THE DETERMINANTS OF CUSTOMER SATISFACTION OF PURCHASING MASS CUSTOMIZED COMPUTER IN MALACCA

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UNIVERSITI TEKNIKAL MALAYSIA MELAKA

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SUPERVISOR'S APPROVAL

I hereby declared that I have confirmed this project paper was entitled: The determinants of customer satisfaction of purchasing mass customized computer in Malacca.

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The thesis is submitted in partial fulfillment of the requirements for the award of Bachelor of Technopreneurship with Honours (BTech)

Faculty of Technology Management and
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DECLARATION OF ORIGINAL WORK

I hereby declare that the project work entitled " The Determinants of Customer Satisfaction of Purchasing Mass Customized Computer in Malacca" submitted to Faculty of Technology Management and Technopreneurship (BTech) , Universiti Teknikal Malaysia Melaka is an original work done by me under the guidance of Madam Mariam Miri Binti Abdullah, lecturer of Faculty of Technology Management and Technopreneurship (BTech), Universiti Teknikal Malaysia Melaka. The results embodied in this research have not been submitted to any other University or Institute for the award of any degree or diploma.

Signature :

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DEDICATION

I would like to express my grateful thanks to my dearest family members who give support and encouragement that helped me in the completion of this research paper. Thanks for giving me the great experienced and chance to complete this meaningful research.

Furthermore, I want to dedicate this thesis to my supervisor, Madam Madam Mariam Miri Binti Abdullah, for her guidance and motivation along this whole process of the research.

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ABSTRACT

All business in the market nowadays are getting competitive in all areas and this also occurred in all industries. Computer industry as an important industry also faced declined in sales due to the rapid change of the market and thus, some actions should be taken in order to help this industry to survive. Hence, the purpose of this study is to identify the determinants of customer satisfaction of purchasing mass customized computer in Malacca. In the conceptual framework, the determinants including price, quality, and order to delivery lead time as independent variables while customer satisfaction on purchasing mass customized computer as dependent variables. This is the explanatory research design, quantitative will be a methodological choice, the survey will be conducted as a research strategy, both primary and secondary data will be used, cross-sectional as time horizon and reliability and validity test will be applied too. The questionnaires were distributed to 384 respondents and Statistical Package for Social Science (SPSS) was used to analyze data collected. For the data analysis techniques, it included Pearson correlation and also descriptive statistics. In order to produced accurate and reliable research data for the research, the researcher targeted consumers that had ever buy a computer in Malacca and between the age range of 18 to 50 only. The result of regression analysis showed that price and quality have a strong positive relationship with customer satisfaction while the order to delivery lead time has a moderate positive relationship with customer satisfaction. Besides, the result also showed that order to delivery lead time has the most significant effect that influencing customer satisfaction.

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ABSTRAK

Semua perniagaan di pasaran pada masa kini semakin kompetitif di semua bidang dan ini juga berlaku di semua industri. Industri komputer sebagai industri penting juga menghadapi penurunan dalam jualan disebabkan perubahan pesat pasaran.Oleh itu, beberapa tindakan perlu diambil untuk membantu industri ini dapat bertahan. Tujuan kajian ini adalah untuk mengenal pasti faktor yang mempengaruhi kepuasan pelanggan terhadap pembelian komputer yang telah diubahsuai di Melaka. Dalam kerangka konseptual, faktornya termasuk harga, kualiti dan masa penghantaran sebagai pembolehubah bebas sementara kepuasan pelanggan untuk membeli komputer diubahsuai sebagai pembolehubah bergantung. Bukan itu sahaja, penyelidikan penjelasan adalah reka bentuk penyelidikan, kuantitatif akan menjadi pilihan metodologi, soal selidik akan dijalankan sebagai strategi penyelidikan, data primer dan sekunder akan digunakan. Soal selidik diedarkan kepada 384 responden dan Pakej Statistik untuk Sains Sosial (SPSS) digunakan untuk menganalisis data yang dikumpul.Untuk teknik analisis data, ia termasuk analisis deskriptif, analisis korelasi dan analisis regresi. Untuk menghasilkan data penyelidikan yang tepat dan boleh dipercayai untuk penyelidikan, penyelidik menyasarkan pengguna yang pernah membeli komputer di Melaka dan antara umur 18 hingga 50 sahaja. Untuk hasil analisis regresi, ia menunjukkan bahawa harga dan kualiti mempunyai hubungan sederhana positif yang kuat dengan kepuasan pelanggan manakala untuk masa penghantaran, ia mempunyai hubungan positif yang sederhana dengan kepuasan pelanggan. Selain itu, hasil kajian juga menunjukkan bahawa penghantaran masa sebagai faktor utama yang mempunyai kesan yang kuat untuk mempengaruhi kepuasan pelanggan.

