

## Is the Plate too Big for Malaysian SMEs to Implement HACCP?

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### Abstract

Hazard Analysis Critical Control Point (HACCP) implementation represents the crucial element required for a country's competitiveness. Deducing from existing literature, it is undeniable that HACCP implementation will open new avenues to product quality, consumer protection, export opportunities and profit maximization. Despite scientific support of its principles for food safety, successful HACCP implementation has been limited among Small and Medium Enterprises (SMEs), particularly in Malaysia. Hence, this article addresses the issue of HACCP implementation among Malaysian SMEs with some highlight on the associated challenges. The challenges include insufficient technical resources, time, financial capability, knowledge and training. Lack of interest in the long term benefits of HACCP is also discussed. The paper reveals a summary of the challenges and benefits that Malaysian SMEs experience through successful HACCP implementation. Based on the comprehensive review of existing literature, a suitable methodology for an empirical study in context of Malaysian SMEs is proposed. This study is expected to identify benefit and challenges for Malaysian SMEs to implement HACCP. As for recommendations, it is suggested that government agencies along with developmental organizations and other stakeholders should publish clear and detailed HACCP guidelines in Malaysia for its effective application.

**Keywords:** HACCP, SME, Benefit, Challenges, Malaysia.

### Introduction

Countries are exercising mandatory restrictions on food safety standards to avoid imports (FAO, 2004; WTO, 2013). One such food safety standard recognized globally is the Hazard Analysis Critical Control Point (HACCP). It has been employed worldwide as a condition, which need to be fulfilled before food can be imported. The advantages of HACCP implementation include: a) Trade at competitive prices; b) Minimising wastage; c) Product reliability and d)

Market growth (Herath & Henson, 2006; Scott, Wilcock, & Kanetkar, 2009; Sarter, Sarter, & Gilabert, 2010). In 2017, Malaysia's, food sector accounted for 10% of the country's output amounting to RM 21 billion, exporting to more than 200 countries (MIDA, 2018). Malaysia is further in a competitive position by producing Asian recipes that fulfill the expanding demand for specialty and ethnic foods (MIDA, 2018). These show that locally made Malaysian meals are emerging as a worldwide demand.

Investments in HACCP will increase the level of competitive advantage on global market, as it plays significant role in differentiating product quality by the consumers. Past research have analysed and found significant effect of HACCP certification on SMEs performance (Tarí & Molina, 2002; Quazi & Jacobs, 2004; Bayati & Taghavi, 2007). HACCP benefits for SMEs include (but not limited to): (a) Improved Image in the market, (b) Product quality and (c) Competitive advantage. Three market patterns that could be held responsible for the selection of HACCP are: (a) Expanding supply chains, (b) Increasing business environment impact and (c) Development of market requirements (Djordjevic, Cockalo, & Bogetic, 2011; Escanciano & Santos-Vijande, 2014).

Unfortunately, for developing countries, HACCP implementation still remains a challenge (Reardon & Farina, 2001; Donovan, Caswell, & Salay, 2001; Henson & Loader, 2001). This is why SMEs' implementation of HACCP in Malaysia is constrained (Violaris, Bridges, & Bridges, 2008; Ball, Wilcock, & Aung, 2009; Fielding, Ellis, Clayton, & Peters, 2011). Some of the major challenges for SMEs have been noted as lack of knowledge about the HACCP, financial limitations, time management and lack of focus (Yapp & Fairman, 2006; Bas et al., 2007; Violaris et al., 2008). Hence based on the above, this article aims to review and forward a summary of the challenges and benefits that Malaysian SMEs experience through successful HACCP implementation. It is expected that apart from enriching the current literature, this article will create awareness about HACCP among Malaysian SMEs along with its benefit and challenges for implementation.

### **Small and Medium Enterprises (SME) in Malaysia**

SMEs' commitment towards a country's development has a huge impact in achieving sustainable economic development (SME Corporation Malaysia, 2018). In ASEAN, SMEs comprise between 88% to 99% of all business entities, contributing significantly in creating new employment opportunities (ranging between 52% to 97%) (SME Corporation Malaysia, 2018). Particularly, SMEs engaged in exports related activities have helped their respective country's economic growth by improving GDP through higher economic productivity (Edwards, 1998 ; Jeffrey & David, 1999 ; Noguer & Siscart, 2005). In Malaysia, SMEs are defined categorically, as shown in Table 1 (SME Corporation Malaysia, 2018).

Table 1  
SME Definition in Malaysia

Size	Micro		Small		Medium	
	Sales Turnover (RM)	Employee	Sales Turnover (RM)	Employee	Sales Turnover (RM)	Employee
Manufacturing		< 50 employees	300,000 to <15 million	5 to < 75 employees	15 to 50 million	75 to ≤ 200 employees
Services & other sectors	< 300,000	employees	300,000 to <3million	5 to < 30 employees	3 to ≤ 20 million	30 to ≤ 75 employees

Source: SME Corporation Malaysia (2018)

SMEs in Malaysia had recorded a higher economic growth of 7.2% in 2017 as compared to 5.2% in 2016, thanks to the solid local demand and export activities that contributed both towards growth in employment and income (SME Corporation Malaysia, 2018). Positively upholding the favorable economic outlook, SMEs' Gross Domestic Product (GDP) growth is expected to expand at the low end of the projection range of 7% - 8%, given that Bank Negara Malaysia (BNM) has revised the overall GDP growth projection to 5%, beneath the general GDP growth projection of 5.5% - 6% in 2018 (SME Corporation Malaysia, 2018).

