doi:10.1088/1755-1315/235/1/012065

Mediation effect of acculturative aesthetic attractiveness on the relation of product innovation to increase SMEs marketing performance

M Pono, A R Munir, J Maming, and N Kadir

Department of Management, Faculty of Economics and Business, Hasanuddin University, Makassar, Indonesia.

E-mail: maatpono@yahoo.com

Abstract. One of the weaknesses of SMEs in many previous studies is Marketing Performance. This study aims to fill the research gap between product innovation capabilities and enrich marketing performance. This study offers the concept of Acculturative Aesthetic Attractiveness to bridge the gap between Product Innovation Capabilities in improving Marketing Performance. The data is taken from the SMEs population in the South Sulawesi Province as much as 115. The analysis is carried out descriptively and inferentially using Structural Equation Modelling to test the research model consisting of 3 (three) proposed hypotheses. The results of the study show that product innovation capability has a direct effect on marketing performance, Acculturative Aesthetic Attractiveness has a direct impact on Marketing Performance through Acculturative Aesthetic Attractiveness. Aesthetic Attractiveness is a mediator in the relation of product innovation capability with marketing performance.

1. Introduction

Small Medium Enterprises (SMEs) is one of the most numerous types of businesses found in Indonesia. Many new entrepreneurs start businesses starting from the type of SMEs business. Beside SMEs does not require establishment permits, which sometimes complicated, limited resources, which available, such as capital, labor, technology, and others, making SMEs is one way for individuals who want to, become entrepreneurs. The growth of SMEs continues to increase from year to year which contributes to reducing unemployment and poverty in Indonesia. Indonesian Government estimates that the number of SMEs in 2013 reached 57,895,721 units, 98.7 percent were micro-enterprises and in 2017 will be more than 59,000,000 units [1].

SMEs have an important and strategic role in national economic development. In addition to playing a role in economic growth and employment, SMEs also play a role in distributing development results. So far, SMEs have contributed to the Gross Domestic Product of 57-60%, and the labor absorption rate is around 97% of the entire national workforce [2]. In South Sulawesi, the growth of SMEs shows some increasing developments. This was demonstrated in the period 2006 to 2016. Based on data released by the BPS South Sulawesi shows that from 2006 to 2016, the SMEs sector in South Sulawesi grew 19.75%. Where, in 2006 the total MSMEs only reached 751,362 businesses, while 2016 rose to 936,294 businesses or if calculated each year UMKM increased by

doi:10.1088/1755-1315/235/1/012065

IOP Conf. Series: Earth and Environmental Science 235 (2019) 012065

20,000 units. Most of these business units are still classified as micro and small businesses. This is due to conditions of capital constraints, limited quality of human resources and access to marketing owned by small businesses.

From total SMEs in South Sulawesi, the number of SMEs for the trade sector reached 408,677 business units; the service sector reached 214,567 business units, the production sector 108,134 units and the industry as many as 16,745 business units. The rest manage other productive sectors. SMEs play a very important role in the economy [3]. Also, SMEs also play a very important role in stabilizing society and also a significant source of growth and employment in the country [4,5].

The most prominent problems of SMEs in addition to classical problems such as the quality of human resources, weak organization, and management, lack of financial control, failure in developing strategic planning, poor inventory control and inability to make business transitions funding, technology, and weak network marketing is a marketing problem [6].

Marketing is a significant problem for SMEs. The change from protection to liberalization can result in many SMEs experiencing a decline in market share due to increasing competition such as the number of products with more competitive prices and quality, the presence of substitute products, and the presence of newcomers. Garment products from China, Thailand, Malaysia, and Vietnam have cheaper prices, good and innovative models and designs.

Marketing competence is important for marketing performance, based on resources based theory states that marketing competencies will have a direct influence on company performance (marketing performance) [7,8]. Several empirical studies explained that there is a relationship between marketing activities on company performance, besides that resources affect marketing competencies and innovation, and are closely related to company performance [9].

The company must also try to use its resources to be able to innovate. Product innovation is one of the most important competitive factors to achieve success, which lately the business environment has always changed rapidly that innovation is a successful application of creative ideas in the company [10]. Innovation is a company mechanism to adapt to a dynamic environment, so companies are required to be able to create new assessments, new ideas, offer innovative products and improve service performance that satisfies customers.

