



**E-COMMERCE QUALITY MODEL TOWARDS
CUSTOMERS' REPURCHASING INTENTION IN COPPER
AND BRASS SMALL ENTERPRISES IN SURAKARTA**

اونيورسيتي تيكنيكل مليسيا ملاك
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

FITHRI SETYA MARWATI

DOCTOR OF PHILOSOPHY

2025



Institute of Technology Management and Entrepreneurship

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Fithri Setya Marwati

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UNIVERSITI TEKNIKAL MALAYSIA MELAKA

DECLARATION

I declare that this thesis entitled “E-Commerce Quality Model Towards Customers’ Repurchasing Intention in Copper and Brass Small Enterprises in Surakarta” is the result of my own research except as cited in the references. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.



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UNIVERSITI TEKNIKAL MALAYSIA MELAKA

APPROVAL

I hereby declare that I have read this thesis and in my opinion this thesis is sufficient in terms of scope and quality for the award of Doctor of Philosophy.



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30 June 2025



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DEDICATION

My highest gratitude goes to my husband Heri Purnawan and beloved Qonita Laras Wijayanti, Andara Herfi Maulida, Kyara Herfi Tsaqifa and my extended family as well as all partners and friends who have always been with me through all the difficulties of my studies by providing extraordinary support and encouragement.



ABSTRACT

Small and medium-sized businesses, or SMEs, are important to most economies, especially in emerging nations, including Indonesia. Driven by the digital economy, MSMEs have been steadily undergoing digital transformation. The adoption of e-commerce has witnessed rapid growth among these enterprises. Yet, several challenges impede the effective utilization of e-commerce, including weak website quality and insufficient quality attributes of products and services. This negatively influences customers' repurchasing behavior, particularly among brass and copper enterprises. This presents a practical challenge: how to improve e-commerce quality to enhance repurchasing intention a topic that remains theoretically underexplored in the literature on developed nations. Therefore, guided by the Stimulus-Organism-Response (S-O-R) framework, this study aims to examine the e-commerce quality factors, driven by website quality, e-service quality and product quality that influence customers' repurchasing intention for brass and copper products through customer satisfaction. Additionally, it explores the moderating effect of corporate image on the relationship between customer satisfaction and repurchasing intention. This research adopts a quantitative method, utilizing a questionnaire distributed to 271 e-commerce customers who purchased brass and copper products. The data was analyzed using SmartPLS, and the findings revealed that e-commerce quality factors, specifically e-service quality, website quality, and product quality positively affect customers' repurchasing intention through satisfaction. The study also found that corporate image plays a significant moderating role in the relationship between customer satisfaction and repurchasing intention. Theoretically, this research extends the S-O-R model within the context of e-commerce in a developing country, particularly Indonesia. The findings support the model's applicability by positioning customer satisfaction as a central "organism" that mediates the impact of quality stimuli—website, e-service, and product quality—on repurchase intentions. Practically, this research provides a blueprint for improving brass and copper enterprises through effective digitalization of their business activities. It offers guidance on enhancing e-commerce quality factors to meet customer satisfaction and repurchasing intentions, as well as how corporate image strengthens this relationship. Therefore, this study recommends that improving quality dimensions and cultivating a positive corporate image are crucial for boosting customer satisfaction and repurchase intentions, especially in developing markets like Indonesia.

Keywords: Brass and Copper Products, Customer Repurchase Intention, Corporate Image

**MODEL KUALITAS E-COMMERCE TERHADAP NIAT PEMBELIAN KEMBALI
PELANGGAN PADA USAHA KECIL TEMBAGA DAN KUNINGAN
DI SURAKARTA**

