

SUPERVISOR DECLARATION

“I/We hereby declare that I/We have checked this project and in my/our opinion, this report is adequate in terms of scope and quality for the award of the degree of Bachelor of Technology Management (High Technology Marketing)”

Signature :

Name of Supervisor : Dr. Norain Binti Ismail

Date :

Signature :

Name of Panel : Dr. Nusaibah Binti Mansor

Date :

CHALLENGES OF COMMERCIALISATION IN PRODUCT PACKAGING
INNOVATION AMONG FOOD INDUSTRIES

ABDULLAH NA'IM BIN MOHAMAD SALEH

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Universiti Teknikal Malaysia Melaka

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DECLARATION

“I hereby declare that the work of this report is mine except for the quotations citations and summarize that have been duly acknowledge”

Signature :

Name : Abdullah Na'im Bin Mohamad Saleh

Date :

DEDICATION

I would like to dedicate this research to my beloved parents and siblings, thank you for raising me and support me until now. A special thanks to my supervisor, panels and my friends for helping me throughout the project towards accomplishing my report.

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In the name of Allah, the Most Gracious and Most Merciful

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ABSTRACT

Since era globalisation nowadays, commercialisation presents a complex challenges for the industry, particularly for food industries whose operating in technology field on product packaging. Many activities, external of organisations and resources are often needed in order to bring new product packaging innovation into the market which can create competitive advantage and also to create several benefits for the food industries. Therefore, it is important to examine the challenges of the commercialisation which was one of the objectives of this study. Besides, the research used qualitative method to conduct the research and at the same time in-depth interview was mainly used due to gain understandings, reasons, opinions and motivation which is relatable with the study. In addition, it is believed that this research paper will beneficial to the industry practitioner and academician to be served as future reference.

Keywords: Commercialisation, Challenges of Commercialisation, Product Packaging Innovation, Food Industry

ABSTRAK

Sejak zaman era globalisasi, pengkomersialan memberikan cabaran yang sengit bagi industri, terutamanya untuk industri makanan yang beroperasi di bidang teknologi pada pembungkusan produk. Banyak aktiviti, organisasi dan sumber luar sering diperlukan untuk membawa inovasi pembungkusan produk baru ke dalam pasaran yang dapat mewujudkan kelebihan daya saing dan juga dapat menghasilkan beberapa manfaat bagi industri makanan. Oleh itu, adalah penting untuk mengkaji cabaran pengkomersialan yang merupakan salah satu objektif kajian ini. Selain itu, kajian ini menggunakan kaedah kualitatif untuk menjalankan penyelidikan kerana temu ramah mendalam akan digunakan kerana ingin mendapatkan pemahaman, pendapat dan motivasi yang berkaitan dengan kajian. Di samping itu, kertas penyelidikan ini akan memberi manfaat kepada pengamal industri dan ahli akademik untuk dijadikan rujukan masa depan.

Kata kunci: Pengkomersialan, Cabaran Pengkomersialan, Produk Pembungkusan Inovasi, Industry Makanan

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LIST OF ABBREVIATIONS

ABBREVIATION	MEANING
R&D	Research & Development
IMP	Industrial Master Plan
SME	Small and Medium-sized Enterprise
CEO	Chief Executive Officer

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CHAPTER 1

INTRODUCTION

1.1 Introduction

In this chapter, the researcher had covered the background study of research topic which is the Challenges of Commercialisation in Product Packaging Innovation and in addition, the researcher included Food Industry sector into the topic. Furthermore, problem statement, scope and limitation of study, methodology of research, research question and research objective were presented in this chapter.

1.2 Background of Study

In Malaysia, commercialisation of cutting edge and tech-based products and services is a major contributor to socio-economic growth. Hang Do et al. (2014) state that commercialisation is driven by the expectations of the firm that they can gain a competitive advantage in the marketplace for a particular product, process or service. Commercialisation can be defined as the process of introducing a new product and making it available on the market. In the industry, a successive commercialisation is a vital role for them to gain profit and it can be a source of competitive advantage to outdo the competitor. Even the small business need to commercial their product or services in order to survive in their industry. Its shows that, how the commercialisation is very important thing for them to adopt especially with the current technology development nowadays.

