Research article

Strategic orientation's dilemma of batik retailers in Jakarta

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ABSTRACT

Ambidexterity orientation that can simultaneously combine and align existing and new competitive advantage sources for small and medium enterprises can be used to determine and implement their market orientation and entrepreneurial orientation. This study explores strategic orientations that are reflected both in market orientation and entrepreneurial orientation to examine the ambidexterity of batik retailers in Jakarta, Indonesia. Research variables consist of environmental dynamics, market orientation, entrepreneurial mindset, entrepreneurial orientation, and business performance. Data analysis was performed using Structural Equation Modeling with Lisrel 10.20 and Smart PLS 3 software. Data analysis in this study was performed on survey results of 200 respondents that were sampled using snowball sampling method. At the 0.05 significance level, results showed that while batik retailers were able to develop both their market orientation and entrepreneurial orientation, only market orientation had impact on improving their business performance. Although entrepreneurial orientation that was based on innovativeness and proactiveness positively affects business performance, it has not been proven to be able to play a significant role affects business performance. Batik retailers were more oriented to the current market and competed in customer acquisition. They tended to be more passive and less proactive in dealing with future market changes.

1. Introduction

Small and medium enterprises (SMEs) with their limited resources constantly face the difficult option either to survive or expand their businesses (Mole, 2000; Heikkilä et al., 2018; Mayr and Lixl, 2019). Limited resources made them more responsive and reactive, hence less proactive and less bold in making business advancements (Smith et al., 1999; Tang, 2016). More studies are needed to examine how SMEs with their limited resources deal with environmental dynamics in their efforts to improve performances (Tajeddini et al., 2013). Many SMEs could not survive because they were incapable to develop their businesses and focused only on short term endeavors (Gray et al., 2011). To secure future business developments, enterprises must be able to create efficiency and innovation (Tushman and O'Reilly, 1996; Benner and Tushman, 2003; Michl et al., 2012). Enterprises must be able to deal with trade-off between disruptive innovation and incremental innovation (Jansen, 2008; Suzuki, 2014). For SMEs, obstacles are frequently in the way in their efforts to create new values and innovations (Runyan and Covin, 2019).

Business environmental dynamics always impose uncertainties for entrepreneurs. In developing countries, SMEs must rely on their creativities to be able to grow and maintain their business existence (Saunila, 2016; Diabate et al., 2019). Dynamic capabilities view as suggested by Teece et al. (1997) stated that to create and maintain competitive advantage, enterprises must be able to develop not only their existing competency but also build their future competency (Benner and Tushman, 2003; Jansen et al., 2009). Balancing between exploiting existing capabilities and exploring new capabilities that can be developed into resources for future competitive advantage is an important effort for enterprises to be able to adapt to environmental changes to secure their survival and prosperity (Rhee and Kim, 2016).

In contrast to big enterprises that are more capable to develop their ambidexterity, SMEs with their limited resources face greater obstacles in their efforts to develop ambidexterity (Lubatkin et al., 2006). This is because decision making in SMEs is in the hand of the business owner who also acts as the operating officer (Verbess et al., 2010). However, SMEs must be mindful in implementing business ambidexterity by determining their abilities to exploit their current resources in dealing with environmental dynamics and by exploring and exploiting new resources to anticipate future environmental changes (Michl et al., 2012; Felício et al., 2019).

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This ambidexterity behavior can be associated with the ability to balance the developments of market orientation and entrepreneurial orientation. For SMEs, market orientation can be seen as the ability to satisfy current customer needs. The implementation of market orientation alone can lead to failure in anticipating future and latent needs (Narver and Slater, 1990; Tajeddini et al., 2013). Entrepreneurial orientation is associated with its innovative and proactive behaviors to exploit future business opportunities (Miller, 1983; Lumpkin and Dess, 1996; Zhang et al., 2020). These orientations are needed to improve and maintain competitive advantages by exploring new opportunities to develop new products for future markets (Hitt et al., 2001).

Business growth is an important determinant of business performance; especially for SMEs that are trying to expand their business sizes. The ability of SMEs to expand their entrepreneurialism is important for their business growth. In the domain of resource-based view of the firm, entrepreneurship plays an important role in improving firm performance that leads to their competitive advantages (Hult and Ketchen, 2001; Alvarez and Barney, 2002; Dess et al., 2003; Kollmann and Stöckmann, 2012; Salder et al., 2020). Environmental dynamics will determine how entrepreneurial orientation affects firm performance (Lumpkin and Dess, 2001; Kollmann and Stöckmann, 2012; Anderson et al., 2014), in the same manner as how market orientation will affect firm performance (Kohli and Jaworski, 1990; Kumar et al., 2011; Andorta and Gupta, 2016).