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LIST OF ABBREVIATIONS

UTeM	University Teknikal Malaysia Melaka
SPSS	Statistical Package for Social Science
ANOVA	Analysis of Variance
DV	Dependent Variable
IV	Independent Variable

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Chapter 1 of this research begins with an abbreviated introduction follows by research background for this topic. This chapter also outlines the problem happened in the computer industry, the concern of customer and stated out previous literature that related to research. Furthermore, this chapter will focus on the research objectives and research questions as it helps the researcher clearly know their research direction. Significance of this research and scope of the study will be discussed in the last part of this chapter to state the contribution of this research to academic and industry.

1.2 Research Background

The computer industry is one of the fast-growing industry among the other sectors. Over the last 5 years, the personal computer market growing in good condition and it is presumed to achieve a compound annual growth rate of 3.3%

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with approximately US $252.7 billion in 2017 in the consequent next 5 years. Besides, Lucintel's research (2012) also revealed that the personal computer market showed noticeable growth during 2006 until 2011 due to the launched of a notebook computer which has better performance with the affordable price ("Growth Opportunities in the Global Personal Computer Market ", 2012).

In the article "Global PC Market Forecast to 2023: Shipments have Been Sharply Declining" (2018), it mentioned the shipments of computer over these last 4-5 years shown significantly decreased. The reason for this scenario is caused by several combination factors which are market saturation, unstable economic condition, increase of computer life span, the threat of substitute product such as smartphone and tablets. Not only that, the global PC shipments are anticipated to have a negative CAGR of 3.0% which is reduced from 258.8 million (2017) to 215.8 million (2023) over the forecast duration.

The market trend now are focus more on customer revolution which means businesses in all industry should listen, react and respond to customers' needs and demand. So, a business model which use technology to give assistance to production at a cheaper price and scale comparative was introduced which is mass customization (Plaksij, 2018). Dell acts as a successful firm in computer mass customization is a good example to refer to its business strategy ("Essay on Dell Analysis", 2018). According to the International Data Corporation (IDC) worldwide quarterly PC monitor tracker (2017), Dell possessed 19.5% of international market share with shipments of over 5.5 million units of computer, which made Dell ranked the top in 2Q17. Besides, Dell expected to improve gradually every year in Central and Eastern Europe, Canada and Western Europe with the growth rate of 21.3%, 35.8%, 20.0% respectively. As a result, the business strategy of Dell become a model for every sector nowadays which is applying of mass customization strategy or built-to-order in their products (" Dell Sees Solid Year-Over-Year Growth in Worldwide PC Monitor Market in Second Quarter of 2017, According to IDC ", 2017).

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According to Muehlbauer (2017), consumers buying behavior towards customized products is a growing trend. Muehlbauer conducted a survey to test the market demand for mass customization. The result showed that 30% of consumers from 500 interviewed consumers have been designing product based on their own desired, while half of them from those who do not have experience buying customized product imagine doing so in near future. Besides, Muehlbauer also used Consumer Barometer study (2017) to outlined that 60 percent of consumers experienced in buying customized products and hope that will be more built-to-order products in the future. From this 60 % of consumers, 55% of them stated that they willing to pay a higher price for this customizable offers. For the rest of 40 percent of consumers who do not yet experience on personalized product, 43% of them expect to see personalizable offers in the future. As a result, mass customization in the computer industry will be a good way to boost the computer unit shipments as it solves what customers concerned and deliver customer value in term of fulfilling demands.