According to National Entrepreneurship Policy (DKN) (MED, 2019) which was being launched recently, whereby the main objective is to make Malaysia a successful entrepreneurial nation by 2030. The policy will work as a catalyst for Malaysia's achievement as a united, prosperous and dignified nation continue to build steadily with a more equitable and inclusive economic distribution. Five main objectives have been set out under the DKN: (1) To establish a holistic and conducive entrepreneurial ecosystem to support the development agenda Malaysia's socioeconomic inclusiveness, balance and stability ; (2) To establish a thoughtful and entrepreneurial Malaysian society ; (3) To increase the number of quality entrepreneurs, capable, resilient, global minded and competitive ; (4) Enhance the capabilities of micro, small and medium enterprises and cooperatives and (5) Making entrepreneurship a career of choice.

Considering global economic developments, current entrepreneurial achievements as well as internal issues and challenges entrepreneurial ecosystem in Malaysia, DKN has outlined six (6) Strategic Core. The strategies are: (1) Cultivate entrepreneurship in all societies ; (2) Optimizing the regulatory system and access to financing ; (3) Stimulate development integrated and holistic entrepreneurship ; (4) Spur economic growth through innovative company ; (5) Improving capability and performance Micro, Small and Medium Enterprises and (6) Internationalisation of High Growth Enterprises

#### **Hazard Analysis Critical Control Point (HACCP)**

Pillsbury Corporation initiated the HACCP program following the interest of National Aeronautics and Space Administration (NASA) to guarantee food security (Bennet & Steed, 1999; Nor, Jaliabc, & Ghani, 2016). HACCP does not propose explicit moves, hence companies

are allowed to select their own methods of controlling hazard (Caswell, 2003). HACCP guidelines are recognised by respective authorities worldwide (Reardon & Farina, 2001). Perhaps this is the reason why every nation can adapt the HACCP in diverse and unique ways. In general, HACCP aims to reinforce the assurance of consumers using three major components: (a) Procedure, (b) Product and (c) Information (Caswell, 2003). Analysis of hazard is crucial to establish a mix of control measures, thereby ensuring effective food safety (Surak, 2007). Primarily, the HACCP Plan is found to include its specific seven main principles which include: (a) Identification of Hazards; (b) Determination of control measures; (c) Determination of Critical Control Points (CCPs); (d) Determination of critical limits for each CCP; (e) Determination of monitoring system for each CCP; (f) Determination of corrective actions for each CCP and Determination of verification procedure (Department of Standard Malaysia, 2007).

The HACCP is not completely an independent system. It originates from prerequisite programs, such as Good Manufacturing Practices (GMP). For HACCP to be effective, these prerequisite programs need to be set up first (Department of Standard Malaysia, 2007). In Malaysia, The Malaysian Standard defines the prerequisite for food safety to guarantee the safety of food throughout preparation, storage, distribution and handling (Department of Standard Malaysia, 2007). It is prescribed that a HACCP team should have information about the products, processes and related hazards while documentation with regards to HACCP need to be reserved (Department of Standard Malaysia, 2007). Scott et al. (2009) further explained that motivational factors to implement HACCP include compliance with importing country's requirements. As HACCP mitigates the risks connected with the method of discovering hazardous segments within food industry, it should be voluntarily taken up through the SMEs in the food industry of Malaysia. In order to effectively implement, SMEs are required to have sufficient knowledge about HACCP. Nevertheless, it is undeniable that SMEs with food safety knowledge have an advantage in implementing HACCP in their daily operation (Coleman, Griffith & Botterill, 2000).

### **Significance of HACCP to SMEs**

The significance of successful HACCP implementation for food safety along with the inadequate literature on the issue motivated this study to explore the issue of HACCP implementation among Malaysian SMEs, focusing on associated challenges and long term benefits of HACCP. This article is expected to contribute towards the policy makers by advocating that products with HACCP could boost exports, which eventually could increase national income. Meanwhile for SMEs, HACCP can act as an additional tool enabling them to improve their competency and productivity. As there is always room for educating experts, for both local and international consumers, HACCP could act as the best indicator to portray that specific food products are safe for human consumption.

### **Conclusion**

HACCP implementation related challenges should not hinder SMEs' growth, as a cost to upgrade food safety systems. With adequate training, knowledge, and appropriate government support, SMEs and nations could witness economic progression. This requires an understanding of HACCP principles and commitment to it within the company. Therefore for SMEs to successfully implement HACCP, an effective HACCP team is required to prepare documents and training plans. As most SMEs have limited understanding of the HACCP, it is

necessary that the governments clarify the goals of the strategy, and provide adequate information to ensure uniformity of HACCP. It should be convenient to plan activities with targeted SMEs with the aim of improving knowledge, understanding, and attitude to achieve business management that enhances food safety. The implementation of the HACCP represent the basic conditions for improving the competitive ability of those companies belonging to the food processing industry, especially for SMEs who plan to venture into exporting activities. HACCP implementation in SMEs will ultimately provide stronger market orientation leading to product quality improvement, ensuring consumer protection while increasing profits simultaneously.

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