AN ACTION RESEARCH ON E-COMMERCE ADOPTION FOR A FROZEN FOOD MANUFACTURER IN MALAYSIA

WEE BOON KHUANG

UNIVERSITI TEKNOLOGI MALAYSIA

AN ACTION RESEARCH ON E-COMMERCE ADOPTION FOR A FROZEN FOOD MANUFACTURER IN MALAYSIA

WEE BOON KHUANG

A project report submitted in partial fulfilment of requirement for the award of the degree of Master of Business Administration

International Business School Universiti Teknologi Malaysia

FEBRUARY 2022

DEDICATION

This thesis work is dedicated to my wife, Ivy, who has been a constant source of support and encouragement during the challenges of graduate school and life. I am truly thankful for having you in my life.

ACKNOWLEDGEMENT

I would like to acknowledge and give my warmest thanks to my supervisor Dr Teo Poh Chuin who made this work possible. Her guidance and advice carried me through all the stages of writing my project. I would also like to thank my committee members for letting my defence be an enjoyable moment, and for your brilliant comments and suggestions, thanks to you.

ABSTRACT

The objective of this research action is to introduce interventions into a frozen food manufacturer (CS), and assists the company venture into online sales channels. This research action will assist the company to generate income from a new profit stream as especially during this COVID-19 pandemic. This action research involved redesign product packaging, improve production process, design marketing strategy, and forming new delivery service provider collaboration. The intervention team identified Shopee.my is the suitable starting selling channel as it provides the most competitive advantage. The intervention team, launched a series of promotion and reach out the target group of customers by using Facebook advertisement. Along the intervention, there are some unintended results which affected the intervention plan, but the team was successfully overcome it. The intervention was taking place on 17th March until 16th May 2020 and successfully generate RM116,690 of revenue to the company and increase the gross profit margin from 25% to 33% for these online sales transactions. The intervention shown positive unintended results too which open up some distributor partnership at other state of Malaysia. Meanwhile for cycle two intervention, a distribution hub was setup in Oct 2021, in order to improve delivery service which is the main complaint issue received during year 2020 and 2021. The intervention is implemented and success maintaining Selangor area online revenue as the pilot project meanwhile other area revenue been decreased 35% to 67% due to the movement control lifted, and public tend to have dine in instead of cook at home. Overall, the action research assisted CS Foodstuff Sdn Bhd to setup an online store from zero, and provide new profit stream to the customer as well as improve CS product appearance in digital channel.

ABSTRAK

Objektif tindakan penyelidikan ini adalah untuk memperkenalkan intervensi ke dalam pengeluar makanan sejuk beku (CS), dan membantu syarikat meneroka saluran jualan dalam talian. Tindakan penyelidikan ini akan membantu syarikat menjana pendapatan daripada aliran keuntungan baharu terutamanya semasa pandemik COVID-19 ini. Penyelidikan tindakan ini melibatkan reka bentuk semula pembungkusan produk, menambah baik proses pengeluaran, mereka bentuk strategi pemasaran, dan membentuk kerjasama penyedia perkhidmatan penghantaran baharu. Pasukan intervensi mengenal pasti Shopee.my adalah saluran jualan permulaan yang sesuai kerana ia memberikan kelebihan paling kompetitif. Pasukan intervensi, melancarkan satu siri promosi dan menjangkau kumpulan sasaran pelanggan dengan menggunakan iklan Facebook. Sepanjang intervensi, terdapat beberapa keputusan yang tidak diingini yang menjejaskan rancangan intervensi, tetapi pasukan berjaya mengatasinya. Intervensi itu berlangsung pada 17 Mac hingga 16 Mei 2020 dan berjaya menjana pendapatan RM116,690 kepada syarikat dan meningkatkan margin keuntungan kasar daripada 25% kepada 33% untuk transaksi jualan dalam talian ini. Intervensi itu juga menunjukkan hasil positif yang tidak diingini yang membuka beberapa perkongsian pengedar di negeri lain di Malaysia. Sementara itu bagi intervensi kitaran dua, hab pengedaran telah disediakan pada Okt 2021, bagi menambah baik perkhidmatan penyampaian yang merupakan isu aduan utama yang diterima sepanjang tahun 2020 dan 2021. Intervensi itu dilaksanakan dan kejayaan mengekalkan hasil dalam talian kawasan Selangor sebagai projek perintis sementara itu hasil kawasan lain telah berkurangan 35% hingga 67% disebabkan kawalan pergerakan ditarik balik, dan orang ramai cenderung untuk menjamu selera dan bukannya memasak di rumah. Secara keseluruhan, kajian tindakan membantu CS Foodstuff Sdn Bhd untuk menyediakan kedai dalam talian daripada sifar, dan menyediakan aliran keuntungan baharu kepada pelanggan serta menambah baik penampilan produk CS dalam saluran digital.