Many studies on the successfulness of entrepreneurship looked at the role of entrepreneurial conducts, however in dealing with rapid environmental changes, entrepreneurial processes will be determined more by aspects of its entrepreneurial perception (Krueger et al., 2000). Change of perception about environmental changes may compel entrepreneurs to look for new business opportunities (Stewart et al., 2008; Naumann, 2017). The cognitive aspect of entrepreneurial perception will create an entrepreneurial mindset that will have more roles to play in entrepreneurial activities (Mathisen and Arnulf, 2014). In the context of SMEs, entrepreneurial mindset lies at the individual level that is reflected in the entrepreneur's mindset. Entrepreneurial mindset that is formed from the entrepreneur's beliefs and behavior will determine how an enterprise will develop its entrepreneurial orientation (Pidduck et al., 2021). For SMEs, entrepreneurial orientation that can be seen at firm level is attributed to its owner and will be reflected in the firm's preferences, beliefs, and behaviors (Covin et al., 2006; Anderson et al., 2014).

The development of both market orientation and entrepreneurial orientation will determine how a firm can build its strategic orientation in its efforts to gain and maintain competitive advantage (Ho et al., 2017). This study examined simultaneous effects of both market orientation and entrepreneurial orientation as an ambidexterity mindset on the business performance of batik retailers in Jakarta. Batik retailers business was chosen as research object because batik is one of Indonesian cultural heritage that are renowned worldwide. In 2019 UNESCO added Indonesian batik in their list of UNESCO's Intangible Cultural Heritage of Humanity. Today, batik is commonly worn by the majority of Indonesian people, and also has started entering international markets. Batik retailers in Jakarta are included in the SME category in Indonesia because their sales turnover reaches the range of US$ 139,000–1,050,000 per year. Regarding batik retailers in Jakarta, it is interesting to examine whether simultaneously, both market orientation that leads to reactive behavior (exploitation orientation) and entrepreneurial orientation that leads to proactive behavior (exploration orientation) can manifest at the same time (Tang, 2016; Chantous and Alnawas, 2020). In addition to improving their operational performances, retailers are expected to be able to collaborate with batik producers in the supply chain to create innovation in order to drive demands (Güemes-Castorena and Ruiz-Monroy, 2020). In the case of the batik supply chain, batik retailers must be able to contribute to innovation and should not be oriented to short-term operational performance only.

Many studies found that entrepreneurial orientation positively affects firm performance. On the contrary, some studies found that entrepreneurial orientation has no effect on firm performance (Hughes and Morgan, 2007; Zhai et al., 2018; Diabate et al., 2019). Complementarities between entrepreneurial orientation and market orientation in strategic orientations that were developed by SMEs in a developing country are a challenging research topic to be addressed (Boso et al., 2013). It is interesting to examine it in the context of batik retailing industry as a representative of SMEs in Indonesia by analyzing how business environmental dynamics affect the developments of both entrepreneurial and market orientations in improving business performance. This study also examined how entrepreneurial orientation may drive the development of market orientation of batik retailers (Tajeddini et al., 2013).

This study has several objectives. First, to examine the effects of entrepreneurial mindset that are reflected in the beliefs and behaviors of the owners of batik retailer business on the development of entrepreneurial orientation that will determine the strategic orientation for the achievement of business performance. Second, to examine how batik retailers developed their strategic orientations in dealing with environmental dynamics in order to maintain their competitive advantages through performance improvements. Third, to examine the relationships of strategic orientations that were developed by batik retailers in the context of ambidexterity to their business performance.

2. Conceptual background and hypotheses

2.1. Environmental dynamics

Environmental dynamics create unpredictable turbulence in the external environment of the firm (Ottesen and Granhaug, 2004). This environmental turbulence was brought about by changes in markets, competitions, technology, and other external factors (Kohli and Jaworski, 1990; Voss and Voss, 2000). Inputs gained from analyzing environmental dynamics can be used to determine a firm's competitive strategy by providing insights about environmental threats and opportunities. In developing countries, regulatory and legal environments impose a rather big impact on entrepreneurs (Sheng et al., 2011; Boso et al., 2013).