Meanwhile, Performance is all systems related to activities and outcomes (outcomes) obtained. Marketing performance is defined as an effort to measure the level of performance including sales volume, number of customers, profits and sales growth [11]. Every company has an interest in knowing its achievement as a mirror of its business success in market competition, with the company's marketing performance can find out where the company's success position is measured from each predetermined period [10].

From the various literature that shows the effect of innovation on performance such as the study conducted [12,13]. These studies state that innovation has a positive influence on marketing performance. Studies show that the renewal of innovation is a source of marketing success [14]. Although product excellence is considered important for marketing performance, studies conducted conclude that product excellence does not have a significant influence on marketing performance [15]. Various studies of innovation provide a gap in the inability of product line innovation in influencing company performance such as the findings which states that innovation has no significant influence on company performance [16]. In a study conducted the effect of failed innovations such as damage to brand reputation for products that have high brand equity [17]. Other research conducted indicates a lack of evidence that innovation in one period has a positive influence on company performance in the next period [18]. Different results of various studies on the effect of innovation on performance offer a research gap on the inability of product innovation to enrich product excellence and marketing performance. For that further research is still needed.

To bridge the research gap above, this research aims to develop a conceptual model which is a strategic bridge between innovation and corporate marketing performance, especially SMEs. To build the model, the researcher proposes a concept of Acculturative Aesthetic Attractiveness as a strategic bridge for product innovation to improve marketing performance.



IOP Conf. Series: Earth and Environmental Science 235 (2019) 012065

doi:10.1088/1755-1315/235/1/012065

2. Literature Review

2.1. Acculturative Aesthetic Attractiveness

The study of products and their attributes to attract consumers is one of the main studies in product strategy. The classic view in marketing strategy so far explains the importance of product design as the main driver of product success to enter the market still appears in the current marketing literature [19, 20]. A good design for a product is not only important for the appearance of the product but also for attracting potential consumers to see and try the product. The product design process starts by understanding consumer needs and sometimes involving consumers in the design process. The findings state that core products are a basis for creating marketing performance, the product design process is seen as an effort to offer something more attractive to the market to enrich certain interests [21,22].

Handicraft products that are based on local culture are believed to have advantages over imported products from abroad. First, the product evokes a personal bond because it represents the identity of the wearer's cultural roots. This is felt in fashion products such as traditional Sumatra Songket, Bugis Silk, Jogja batik or other fabrics. Secondly, become the souvenirs domestic and national for travelers as a marker for visiting the area where the craft originated. Thirdly, local cultural handicraft products also become a means of inter-regional solidarity and generate pride in the diversity of the nation the product design process, the company tries to create something interesting for its products, which produces various attributes that reflect certain cultures and locations that have the potential to attract consumers to see and buy the product [23].

In countries with geographic and cultural diversity such as Indonesia, a product can be built with ethnic attributes derived from the interaction between location and culture where it is located. By integrating multi-ethnicity and culture, a company can sort and choose various elements of foreign culture and domestic culture and combine these attributes to be embedded in their products, produce a product with some attractiveness attributes conceptualized in this study as Acculturative Aesthetic attractiveness [24].

2.2. Product Innovation

The most innovative companies are involved in a continuous search for better products, services, and ways of doing things. They try to continue to improve their internal capabilities and other resources. The more innovative the companies of a country, the stronger the competitive advantage of the country. More productive companies are more efficient in using their resources [25].

The innovation is defined as opening the door both globally and internationally competitive advantage through providing markets with new or unique products/services; creating entry barriers that provide the resources needed to develop innovation through learning; and creating new values that shape competitive environmental rules.

Innovation is goods, services or ideas that some people perceive as new, no matter how long their history is [26]. Meanwhile the Organizational innovation as an overall innovative ability of an organization to introduce new products to the market, or open new markets, through combining strategic orientation with innovative behavior and processes.

Base on Oslo Manual, innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations [27].

From some of the definitions above, innovation is creating something that is new or enhancing from existing (performance or perception of greater value) both for goods and services as a strategic choice of the organization to improve the organization and make it more competitive. Innovation can exist in various forms, such as product or process innovation, radical or incremental innovation, administrative or technological innovation, etc. [28, 29].



GIESED 2018 IOP Publishing

IOP Conf. Series: Earth and Environmental Science 235 (2019) 012065

doi:10.1088/1755-1315/235/1/012065

2.3. Marketing Performance

Marketing performance is a variable that can be used to measure the marketing performance of a business. This is in accordance with the study which states that marketing performance is a concept to measure the market performance of a product. The others study also states that marketing performance is an important element of company performance in general because the performance of a company can be seen from its marketing performance [30].