TABLE OF CONTENTS

TITLE	PAGE
DECLARATION	V
DEDICATION	VI
ACKNOWLEDGEMENT	VII
ABSTRACT	VIII
ABSTRAK	IX
LIST OF TABLES	XIII
LIST OF FIGURES	XIV
LIST OF CHARTS	XV
LIST OF APPENDICES	XVI
CHAPTER 1 INTRODUCTION	1
1.1 Problem Situation & Importance of the Study	1
1.2 The Company	2
1.3 Challenge Formulation	2
1.4 Research Objective and Question	3
CHAPTER 2 INDUSTRY AND PROBLEM DIAGNOSIS	4
2.1 Industry Background	4
2.2 Problem Diagnosis	5
2.3 Previous and Contemporary Studies	7
2.3 Intervention Planned	10
2.4 Conclusion	13

CHAPTER 3 METHODOLOGY	14
3.1 Introduction	14
3.2 Hypothesis	14
3.3 Action Research Process Design	15
3.4 The Interview	18
3.5 The Survey	20
3.6 The Survey Sampling	21
3.7 Survey Measurement	22
3.7 Instrumentation	22
3.8 Summary	24
CHAPTER 4 ANALYSIS & FINDING	25
4.0Introduction	25
4.1 Quantitative Data Analysis	25
4.3Finding	30
4.4Summary	31
CHAPTER 5 INTERVENTION & REFLECTION	32
5.1 Introduction	32
5.2 Intervention Plan	32
5.3 Selling Platform	33
5.4Logistic Partnerships	35
5.5 Product Positioning	36
5.6Delivery Challenge	36
5.7 Marketing Plan	36
5.8 Action Research Reflection	38
5.9 Conclusion	40
5.10 Cycle Two Proposed Intervention & Implication	40

CHAPTER 6 CYCLE TWO INTERVENTION ANALYSIS	42
6.1 Introduction	42
6.2 Intervention Plan	42
6.3 Interview	42
6.4Finding of Analysis – Quantitative Analysis	43
6.5 Conclusion	46
CHAPTER 7 CYCLE TWO INTERVENTION & RESULTS	48
7.1 Introduction	48
7.2 Intervention Plan	48
7.4 Action Research Reflection	56
7.5 Conclusion	59
REFERENCE	60

LIST OF TABLES

TABLE NO	O. TITLE	PAGE
Table 1.1:	Passarch Objective and Passarch Question	12
Table 1.1.	Research Objective and Research Question	
Table 2.1:	Problem and Intervention	19
Table 3.1.	Research Question and Data Collection	25
Table 5.1:	Research Question & Intervention Plan	41
Table 5.2:	Comparison between Online Platform	43
Table 5.3:	Minimum Order & Delivery Offer	46
Table 5.4:	Challenge & Intervention	50
Table 7.1:	Research Question & Intervention Plan	56
Chart 7.1:	Revenue of Min, Max, Average (2020 March to 2021 September)	57

LIST OF FIGURES

FIGURE N	PAGE	
Figure 1.1:	Questions for Research Process	11
Figure 6.1:	Shopee Shop Rating through CRM (Front Page)	52

LIST OF CHARTS

CHART NO. TITLE		PAGE
Chart 4.1:	MOQ Acceptable Amount	34
Chart 4.2:	Selling Channel Purchase Done in last 30 days	35
Chart 4.3:	Service Expectation Rating	35
Chart 4.4:	Promotion Expectation Rating	36
Chart 4.5:	Refund Expectation Rating	36
Chart 4.6:	Product Uniqueness Rating	37
Chart 4.7:	Product Preparation Rating	37
Chart 4.8:	Delivery Preparation Rating	38
Chart 4.9:	Delivery Method Rating	38
Chart 4.10:	Delivery Timing Rating	39
Chart 6.1:	Shop Rating	53
Chart 6.2:	Rating Review Less Than 2 Star and Its Issue	53
Chart 6.3:	Complaint Received Through Chat Box	54
Chart 7.2	New Hub Functions & System	58
Chart 7.3	Sales Comparison by Month	61
Chart 7.4	New Customer Comparison by Area	62
Chart 7.5	Survey Results for Question a) c) e)	63

LIST OF APPENDICES

APPENDIX	TITLE	PAGE
Appendix A: Similarity Inc	dex Report	61
Appendix B: Impact Report		62
Appendix C: Supervisor Pr	63	
Appendix D: Company Le	64	
Appendix E: Compulsory	65	
Appendix F: Supervisor Co	onsent Form	66

CHAPTER 1

INTRODUCTION

1.1 Problem Situation & Importance of the Study

The focus of this action research is to assists CS to venture into e-commerce sales channel. CS have been trying to open up the e-commerce sales channel as CS look into it as a great potential to reach those end consumers. Besides that, e-commerce allow manufacturer to enjoy more flexible in marketing campaign planning, more bargain power over product launching term and condition, as well as obtain the real feedback about quality of the products and services. Selling through middle-man or distributor do not allow or limits the manufacturer to get that above-mentioned information first hand. Furthermore, distributor or middle man selling channel is profit-driven entity, when come to launching total creative new product, the distributor tends to be conservative and lack of cooperative in pushing the new product to success if they do not see promising return in short period.