1.3 Problem Statement

In the market place nowadays, there is a dilemma inherent in products marketed which is the standardization product is produced in push manufacturing manners. In general, customers will understand what they want, which means customers are concern more on the utility function of the product but normally lack of knowledge in term of the technical part and the problems embedded during production. In contrast, the industry side normally understands the technical part but less understand the customer's demand and preferences. This scenario indicated that there is a lack of communication between the manufacturer and its customers. Thus, this situation leads to the appear of mass customization in different industries as customers tend to have different requests on product design or components.

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In Malaysia, there are less mass customized products available because the management for production and logistic is challenging. The success of mass customization product mainly depends on the leverage between the sacrifice made by customers and the customized product which is also considered as trade-offs. For example, it is about how much price that customers willing to pay and how long time they can wait to get their mass customized products. In different circumstances, it is about the ability of a company to manufacture and deliver the mass customized products with reasonable price and tolerable period of time. However, the fact is that actually most of the consumers can accept a higher price for customized products as it provides added value for a personalized solution (Tseng & Piller, 2011).

Based on the State of Personalization report (2017), it indicated that the majority of the customers felt dissatisfying on their shopping experience due to lack of customization provided. Besides, it is shown that an average of 71 percent of them also disappointed on the impersonal experiences. Therefore, mass customization will be a good method to solve this problem while maintaining cost effectiveness in order to deliver better value to customers.

In this research, the industry selected to be studied is the computer industry. This is because the computer industry faced a huge problem now - it keeps falling in sales. The latest Gartner report (2018) stated that it is about 61.7 millions of computer shipments in the Q1 2018 which has reduced by 1.4% of computer shipments compared to Q1 2017. According to Marvin (2018), the computer industry experienced sales declined since 2012 due to the boom of substitute products such as mobile device, but this scenario only occurred on smaller manufacturers, those top vendors are not included. For instances, Dell who acts as one of the top vendors increased their sales by 6.5% year over year even the computer industry faced big shrunk in the market.

These top vendors still can stay steadily in the market place as they have their own way in providing what customers really want and deliver desired value to them. One of the main strategy applied by Dell is mass customization. Dell clearly

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defines that their company will make products only when there is an order placed so that customers can choose which component part they want it to have better performance while the less important features can be lowering its capacity to balance the price of the computer.

Most of the research available for secondary data sources are focused on investigating the industry perspective on the mass customization while customers' point of view is ignored. Besides, there is much research that discussed the mass customization strategy but only a few will study in terms of the customer's preferences towards mass customization. Therefore, this research aims to study the determinants that related to what is a concern by customers when it comes to mass customization context from a customer perspective in order to fill the research gap.

1.4 Research Questions

This research aims to study the determinants of customer satisfaction on purchasing mass customized computer in Malacca. Thus, the following research questions need to be answered in this research as below:

1. What are the determinants of customer satisfaction of purchasing mass customized computer?
2. What is the relationship between determinants and customer satisfaction of purchasing mass customized computers?
3. What is the most important determinant of customer satisfaction of purchasing mass customized computers?

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1.5 Research Objectives

This research purpose is to study determinants of customer satisfaction on purchasing mass customized computer in Malacca. Thus, the determinants that influenced satisfaction in the computer industry from a customer perspective is the main topic to be focused in this research. Therefore,the researcher state with some research objectives for this research as below:

1. To explain the determinants of customers satisfaction of purchasing mass customized computers.
2. To study the relationship between determinants and customer satisfaction of purchasing mass customized computers.
3. To analyze the most important determinant of customer satisfaction of purchasing mass customized computers.

1.6 Scope of Study

The scope of this research is to study the determinants of customer satisfaction on purchasing mass customized computer in Malacca.

The computer industry is selected as the main sector to discussed in the research as it suffered from market shrink and the mass customization might be a good way to overcome this problem. Market shrink is mainly caused by several factors such as the more customers prefer the use of smartphone and phablets that allow mobile ability. Secondly, the new model launched by most of the computer manufacturer every year does not really improve much, so customers prefer to keep their computer longer and behave wait-and-see attitude (Weinberger, 2017). Thus, it is obvious how important the customer's attitude and perspective towards

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