ABSTRAK

Perniagaan Kecil dan Sederhana (PKS) memainkan peranan penting dalam kebanyakan ekonomi, terutamanya di negara-negara membangun, termasuk Indonesia. Didorong oleh ekonomi digital, PKS telah melalui proses transformasi digital secara berterusan. Penerimaan e-dagang dalam kalangan perusahaan ini menunjukkan pertumbuhan yang pesat. Namun, beberapa cabaran menghalang penggunaan e-dagang secara berkesan, termasuk kualiti laman web yang lemah dan atribut kualiti produk serta perkhidmatan yang tidak mencukupi. Ini memberi kesan negatif terhadap tingkah laku pembelian semula pelanggan, terutamanya dalam perusahaan tembaga dan loyang. Ini mewujudkan satu cabaran praktikal: bagaimana meningkatkan kualiti e-dagang untuk meningkatkan niat pembelian semula—isu yang masih kurang diterokai secara teori dalam literatur negara maju. Oleh itu, berlandaskan kerangka Stimulus-Organism-Response (S-O-R), kajian ini bertujuan untuk meneliti faktor kualiti e-dagang yang mempengaruhi niat pembelian semula pelanggan terhadap produk tembaga dan loyang melalui kepuasan pelanggan. Selain itu, kajian ini turut meneroka kesan penyederhana imej korporat terhadap hubungan antara kepuasan pelang dan niat pembelian semula. Kajian ini menggunakan kaedah kuantitatif dengan mengedarkan soal selidik kepada 271 pelanggan e-dagang yang pernah membeli produk tembaga dan loyang. Data dianalisis menggunakan SmartPLS, dan hasil kajian menunjukkan bahawa faktor kualiti e-dagang—terutamanya kualiti e-perkhidmatan, kualiti laman web, dan kualiti produk—memberi kesan positif terhadap niat pembelian semula pelanggan melalui kepuasan. Kajian juga mendapati bahawa imej korporat memainkan peranan penyederhana yang signifikan dalam hubungan antara kepuasan pelanggan dan niat pembelian semula. Secara teori, kajian ini memperluas model S-O-R dalam konteks e-dagang di negara membangun, khususnya Indonesia. Hasil kajian menyokong keberkesanan model ini dengan meletakkan kepuasan pelanggan sebagai "organism" utama yang menjadi pengantara antara rangsangan kualiti (laman web, e-perkhidmatan, dan kualiti produk) dengan niat pembelian semula. Secara praktikal, kajian ini menyediakan panduan untuk meningkatkan perusahaan tembaga dan loyang melalui digitalisasi perniagaan yang berkesan. Ia memberikan cadangan tentang cara meningkatkan faktor kualiti e-dagang bagi memenuhi kepuasan pelanggan dan niat pembelian semula, serta bagaimana imej korporat mengukuhkan hubungan ini. Oleh itu, kajian ini mengesyorkan bahawa meningkatkan dimensi kualiti dan membina imej korporat yang positif adalah penting untuk meningkatkan kepuasan pelanggan dan niat pembelian semula, terutamanya di pasaran membangun seperti Indonesia.

Kata Kunci: Produk Kuningan dan Tembaga, Minat Beli Ulang Pelanggan, Citra Perusahaan

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LIST OF ABBREVIATIONS

Covid-19	-	Coronavirus Disease-19
EHC	-	Entrepreneurial Human Capital
ICT	-	Information and Communication Technology
IDR	-	Indonesia Rupiah
IoT	-	Internet of Things
PBC	-	Perceived Behavioural Control
SEM-PLS	-	Structural Equation Modelling-Partial Least Squares
SMEs	-	Small Medium Enterprises
TPB	-	Theory of Planned Behaviour
USD	-	United States of American Dollar

LIST OF SYMBOLS

- f^2 - Effect Size
 R^2 - Coefficient of determination



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LIST OF PUBLICATIONS

The followings are the list of publications related to the work on this thesis:

Sameer Al-Shami, Fithri Setya Marwati, 2024, E-Commerce Quality Factors, Satisfaction Drivers, and Repurchase Intentions: The Moderating Effect of Corporate Image of Brass and Copper Business, *Journal of Business and Industrial Marketing*.



CHAPTER 1

INTRODUCTION

1.1 Background

Small and medium-sized businesses, or SMEs, are important to most economies, but especially to emerging nations. SMEs make up the bulk of companies globally and play a significant role in both employment creation and the expansion of the international economy. They account for almost 50% of jobs and 90% of enterprises globally (Taiwo, Falohun and Agwu, 2016). In emerging economies, formal SMEs can account for as much as 40% of GDP. When informal SMEs are taken into account, these figures rise dramatically. By 2030, 600 million jobs would be required to accommodate the expanding global workforce, according to estimates from World Bank org. As a result, several governments worldwide have made SME growth a top priority. SMEs account for seven out of ten formal jobs created in emerging markets (www.worldbank.org).