Packaging is one of the main process to preserve the quality of food products for transportation, storage and end use. Generally, innovations in food packaging aim at improving, combining, or extending the four basic functions of traditional food packaging (Yam, Takhistove, & Miltz, 2005). There are four basic functions for packaging which are protection, communication, convenience and containment (Han, 2005). These four basic function plays a vital role towards product packaging. With all these four attributes, this would surely increase the quality of the product packaging. Nevertheless, this does not include any innovation in the process yet. When innovation comes into the world of technology, technology advancement would influence packaging technology and appear as active packaging and intelligent packaging. Then the output of the packaging would focus more on these few criteria; reduce cost, east to use, safe content and packaging, environmental friendly. Food packaging innovation should not just focus on the four basic function of traditional food packaging, but, the innovation should help create a more environmental friendly world. Where packaging waste and food loss on our environment is reduced totally.

As mentioned by Elsadig (2012), food manufacturing industry plays a significant role in the economy of Malaysia as this industry provides not only the source of employment but also the market outlet and added value for primary agricultural products. Society is becoming increasingly complex, user such as food producers, food processors, logistic operators, retailers and consumers continuously demand innovative and creative food packaging in order to guarantee food safety and food quality (Vanderroost, Ragaert, Devlieghere, & De Meulenaer, 2014). Since 2000's, food packaging innovation is no longer an old traditional way of packaging as it has expanded towards a new way of packaging. Globalisation, technological developments and rapidly changing customer requirements have increased the significance of food industries due to their ability to create and exploit innovation.

It has becoming strongly clear that commercialisation does influence the pattern of industry nowadays. Thus, food packaging innovation in food industries would become extra firm with the help of a proper commercialisation. But, in order to get into the commercialisation, there would be a challenges and that is the exact purpose of the research. To know the product packaging innovation and to investigate deeply into the challenges of commercialisation.

1.3 Problem Statements

Finding challenges would create awareness and eventually solution would arise. For those industry operating in high technology field, complex challenges would present in terms of commercialisation. This research would focus in examining challenges of commercialisation in product packaging innovation.

However, it is not easy to adopt commercialisation in product packaging innovation. The three major shortage would be the lack of funding, the unavailability of expert in implementing product packaging innovation and the third one would be the lack of technology advancement development.

The lack of funding would be the major cause where without funding it could create the other problems. Lack of funds would act as a prime barrier in not providing a proper value to finance a need, program or project. Commercialisation helps create competitive advantage and create new product innovation. Therefore, without a proper funding, they could not manage to innovate and eventually lose their competitive advantage. This is how funding would create differences between one company and another.

Nevertheless, each of its problems has its own explanation. The unavailability of expert implementation shows how worrying the organisation of not having it. In terms of not having an expert, the organisation have no courage to implement the technology in commercialising the product. The organisation need to outsource an expertise in this area. Money would be splash and increase the expenditure of the organization. In term of food industry, an organization might look for outsourcer for not having their own expert. Outsourcing may even give benefits sometimes, but to be doing it occasionally, it may ruin one business.

Food industry may not be alert with the current wave of technology advancement or maybe they lack in making it. If anything like this happen, the commercialisation would be difficult to be implemented especially in packaging. They sometimes own a technology but without understanding the basic knowledge on how it truly function or how the machine may work in the most efficient way, the technology would be a waste. The purpose of technology advancement is to help ease people job and increase work efficiency. Without a proper technology advancement development, workload would be a burden and spoil a positive working environment.

1.4 Research Questions

Three research question have been determined from the problem statements.

1. What is the product packaging innovation among food industries?
2. What are the challenges of the commercialisation among food industries?
3. What is the best recommendation for food industries in improving their commercialisation for product packaging innovation?

1.5 Research Objectives

This study will try to explain the challenges of commercialisation in product packaging innovation among food industries by following

1. To study the product packaging innovation among food industries.
2. To investigate the challenges of the commercialisation among food industries.
3. To recommend a guideline for food industries to commercialise their product packaging innovation.

1.6 Methodology

According to Saunders et al. (2012), there are three methodology to conduct a research which are qualitative, quantitative and mixed method. One of the ways to distinguish them is quantitative research where it is focus on numerical method. Quantitative research emphasizes objectives measurements and the statistical and numerical analysis of data collected through questionnaires and surveys by manipulating pre-existing statistical data.