2.2. Entrepreneurial mindset

Entrepreneurial mindset that determines entrepreneurial activities is a set of behavior, beliefs, and values held by small and medium entrepreneurs (Ejupi-Ibrahim et al., 2020). In big firms, these will be reflected in their organizational culture, but in SMEs, entrepreneurial mindset is more dictated by the mindset of its business owner. Entrepreneurial mindset is reflected in how individuals think and act entrepreneurially (Ireland et al., 2003). Entrepreneurial mindset depicts the mental model on how business owners think and act in their efforts to exploit opportunities and how they present their emotional aspect in implementing entrepreneurial processes (Mathisen and Arnulf, 2014; Naumann, 2017: Kuratko et al., 2020). With a strong entrepreneurial mindset basis, firms can determine the appropriate strategy to gain competitive advantage (Lumpkin and Dess, 1996; Hitt et al., 2001).

2.3. Entrepreneurial orientation

Entrepreneurial orientation depicts how firms compete (Covin and Slevin, 1991; Zhai et al., 2018; Diabate et al., 2019). Entrepreneurial orientation gives direction to how firms create driving forces that support the implementation of entrepreneurial activities that lead to competitive advantage (Lumpkin and Dess, 2001; Covin and Wales, 2011; Kollmann and Stöckmann, 2012). Firms need to develop dynamic capabilities to innovate and act proactively in order to exploit opportunities in dealing with environmental uncertainties (Miller, 1993; Anderson et al., 2014; Zhang et al., 2020). Entrepreneurial orientation can bridge a gap between current market needs and future business opportunities (Slater and Narver, 1995; Tajeddini et al., 2013).
2.4. Market orientation

The capability to become a market-oriented firm will be determined by a firm’s capability to implement its marketing concept in its target market (Kohli and Jaworski, 1990). Market orientation is developed through orientations toward customers, competitors, and other exogenous factors (Boso et al., 2013) that are needed to gain and disseminate knowledge about customers and competitors (McMullen and Kier, 2016). Market orientation is a distinctive source for a sustainable competitive advantage (Kumar et al., 2011). Market orientation is developed as an organizational culture with focus on markets and competitors to create a superior customer value (Zhai et al., 2018). From these explanations, a hypothesis can be formulated:

**H3.** Entrepreneurial mindset positively and significantly affect market orientation.

Entrepreneurial mindset plays an important role in the development of entrepreneurial orientation that provides a driving force for firms to develop their future-oriented entrepreneurial behavior (Wiklund and Shepherd, 2003; Kollmann and Stockmann, 2012). This capability to respond to existing customers and situations. Certainly market orientation alone cannot be used to predict future market needs and situations. Certainly market orientation alone can be used to predict future market needs and situations (Kohli and Jaworski, 1990; Andorta and Gupta, 2016). Information gained from markets, competitors, and other exogenous factors can be processed to create customer values (Sinkula, 1994; Otero-Neira et al., 2013). In this sense, the following hypothesis can be formulated:

**H4.** Entrepreneurial orientation positively and significantly affects market orientation.

Entrepreneurial orientation describes how firms respond to existing customers and competitions by trying to create products that fit with current needs and situations. Certainly market orientation alone cannot be used to predict future market needs and situations. Certainly market orientation alone can be used to predict future market needs and situations (Kohli and Jaworski, 1990; Andorta and Gupta, 2016). Information gained from markets, competitors, and other exogenous factors can be processed to create customer values (Sinkula, 1994; Otero-Neira et al., 2013). In this sense, the following hypothesis can be formulated:

**H5.** Market orientation positively and significantly affects business performance.

Entrepreneurship always leads to wealth creation through value creation. Studies done in developing countries showed that entrepreneurial orientation determines a firm’s growth (Diabate et al., 2019). Entrepreneurial orientation will determine a firm’s capability to explore potential market opportunities and develop new businesses that will lead to improvement of a firm’s competitive advantage (Zhai et al., 2018). By creating new innovations and capabilities to respond to environmental changes, entrepreneurial orientation will improve a firm’s performance (Rauch et al., 2009; Kollmann and Stockmann, 2012; Anderson et al., 2014). In addition to improving a firm’s performance, entrepreneurial orientation also plays a role in improving a firm’s capability to exploit external resources to develop new products and services (Zhang et al., 2020). Based on this premise, a hypothesis is formulated:

**H6.** Entrepreneurial orientation positively and significantly affects business performance.

Based on these six hypotheses, a research model can be drawn as seen in Figure 1.
3. Research method