A successful e-commerce campaign would help company from relying too much on the traditional selling channel and distribution channel. It reduces the risk the company need to handle if the particular sales channel facing sales drop which may results from business dispute, or distributor change product brand for trading. Middle distributor played an important role this in industry in a long history as manufacturer have to rely on distributor's assets and resource such as cold room facilities, and cold truck delivery service, to deliver the products to consumer table. Meanwhile distributor favours in credit term, which it posts certain risk and affect company cash flow if there is any delay in payment. Whereas e-commerce sales channel is always cash term, which provide manufacturer better option to improve company cash flow. In addition, with today relatively mutual of last-mile logistic service provider, manufacturer can actually easily break the logistic barrier with an effective supply chain planning and deliver the goods by manufacturer at nationwide level.

So, a successful e-commerce campaign will not only increase the company sales, it will change the entire company marketing strategy as well as changing the food industry supply chain game rules. Consumer will able to get connected with manufacturer directly, and the role of domestic distributor will swift from market capacity owner to stockist. This will greatly benefit manufacturer in a long run and manufacturer will have more bargain power over distributor when come to marketing strategy planning and payment term.

1.2 The Company

CS Sdn Bhd (CS) has been established in Malaysia since 1998. Initially CS product and services was targeting to serve restaurant operator by providing ready to serve frozen dim-sum. The product and services aim to assists the restaurant operator to prepare handmade product, and the product can be easily serve just by heating up. This allow the restaurant operator to handle more order faster and less labour force that required at the kitchen preparation area. Then after 8 years' time, CS slowly developed specialization in manufacturing and distribution of a variety of traditional dim-sum with large partnership with domestic frozen food distributor across west Malaysia. CS distribution cover Selangor, Johor, Perak, Melaka, Kedah, Perak, Penang, Terengganu, Kelantan, and Pahang. CS main office is located in Kuala Lumpur, and employed 70 employees with semi-automated production line. 72% of sales revenue contributed by general trade. Most of the delivery was handled by CS own temperature-controlled delivery truck. The distribution of products heavily relied on distributor partnership. Frozen food required cold room facilities, and in Malaysia, there are limited number of business operator have such facilities.

1.3 Challenge Formulation

This action research objective is to assists manufacturer venture into e-commerce which improve company revenue from this new revenue stream. CS need to identify where to sell, what is the product will be suitable to sell online, what selling package suitable for online sales, and how to deliver the order and reach the customer table as shown in chart 1.1.



Figure 1.1 Questions for Research Process

1.4 Research Objective and Question

Following research question that linked back to the research objective as shown in Table 1.1:

-

 Table 1.1 Research Objective and Research Question

Research Objective	Research Question
O1. To identify suitable selling platform	Q1. What is the sales platform current
for CS as starting point (Where to sell)	available at the market that suitable
O2. To identify suitable delivery method	Q2. What is the current prospect partner
for frozen food across nationwide level	at the market can be reach out to form
(How to deliver)	partnership
	Q3. What is the consideration should be
	included to make the product suitable to
O3. To propose suitable product and its	sell online
packaging for online channel	Q4. What is the process change or
(What to sell)	product packaging changes should be
	introduced to make the selected product
	last 48 hours outside freezer
O4. To assists CS with effective marketing plan to launch the e-commerce (How to sell)	Q5. What factor effect the intend to buy for online shopper

REFERENCE

Adjp Quad. March 7, 2016. Research Tools: Interviews & Questionnaires. Retrieved From Https://Lled500.Trubox.Ca/2016/225

Boone, H.N. and Boone, D.A. (2012) Analyzing Likert Data. The Journal of Extension, 50, pp 1-5.

Collis and Hussey. 2014, Business Research: A Practical Guide for Undergraduate and Postgraduate Students, Macmillan International Higher Education. USA, pp195 - 225

Creswell. 2012. Planning, Conducting, and Evaluating Quantitative and Qualitative Research, Fourth Edition, University of Nebraska–Lincoln, Pearson Education, pp 10-11

Dörnyei, Z., & Csizér, K. (2012). How to design and analyze surveys in SLA research? , Research methods in second language acquisition: A practical guide (pp. 74-94).

Höck, C., Ringle, C. M., and Sarstedt, M. 2010. Management of Multi-Purpose Stadiums: Importance and Performance Measurement of Service Interfaces, International Journal of Services Technology and Management, 14(2/3): 188-207.

Richard Sagor. 2005. Guiding School Improvement with Action Research. ACSD, USA, pp. 47-146.

Khalid, Abdullah and Kumar. 2012. Get Along with Quantitative Research Process, Article, USA.

Saifullah, A. Nawaz, A. Rizwan, Khalid, 2014. Journal Frozen Food Revolution: Investigating How Availability Of Frozen Food Affects Consumer Buying Behavior. International Journal of Economics, Commerce and Management, Vol. II, Issue 8, 2014, UK.