The study defines market performance as an effort to measure the level of performance which includes the number of sales, number of customers, profits and sales growth. In the research measuring marketing performance through four indicators, namely customer satisfaction, delivery of value, the effectiveness of marketing programs, and the success of new products [31].

Based on a literature review and previous research, the model of our empirical research in this study can be described as follows:



Figure 1. The empirical research model built in this study

Based on the literature review and picture above, there are four hypotheses formulated in this study as follows:

- 1. The higher Product Innovation, the higher Acculturative Aesthetic Attractiveness.
- 2. The higher Product Innovation, the higher Marketing Performance.
- 3. The higher Acculturative Aesthetic Attractiveness, the higher Marketing Performance.

3. Research Method

This research is survey research with a quantitative approach. The population in this study is small and medium enterprises engaged in the craft and creative industries. Data were collected from sample data from 115 small and medium enterprises in South Sulawesi Province to test models and hypotheses. Sample selection is based on the proportional sampling technique. The respondents in this study were business owners or managers.

In this study three variables are used as follows; product innovation, Acculturative Aesthetic attractiveness, and marketing performance. A closed questionnaire is used to ask the perception of each respondent. Variables and indicators are measured using a 1 to 5 Likert Scale, where scale 1 indicates strongly disagree and scale 5 indicates strongly agree. To operationalize the variables in the model, meaning and indicators are shown in the following table:

Tube 1. Variables and indicators							
Variable	Core Meaning	Indicators					
Product Innovation	Ability to innovate products	 Ability to make various types of products Special design capabilities Ability to make different brands 					
Acculturative Aesthetic Attractiveness	The attractiveness of product aesthetic as a combination with local and global culture	 Aesthetic motif attractiveness Aesthetic style attractiveness Aesthetic form attractiveness 					
Marketing Performance	The level of marketing achievement in the market	 Sales Volume. Sales Value Sales Growth in new Market 					

Table 1. Variables and Indicators

IOP Conf. Series: Earth and Environmental Science 235 (2019) 012065

doi:10.1088/1755-1315/235/1/012065

In this study, reliability is measured by using Construct Reliability (CR) and Variance Extracted (VE) on each latent variable. Usually, the minimum value of Construct reliability is 0.70. While the minimum value of VE is 0.50 [32]. In this study, all variables are considered reliable because each value has passed the required value.

While validity testing uses confirmatory factor analysis (CFA) which will produce the value of the loading factor for each indicator on the latent variable. Value of loading factor which greater than 0.50 is used as a cut-off value of construct indicator validity. Table 2 shows all the indicator values are calculated at more than 0.50. Therefore, all of the indicators in this study are confirmed as valid.

Variable	Indicators	Standardized Loading Factors	Standard Errors	Reliability	
				CR	VE
Product Innovation	X11	0.940	0.77	0.79	0.55
	X12	0.845	0.68		
	X13	0.789	0.77		
Acculturative Aesthetic Attractiveness	X21	0.953	0.66	0.75	0.53
	X22	0.947	0.60		
	X23	0.924	0.66		
Marketing Performance	X31	0.864	0.79	0.84	0.63
	X32	0.909	0.81		
	X33	0.890	0.79		

Table 2. Validity and Reliability

Data were then analyzed using AMOS 23 statistic software for a full structural equation model.

4. Results

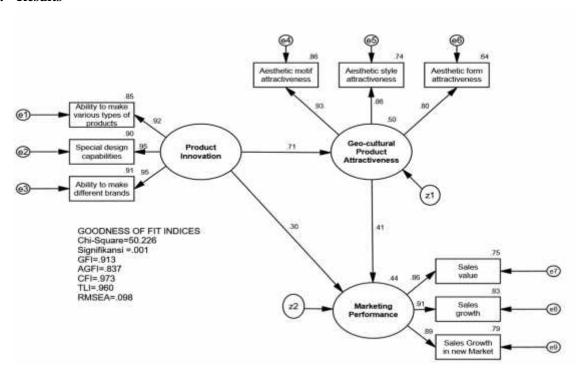


Figure 2. Model Testing



GIESED 2018 IOP Publishing

IOP Conf. Series: Earth and Environmental Science 235 (2019) 012065

doi:10.1088/1755-1315/235/1/012065

From structural model in the figure 2 above, our structural model analysis demonstrated good model acceptance level as concluded from several indices such as ²= 50.23; Significance Probability = 0,001; GFI= 0.913; AGFI= 0,837; CFI =0,973; TLI = 0,960; RMSEA = 0,064, therefore our model fit with the expected population. The structural coefficient for regression analysis is presented in the following table 3.