— Small businesses are significant sectors because they play a crucial role for economic decision-makers in both developed and developing countries, and they are the foundations of economic development (Street and Cameron 2007), (Chege and Wang, 2020). This is due to the positive economic impact on the national economy (Kiyabo and Isaga, 2020). The incapacity of huge industrial projects to accomplish economic development on their own, their inability to create appropriate work prospects for the unemployed, and their reliance on large investments were all grounds to promote the growth of small businesses. Furthermore, the small business sector is preferable due to its low capital requirements, which help to address the problem of unemployment experienced by the majority of underdeveloped countries, particularly among young people, as well as its ability to adapt to changes in demand for goods when compared to large industrial projects. It has the potential to develop production and administrative art, as well as its requirement for modest infrastructural features that are consistent with the character and conditions of emerging country economies.

In the OECD area, SMEs are the most common type of business, accounting for nearly 99% of all enterprises. They are the primary source of employment, accounting for over 70% of jobs on average, and are significant contributors to value creation, providing between 50% and 60% of value added on average (Figure 1) (Gurria, 2018). SMEs account for up to 33% of GDP and 45% of all jobs in emerging economies. Regardless of income levels, SMEs account for over 50% of employment and GDP in the majority of countries when the contribution of informal companies is taken into consideration (Gurria, 2018). Furthermore, the growth of SMEs can support resilience and economic diversity. This is particularly important for resource-rich nations that are more susceptible to changes in the price of commodities. Figure 1. SMEs are the main source of jobs in the business sector.

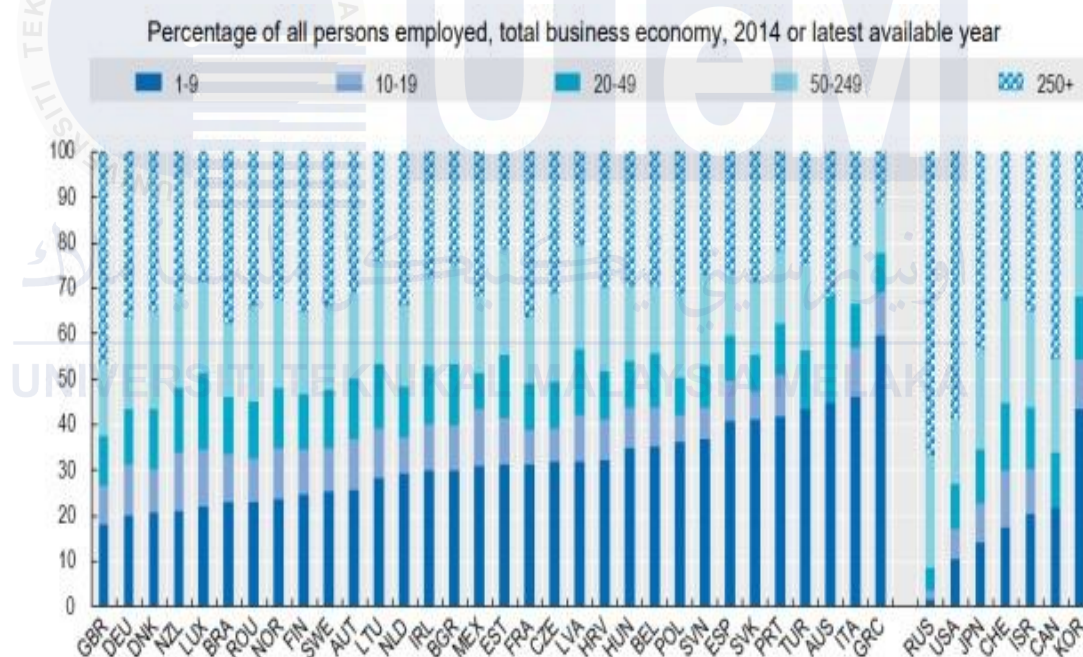


Figure 1.1 SMEs And Job Creation

Source: (Gurria, 2018)

Notes: For Canada, Switzerland, Israel, Japan, Korea, the United States and the Russian Federation, data do not include nonemployers. Data for Korea and Mexico are based on establishments. Data for the United Kingdom exclude an estimate of 2.6 million small unregistered businesses. For Australia, Canada and Turkey the size class 1-9 refers to 1-19. Source: OECD (2017), Entrepreneurship at a Glance 2017, OECD Publishing, Paris, forthcoming.

