


# SMEs Development Strategy Model Based on Creative Economy With Quadruple Helix Approach


Naili Farida, Diponegoro University, Indonesia

 <https://orcid.org/0000-0001-8532-4984>

Hari Susanta Nugraha, Diponegoro University, Indonesia

Agus Naryoso, Diponegoro University, Indonesia

Elia Ardyan, Universitas Ciputra Surabaya, Indonesia

 <https://orcid.org/0000-0002-6705-8958>

## ABSTRACT

The purpose of this study is to examine the effect of competitor-sensing capability and customer-sensing capability on the success of product innovation and SME performance. The sample of this study was 294 Islamic fashion business in Central Java. This study uses structural equation modeling. AMOS version 20 is used to process data. The results of this study indicate that there are different results between competitor and customer-sensing capability. Competitive sensing capability is a driving factor in creating success innovation products compared to customer sensing capabilities. This study also found that competitor and customer sensing capabilities were unable to improve marketing performance. Marketing performance can enhance if entrepreneurial orientation and product innovation success are also improved. This study contributes to practice.

## KEYWORDS

Competitor-Sensing Capability, Customer-Sensing Capability, Entrepreneurial Orientation and Marketing Performance, Product Innovation Success

## 1. INTRODUCTION

At the end of 2015, a free market was applied in countries belonging to the Association of South East Asia Nations (ASEAN). Countries included in it include Indonesia, Singapore, Malaysia, the Philippines, Thailand, Vietnam, Brunei, Myanmar, Cambodia, and Laos. The free market will benefit countries in it because the market share will be broader and more profitable. The development of creative industries in ASEAN countries has the opportunity to expand abroad, one of which is the Islamic fashion industry. Based on data from the largest Islamic fashion exporter in 2014 the first rank was Bangladesh, amounting to USD 22 billion, second place was Turkey for USD14 billion and third place was Indonesia for USD 11.78 billion. Indonesia has a great opportunity to develop the Muslim fashion industry. Increasing the expansion of Indonesia Islamic fashion abroad, the Islamic

DOI: 10.4018/IJSESD.2021010104

fashion industry must change the way offline marketing goes online. Another way is to increase the exhibition and fashion show in member countries of the ASEAN Economic Community.

Product competitiveness and innovation are vital in the Islamic fashion industry. Product competitiveness and innovation are important factors to improve SME performance (Ardayan, 2016; Ardayan et al., 2016; Ardayan & Sugiyarti, 2018; Sugiyarti & Ardayan, 2017). Product competitiveness can mean that SME products are better quality than their competitors (Luo, 2010). Product competitiveness is obtained because of superior quality (Ardayan & Sugiyarti, 2018) and the ability of SMEs to innovate (Liu & Jiang, 2016). Factors driving product innovation include knowledge sharing (Bao et al., 2012; Jenny, 2005; Wang & Wang, 2012), relationship and networking (Ardayan et al., 2016; Farida et al., 2017), and co-creation (Hidayanti et al., 2018).

The ability of SMEs to sense the environment is very important for SMEs. Market sensing capability can be interpreted as the company's ability to learn (Day, 2002), understand, and use information (Kok et al., 2003) about markets with the aim of anticipating changes in the market (Foley & Fahy, 2004). The ability to sense customers will have an impact on increasing innovation (Ardayan, 2016; Calantone et al., 2002; Sugiyarti & Ardayan, 2017; Zhang & Wu, 2013), speed to market (Ardayan, 2016), quality of market entry (Sugiyarti & Ardayan, 2017), and business performance (Lindblom et al., 2008). Adequate information will be able to influence the company's response (Daugherty et al., 1995). Companies that are able to respond will have an impact on their export performance (Darmawulan et al., 2018).