Hypothesis Standardized P **Estimates Product Innovation** 0.71 0.000 Acculturative Aesthetic Attractiveness Acculturative Aesthetic Marketing Performance 0.410.000 Attractiveness 0.30 **Product Innovation** Marketing Performance 0.012

Table 3. Results of Hypothesis Testing

As presented in table 3, all hypotheses were tested; the significance probability is lower than 5% for every relationship between hypothesized variables, we can conclude that data of our sample support all hypotheses.

5. Conclusions

As stated at the beginning of this study that the objective of the study is to fulfill a research gap on the inability of innovation in enhancing marketing performance. A model relation of Product Innovation, Acculturative Aesthetic Attractiveness, and Marketing Performance are built and tested empirically using a structural equation model. The acceptance of our hypothesized model and relationships demonstrates several ways to enhance marketing performance. Three key findings are described as follows: (1) a company with high Product Innovation will increase the attractiveness of Acculturative Aesthetic product leading to marketing performance. This type of Innovation such as the ability to make various types of products and to make different brands also capabilities to make special design is expected to be a driver for increasing the attractiveness of geo-cultural product attributes as leverage for enhancing marketing performance, (2) a company with high Product Innovation expected to strengthen the attractiveness of Acculturative Aesthetic product as a driver for enhancing marketing performance, (3) thus Acculturative Aesthetic attractiveness indeed plays a role as a mediator in the relation between product Innovation, and marketing performance.

Theoretically, the findings of this study contribute to solving problems of the inconsistent relation of Product Innovation and marketing performance. The new concept of Acculturative Aesthetic attractiveness which is offered as mediation in connection with product Innovation and marketing performance has been tested and plays an important role in bridging the correlations between the two variables. Then, further research needs to add some variables, the coverage area of research, and types of industries to gain research findings widely.

References

- [1] Ali E, Koçoglu I, Keskin H, Ince, HüseyinI and SalihZ2010European Conf. on Innovation and Entrepreneurship vol 42(England: Academic Conferences International Limited)
- [2] Dorman L I 1975 Variations of Galactic Cosmic Rays (Moscow: Moscow State University Press) p 103
- [3] Bank Indonesia 2015 SMEs Business Profile (Jakarta: Bank Indonesia)
- [4] Tambunan T 2008 Development of SMEs in ASEAN with reference to Indonesia and Thailand *J. Econ.* **20**53–83