1.2 Micro and Small Enterprises in Indonesia

Micro, small, and medium-sized businesses, or MSMEs, are the largest business sector in the Indonesian economy. Due to their shown resilience to many forms of economic crisis shocks, MSMEs are an important group. In compliance with Law Number 20 of 2008, which governs Micro, Small, and Medium Enterprises (MSMEs), the government classifies several business types according to asset and turnover parameters. Micro enterprises are profitable businesses that are held by individuals or individual legal entities and have a net worth of no more than IDR 50 million, excluding real estate and buildings utilized for commercial purposes. Its annual turnover cap is also 300 million IDR.

A small business is a successful venture that can be independently operated by individuals or corporate entities. The business is not a subsidiary or division of a company that owns, controls, or merges with a large or medium-sized business directly or indirectly. A small firm is defined as having a net worth of between IDR 50 million and IDR 500 million, excluding real estate and commercial structures. Furthermore, it generates between IDR 300 million and IDR 2.5 billion in revenue annually. A "medium business" is a profitable economic venture that operates independently and does not include a particular division or subsidiary of a corporation. IDR 500 million is the least required for total net worth, and IDR 10 billion is the highest. Furthermore, yearly sales exceeding Rp 2.5 billion, up to Rp 50 billion. Based on the rules of the UMKM Law, the government assumes that the average annual sales of a company sector are five times its net value.

The engagement of MSMEs is one of the factors that influence Indonesia's economic growth, which can either increase or decrease. According to Section 4 of Article 33 of the 1945 Constitution, the MSME sector of the national economy has a unique perspective and substantial potential to improve human welfare. MSMEs contribute significantly to the nation's economic growth. According to data from the Ministry of Cooperatives and SMEs, there are currently 64.19 million MSMEs, which contribute 61.97% of GDP, or IDR

8,573.89 trillion, to the total economy. MSMEs contribute to the Indonesian economy in two ways: they can absorb 97% of the existing labor force and aggregate up to 60.4% of total investment. The multiple challenges and conditions of the Covid-19 pandemic, which have produced changes in consumption patterns of products and services, creating an impetus to accelerate digital transformation, are intrinsically tied to Indonesia's high number of MSMEs (Irawan, 2020). Restaurants, computer software stores, small machine shops, and village craft craftsmen are all examples of small enterprises that compete in highly competitive marketplaces and demanding social settings. The owners may or may not require assistance; some are brisk, inventive, and growth-oriented, while others are classic lifestyle enterprises content to stay small (Maksum, Sri Rahayu and Kusumawardhani, 2020).

According to data from the Ministry of Cooperatives and Small and Medium Enterprises (2015), just 10% of Indonesian companies are huge corporations, whereas 90% of them are MSMEs (Setiawan et al., 2019). Even though they are not big businesses, MSMEs have been a significant contributor to Indonesia's economic growth (Siregar, Gunawan and Saputro, 2021). According to (Coordinating Ministry for Economic Affairs, 2023), the MSME sector has an enormous contribution to the Indonesian economy which has more than 64.2 million business units, contributes 61.9% to the Gross Domestic Product (GDP), and absorbs 97% of the workforce. However, MSMEs in Indonesia face various challenges, such as access to finance, marketing, competitiveness, and productivity (Coordinating Ministry for Economic Affairs, 2023). Furthermore, MSMEs are less vulnerable to the global economic slump since they create necessities rather than luxury items, produce and market their products locally, are more adaptive in general, and are less burdened by heavy administrative costs (Nurcahyanto, Simsek and Urmee, 2020). One of the effective SMEs sectors is Brass and Copper.

1.3 Brass and Copper SMEs

Indonesia's metal sector continues to be supported by iron, aluminum, copper, nickel, and tin. According to data from the Ministry of Industry, Indonesia is currently ranked fourth