Next method is qualitative for which data collection techniques mainly using interview. For method use in finding, the researcher uses a qualitative research. The reason why the researcher chooses this because the qualitative used to gain an understanding of underlying reasons, opinion and motivation on types of product packaging innovation and then to find what other challenges that would be faced by industry in commercialising their products. The researcher used this method to provide insights into problems ideas. It is also used by the researcher to analyse trends and opinions that can seek to reduce bias and error.

In this research, the researcher uses the exploratory research as the nature of research design. This is because the one of objectives for exploratory research is to understand and provide insight into the problem confronting by the researcher (Malhotra, 2010). Therefore, by using the exploratory research, it will create a new direction to pursue and, as a result, food industries may use this research as a guideline to remain success in order to commercialise their product packaging innovation.

The sample size is typically small because it can give a specific respondents and organisations and the respondents are selected among the company in the food industry in Melaka by using an in-depth individual interview. The researcher will meet the marketing manager of the food industries in order to get the information regarding the topic discussed and want to know the background of the selected company. There are four companies selected in order to conduct this study. In addition, the suitable criteria that should be in

the respondent of the research is the need to be knowledgeable and the most important thing is to have an expertise on the product packaging innovation. It is because by having those criteria, the result of the studies will be more accurate and validity of the result will be accepted.

The interview session will conduct by the researcher by interviewing the middle and the top management of the company among food industries because they understand more on the whole operation of the company. By using a semi-structured interview, it will consist few section including background of interviewees, challenges of commercialisation in product packaging innovation plus recommendation for the food industries. Hence, the purpose of the interview would be getting an important and useful story behind the interviewee experiences. The researcher could pursue deeper information regarding the topic.

1.7 Scope and Limitation

This research was conducted to identify the challenges of commercialisation in product packaging innovation, and the researcher specifically choose food industry to identify it. Therefore, this research will be carried out in food industries in Melaka. The researcher will randomly selected four companies of food industry in Melaka to carry out in-depth interview with selected respondents. The selected target respondents of the industries would be middle and top management and also includes the executive that expert in product packaging of the company. The researcher assumed that respondents were provided the honest answer while answering the interviewer's question.

For the limitation, there are several limitation faced by the researcher while doing this research paper. Time constraint is one of the factor faced by the researcher. Only a few months given to the researcher to complete all the research and it makes hard to the researcher to get cooperation from the targeted respondents. Hence, the duration is insufficient for the researcher to obtain more relevant information regarding this research and the selected respondent also cannot be more specific and wide due to time constraint.

In addition, the sample size also includes which only targeted four companies from food industry those operate in Melaka to conduct the study. Of course there are more than four food industries operate in Melaka but because of time constraint, researcher only focus on four food industries only. In order to get a better result, the researcher should study more than four food industries and the result would be more solid and convincing. Therefore, the future research should select more food industries to increase the exactness of the result.

Next, the other limitation would be the location. The research only carried out in Melaka. Therefore, future research for this study should be carried out in other state also to explore the differences and similarities the challenges of commercialisation in product packaging innovation among food industries in Melaka and other states.

1.8 Significance of Research

The study will beneficial to academician by giving an in-depth knowledge about the challenges of commercialisation in product packaging innovation for food industries. Besides, this study also can be served as future reference for academician in conducting future research.

Furthermore, industry practitioner can also be beneficial from this study. This study not only provides about commercialise of the product but also discuss about the terms product packaging innovation that can be implement in the organisation. Thus, this research can serve as a guideline to the food industries to commercialise their product packaging innovation, and this is also act as a tool for food industries to improve their food packaging innovation towards commercialising by understanding the challenges of the commercialisation in product packaging innovation.

In addition, by understanding this research, industry practitioner also can avoid those challenges in commercialising their new product packaging. It is because one of the objectives of the research itself is to determine the challenges of commercialisation in product packaging innovation. Hence, food industries may try to minimize those challenges by using this research as a guideline in order to improve their commercialisation process. Practically, the organization can be assured of creating competitive advantage to beat the competitors.

1.9 Summary

This was structured as the introduction to this study. This study is about how the challenges of commercialisation in product packaging innovation among food industries. Thus, this chapter briefly explain about the background of the study, objectives and research questions are pointed out in this chapter. Besides that, this chapter also explain the scope will be covered in the study and limitations faced by the researcher in conducting the research. The following chapter will describe in details the literature review of product packaging innovation in terms how the challenges to commercialising it. Theoretical framework will also be proposed in chapter 2.