes the creation of collaborative advantages. Under the cooperative model, the business world consists of a network of inter-dependent relationships formed and fostered to gain mutual benefits through strategic collaboration. The paradigm also builds on the relational view of the inter-organizational competitive advantage and considers the dyad/network as the analysis unit instead of individual companies and thus offers more consistent support for the supply chain management perspective.

POLICIES AND PROCEDURE

As an ongoing initiative to enhance the quality of services provided to the food industry, in particular to SMEs, food safety is the responsibility of the industry. The responsibility for ensuring compliance with food law, in individual food safety, is the priority of the Ministry of Health (Fernando et al., 2014). As the place is under their control, the food industry is the best place to implement a safe system. Further innovation to upgrade the food safety system in Malaysia has also been improved.

ORGANIZATION AND CHANGE MANAGEMENT

Scientific research has so far centred on analytical methods, food processing technology and product formulations as technical solutions, and food safety management systems as management solutions to improve the hygiene and safety of food products in the food supply chain (De Boeck et al., 2015). However, the company's management viewed the incorporation of the human dimension in its direction of food safety as very challenging and refreshing. This variable is therefore critical to be considered as complementary to supply chain management and to the new food safety culture perspective.

INFORMATION SYSTEM

Information systems are designed to automate and manage all stages of the supply management of the company and regulate the organization's overall product distribution. The SCM framework enables the need for the company's products to be significantly better met and the costs of logistics and buying to be substantially reduced (Boiko et al., 2019). SCM encompasses the whole raw material buying, processing, and product delivery period. Researchers typically recognize six primary areas that concentrate on supply chain management which are manufacturing, materials, location, inventory of warehouses, transport, and information (Boiko et al., 2019).

The complexity frequently encountered by supply chain actors is the competing interests of the chain's actors. Each actor has its objectives, performance measurements, and criteria for optimization (Aramyan et al., 2007). This conflict may not always contribute positively to the success of the chain as a whole, as the performance improvements of an individual may be harmful to other chain actors. The role of actors in the chain influences their

performance. The competing interests of various players in the chain complicate the availability of information. Also, the strategic importance of some of the data prevents free exchange between partners in the chain.

INFRASTRUCTURE AND FACILITIES

The bullwhip effect of food supply, which caused demand and supply uncertainty and increased the complexity of the food supply chain, is one consequence of the COVID-19 pandemic (Richards & Rickard, 2020). As a result, food consumption in urban areas would be more unpredictable, which will need to be implemented by the distribution system. During the pandemic, as a government concern, the emerging stockpile of staple food would gain considerable attention, especially for areas known as red zones. These situations have consequences for food availability, impeded access to food for the community, restricted communication between red zones and the other regions, and supply affordability (Pulighe & Lupia, 2020).

CONCLUSION

The importance of supply chain management and food safety in developing countries, especially Malaysia requires a new model to embed sustainable indicators in food management practices. The existing literature reviews suggest there is limited research to guide food retailers in assessing food safety. To provide sufficient guidelines to assist food retailers, crucial perspectives that improve food safety in supply chain management should be explored. This research contributes to providing a better understanding of food safety practices in supply chain management. The potential roles of food retailers to improve food safety will be explored at each stage of supply chain activities. Consequently, this improvement will increase the competitiveness in the consumer market, profitability and future business opportunities.

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