3.1. Data collection and sample

This research was conducted in Jakarta, the capital city of Indonesia. This study employed cross-sectional survey-based study design. Respondents in this study were batik retailers that are running their businesses in Jakarta. This survey sampled 200 batik retailers by using snowball sampling method as the appropriate judgmental sampling method to be used considering that batik retailers population in Jakarta is highly specific and difficult to sample. Five latent variables with 17 indicators that have passed the validity and reliability tests were used in this study. Referring to Hair et al. (2010) who suggested that for each variable indicator 5 respondents were needed, thus in this study which involved 17 indicators, a sample of at least 85 sample units was needed. We sampled 200 batik retailers in our survey and thus exceeded 85 sample units as the minimum required respondents according to Hair et al. (2010). Sample characteristics are shown in Table 1 below:

| Table 1. Sample characteristics. | Frequency | Relative Frequency |
|----------------------------------|-----------|--------------------|
| 1. Gender of batik retailer       |           |                    |
| Male                             | 191       | 95.5 %             |
| Female                           | 9         | 4.5 %              |
| Total                            | 200       | 100 %              |
| 2. Business location             |           |                    |
| Central Jakarta                  | 76        | 38 %               |
| North Jakarta                    | 36        | 18 %               |
| West Jakarta                     | 56        | 28 %               |
| South Jakarta                    | 14        | 7 %                |
| East Jakarta                     | 18        | 9 %                |
| Total                            | 200       | 100 %              |
| 3. Length of business (years)    |           |                    |
| 0-10                             | 141       | 70.5 %             |
| >10-20                           | 21        | 10.5 %             |
| >20-30                           | 19        | 9.5 %              |
| >30-40                           | 16        | 8 %                |
| >40                              | 3         | 1.5 %              |
| Total                            | 200       | 100 %              |

3.2. Measures

This study used measures that have been validated in literatures. All items were measured using 5-point Likert Scale from a scale of strongly disagree to a scale of strongly agree in questionnaires sent to respondents. Research variables consist of: (a) environmental dynamics, (b) entrepreneurial mindset, (c) market orientation, (d) entrepreneurial orientation, and (e) business performance. Environmental dynamics were measured by using indicators from Jaworski and Kohli (1993) as well as Gima et al. (2006). The latent variable of environmental dynamics perception was measured in relation to four dimensions: market turbulence, competitive intensity, technological turbulence, and regulations. Entrepreneurial mindset variable was measured using The Entrepreneurial Mindset Profile (EMP) that was developed by Davis et al. (2015) which contains dimensions of entrepreneur’s traits, spirit and skills. Kohli and Jaworski (1990) described market orientation as the implementation of marketing concepts within organizational activities and behaviors. The measurements for market orientation construct were developed based on the market orientation definition of Jaworski and Kohli (1993) using three dimensions: market intelligence generation, intelligence dissemination, and market responsiveness. Lumpkin and Dess (1996) explained that entrepreneurial orientation has five dimensions, namely innovativeness, risk-taking, proactiveness, competitive aggressiveness, and autonomy. We used entrepreneurial orientation measurement as was developed by Hughes and Morgan (2007). The measurements for business performance construct of batik retailers were developed based on suggestions from Runyan et al. (2008) that small business performance can be inferred from performance growth within the last few years and by comparing it to those of their competitors. Batik retailers’ performances, while evidently can be inferred from sales growth and profit can also be inferred from the total number of employees, marketable products variations, and customer services.

3.3. Evaluation of the goodness of fit

In this section we examined the goodness of fit between the data and the model, the validity and reliability of the measurement model, and the significance of the coefficients of the structural model. The evaluation of the goodness of fit between the data and the model is carried out through several stages (Hair et al., 2010), namely overall model fit, measurement model fit and structural model fit.

3.3.1. Overall model fit

Overall Model Fit is intended to evaluate the general goodness of fit (GOF) between the data and the model. To perform overall model fit testing we used Structural Equation Modeling (SEM) with Lisrel 10.20 instrument using Maximum Likelihood approach. The fit indices demonstrated a good fit between the measurement model and the data: \( \chi^2 = 188.21 \) (the smaller the \( \chi^2 \) value the better), df = 113; root mean square error of approximation (RMSEA) = 0.058 (RMSEA \( \leq 0.08 \) is a good fit); Normed Fit Index (NFI) = 0.94 (NFI \( \geq 0.9 \) is a good fit); Non-Normed Fit Index (NNFI) = 0.97 (NNFI \( \geq 0.9 \) is a good fit); Comparative Fit Index (CFI) = 0.97 (CFI \( \geq 0.9 \) is a good fit); Incremental Fit Index (IFI) = 0.97 (IFI \( \geq 0.9 \) is a good fit); Relative Fit Index (RFI) = 0.93 (RFI \( \geq 0.9 \) is a good fit); Root Mean Square Residual (RMR) = 0.023 (RMR \( \leq 0.05 \) is a good fit); Standardized RMR = 0.050 (Standardized RMR \( \leq 0.05 \) is a good fit); and Goodness of Fit Index (GFI) = 0.90 (GFI \( \geq 0.9 \) is a good fit). Results from LISREL Estimates using Maximum Likelihood approach showed the Overall Model Fit of this study altogether have met the goodness of fit standard. Hence, it can be concluded that these research models should produce robust results.