- [5] Levy B, Albert B and Jeffrey N 1999 Fulfilling the Export Potential of Small and Medium Firms (Boston: Kluwer Academic Publishers)
- Ikhsan M 2004 Returning Economic Growth Rate in Middle term: The Role of SMEs J. Anal. [6] Soc. 9 1-31
- Zimmerer, Thomas W, Scarborough and NormanM2004Essential of Entrepreneurship and [7] Small Business Management (Jakarta: PT Gramedia)
- Day G S 1994 The capabilities of market-driven organization J. Mark 5837-52 [8]
- Moorman C and Slotegraaf R J 1999 The contingency value of complementary capabilities in [9] product development J. Mark. Res. 36 239-257
- [10] ChauvinKWand Hirschey M1993Advertising, R&D expenditures and the market value of the firm Financ. Manag. 22 128-140
- [11] Mudiantono and Khamidah N 2005 Analysis of the influence of environmental factors on product innovation and marketing strategy creativity in improving marketing performance (Study in ceramic craft companies in Sentra Kasongan, Bantul regency, Yogyakarta) J. Bisnis dan Ekon. 1215
- [12] Voss GB and Voss, Z G 2000 Strategic orientation and firm performance in an artistic environment *J. Mark.* **64** 67-83
- [13] Molina C, Francisco J, Jimenez J, Daniel, Munuera A and JoseL2011Product competence exploitation and exploration strategies: The impact on new product performance through quality and innovativenessInd. Mark. Manag. 40 1172-82
- [14] Rhee J, Park T and Lee DH 2010 Drivers of innovativeness and performance for innovative smes in South Korea: Mediation of learning orientation Technovation 30 65-75
- [15] Cheng CF, Chang M L and LiC S 2013Configural paths to successful product innovation J. Bus. Res. 66 2561-73
- [16] García-Villaverde PM, Ruiz-Ortega M J and Ignacio C J 2013 Entrepreneurial orientation and the threat of imitation: The influence of upstream and downstream capabilities Eur. Manag. *J.* **31** 263-277
- [17] Cillo P, De Luca L M and TroiloG2010Market information approaches, product innovativeness, and firm performance: An empirical study in the fashion industry Res. Policy391242-1252
- [18] Liao S and Cheng C C J 2014Brand equity and the exacerbating factors of product innovation failure evaluations: A communication effect perspective J. Bus. Res. 67 2919-2925
- [19] Santos D F L, Basso LF C, KimuraH and Kayo E K2014Innovation efforts and performances of Brazilian firms J. Bus. Res. 67527-535
- [20] Bloch PH 1995 Seeking the ideal form: Product design and consumer response J. Mark. 1629
- [21] Liu W and Atuahene-Gima K 2018 Enhancing product innovation performance in a dysfunctional competitive environment: The roles of competitive strategies and marketbased assetsInd. Mark. Manag.737-20
- [22] Shri, Suresh T S and Srivastava R K 2013The impact of core product and core application on product launch and its success in an industrial market J. Educ. Res. Rev. 216 21
- [23] Hisarciklilar O and Boujut J F 2009 A speech act theory-based information model to support design communication through annotations Comput. Ind. 60510-519
- [24] Ministry of Cooperation and SME of Republic of Indonesia 2014 Development of Small, Medium Enterprises Data (Jakarta : Depkop)
- [25] Celenk O and Van de Vijver F 2011 Assessment of acculturation: Issues and overview of measures Online Readings Psychol. Cult.8 1-22
- [26] Wang, Catherine L an Ahmed P K 2004 The Development and validation of the organizational innovativeness construct using confirmatory factor analysis European J. Innov. Manag. **7**303-313
- [27] Kotler P, Keller and Kavin L 2012 *Marketing Management*(Essex: Pearson Education Limited)
- [28] European Commission 2015 Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data3rd Edition(Oslo: OECD Publishing)



doi:10.1088/1755-1315/235/1/012065

- [29] Zaltman G, Duncan R and Holbeck J 1973 Innovation and Organizations (New York: John Wiley)
- [30] Utterback J 1994 Mastering the Dynamics of Innovation: How Companies Can Seize Opportunities in the Face of Technological Change (Illinois: University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership)
- [31] Permadi M 1998 Development of market performance J. Ekon. dan Bisnis Indones. 13 32
- [32] Halim, H D, Solimun and Djumahir 2012 Marketing capability as mediating effect of marketing orientation, learning orientation and entrepreneurial orientation on marketing performance (study on medium business in South East Sulawesi) *J. Apl. Manaj.* **10** 33
- [33] Munir A R and Bata G 2017 Extending the technology acceptance model to predict the acceptance of customer toward mobile banking service in Sulawesi Selatan*Int. J. Econ. Res.* 14365-375
- [34] ASEAN 2013 ASEAN Community Progress Monitoring System Full Report 2012: Measuring Progress towards The ASEAN Economic Community and the ASEAN Socio-Cultural Community (Jakarta: ASEAN Secretariat)
- [35] Cravens D W 2009 Strategic Marketing (New York: Tata McGraw-Hill Education)
- [36] Hartini S 2008 The Effect of Market Orientation toward Firm's Innovation, Product Quality, Competitive Advantage and Firm's Performance of Small Medium Enterprise in East Java *Int. Bus. Res.***2** 15
- [37] Hooley GN, Piercy and Briggite N 2012 Marketing strategy and competitive positioning (England: FT Prentice Hall)
- [38] Leonard L B 2001 Improve service by acting smallManag. Serv. Qual. An Int. J. 11 75-79
- [39] Malhotra K N 2009Marketing Research An Applied Orientation6th Edition (New Jersey: Prentice Hall International Inc)
- [40] Matsuno K J T, Mentzer and Ozsomer A 2002 The effect of proclivity and market orientation on business performance *J. Mark* **66**18-32
- [41] Shan P, Song M and Ju X 2016 Entrepreneurial orientation and performance: Is innovation speed a missing link? *J. Bus. Res.***69**683-690
- [42] <u>Torun H</u> and Cicekci C 2007 *Innovation: Is the Engine for the Economic Growth* (Izmir: Ege University)



Reproduced with permission of copyright owner. Further reproduction prohibited without permission.