Day (2002) dan Olavarrieta and Friedmann (2008) explain that market sensing capability is a learning process for customers, competitors, and other parties. In this study, we divide market sensing capabilities into two types, namely competitor-sensing capability and customer-sensing capability. The use of competitor and customer-sensing capability is very rare in previous literature. This research contributes to the knowledge of how competitor and customer sensing capabilities have an impact on product innovation success and SME performance. The purpose of this study is to examine the effect of competitor-sensing capability and customer-sensing capability on the success of product innovation and SME performance.

## **2. LITERATURE REVIEW**

### **2.1. Quadruple Helix**

In the early 1990s, the Triple Helix concept was one of the basic concepts of innovation developed by Henry Etzkowitz and Loet Leydesdorff. The triple helix concept which explains the need for a relationship between the University, Industry and the Government in the development of innovation (Hoffman & Novak, 1996). In its development the concept of triple helix developed into a quadruple helix. The quadruple helix concept was developed by Elias G. Carayannis and David F.J. Campbell in 2009 (See-To & Ho, 2014). The Quadruple helix concept includes civil society or the public into University, government and industry relations. The public referred to in the concept of quadruple helix is the physical environment and social environment (Mauri & Minazzi, 2013). The helix quadruple approach in the context of innovation is important to explore (Galvao et al., 2017). The Quadruple Helix is a model of innovation and collaboration with a civil society perspective. Quadruple helix is very important for needs such as health services or other services.

### **2.2. Market Sensing Capability**

The concept of market sensing initially stated by Day (1994). Market sensing is one of dynamic capabilities that should be owned by the company. Market sensing capabilities are able to observe the various trends and changes taking place in the market. Teece (2007) explains that this capability is part of the dynamic capabilities that are needed in an environment that tends to change to change and uncertain. Organizations systematically and proactively learn about any changes that affect customers,

12 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/article/smes-development-strategy-model-based-on-creative-economy-with-quadruple-helix-approach/266248](http://www.igi-global.com/article/smes-development-strategy-model-based-on-creative-economy-with-quadruple-helix-approach/266248)

## Related Content

---

### A Simple Model of Financial Epidemiology

Donald D. Hackney, Daniel L. Friesner and Matthew Q. McPherson (2014). *International Journal of Social Ecology and Sustainable Development* (pp. 47-57). [www.irma-international.org/article/a-simple-model-of-financial-epidemiology/112114](http://www.irma-international.org/article/a-simple-model-of-financial-epidemiology/112114)

### Foreign Direct Investment Operations of International Businesses and Their Impact in Turkey

Omer Yurtseven, Dilek Temiz Dinç and Aytaç Gökmen (2020). *International Journal of Sustainable Economies Management* (pp. 1-11). [www.irma-international.org/article/foreign-direct-investment-operations-of-international-businesses-and-their-impact-in-turkey/256223](http://www.irma-international.org/article/foreign-direct-investment-operations-of-international-businesses-and-their-impact-in-turkey/256223)

### Russia-China Collaboration in the Arctic: Opportunities and Challenges

Nikolay Kotlyarov (2019). *Handbook of Research on International Collaboration, Economic Development, and Sustainability in the Arctic* (pp. 207-219). [www.irma-international.org/chapter/russia-china-collaboration-in-the-arctic/218613](http://www.irma-international.org/chapter/russia-china-collaboration-in-the-arctic/218613)

### Assessing the Maturity of Green IT Adoption Within the Philippine Manufacturing Industry

Alexander A. Hernandez (2019). *Green Business: Concepts, Methodologies, Tools, and Applications* (pp. 1285-1305). [www.irma-international.org/chapter/assessing-the-maturity-of-green-it-adoption-within-the-philippine-manufacturing-industry/221104](http://www.irma-international.org/chapter/assessing-the-maturity-of-green-it-adoption-within-the-philippine-manufacturing-industry/221104)

### Habits and Behaviours in the Use of Domestic Lighting

Tom Page (2019). *International Journal of Sustainable Economies Management* (pp. 68-85). [www.irma-international.org/article/habits-and-behaviours-in-the-use-of-domestic-lighting/223208](http://www.irma-international.org/article/habits-and-behaviours-in-the-use-of-domestic-lighting/223208)