3.3.2. Measurement model fit

The measurement of the model fit was carried out on each construct or measurement model separately through an evaluation of the validity of the measurement model and an evaluation of the reliability of the measurement model. As the rule of thumb, a variable is declared to have good validity if: The value of t on the loading factor is greater than the critical value (or \( |t| > 1.96 \), for practical purposes \( > 2 \)) (Rigdon and Ferguson, 1991; Doll et al., 1994) or standardized loading factors > 0.70 (Rigdon and Ferguson, 1991) or at least each indicator for research variables is greater than 0.5 (Igbaria et al., 1997). To measure reliability in Structural Equation Modeling, a
composite reliability measure and variance extracted measure was used. Hair et al. (2010), stated that a construct has good reliability if: Construct Reliability (CR) value $\geq 0.70$ and Value of Variance Extracted (VE) $\geq 0.50$. Results from validity and reliability analyses showed that variable indicators as shown in Table 2 have met the goodness of fit standards for reliability and validity. In relation to the environmental dynamics variable, there were 3 indicators that have met the validity and reliability requirements out of the 4 proposed indicators. The indicator for regulation did not meet the validity and reliability criteria and therefore was not used further as an indicator of the environmental dynamics variable. For the entrepreneurial orientation variable, there were 4 indicators that have met the validity and reliability requirements out of the 4 proposed indicators. The autonomy regulation indicator did not meet the validity and reliability criteria, therefore it was not used further as an entrepreneurial orientation variable. Furthermore, The score of standardized loading factor (SLF), The value of Construct Reliability (CR), and the value of Variance Extracted (VE) below were only calculated from indicators that have met the criteria of good validity and reliability. The score of standardized loading factor (SLF) for each variable indicator is larger than 0.5 (Igbaria et al., 1997). Fifteen of the 17 indicators used (88%) have Standardized loading factors greater than 0.7 (Rigdon and Ferguson, 1991). Two of the 17 indicators used (12%) have Standardized loading factors greater than 0.6 (Igbaria et al., 1997). The value of Construct Reliability (CR) for each variable indicator has met the goodness-of-fit standard of more than 0.7 and the value of Variance Extracted (VE) for each variable indicator has also met the goodness-of-fit standard of more than 0.5. Hence, it can be concluded that the (construct) measurement model has good validity and reliability.

3.3.2.1. Internal consistency reliability, convergent validity and discriminant validity. In relation to the measurement model fit, researchers also conducted tests on internal consistency reliability, convergent validity and discriminant validity using Smart PLS 3 software. Internal Consistency Reliability is done by measuring Cronbach’s alpha, rho_A and Composite Reliability. Cronbach’s alpha is considered to be a more conservative measure of Internal Consistency Reliability. Dijkstra and Henseler (2015) proposed rho_A as a more exact measure of construct reliability, which usually stands in between Cronbach’s alpha and Composite Reliability (Hair et al., 2017a, 2017b). Composite Reliability measures internal consistency and as the rule of thumb, the Composite Reliability between 0.60 – 0.70 are considered acceptable in exploratory research and value between 0.70 and 0.90 are satisfactory to good (Hair et al., 2019).

Convergent validity of the measurement model with reflective indicators is assessed based on the correlation between the component score and the construct score. Convergent validity can be measured by average variance extracted (AVE) which indicates how much the variable explains the variance of its item with the condition that the AVE must be greater than 0.5 (Hair et al., 2019). The results of Internal Consistency Reliability and Convergent validity are shown in Table 3. Cronbach’s Alpha value of all research variables is greater than 0.6 which states that it is satisfactory to have good Internal Consistency Reliability. The rho_A value of the overall research variables is greater than 0.8 which states that it is satisfactory to good Internal Consistency Reliability. Composite Reliability of all variables studied is greater than 0.8 stating satisfactory to good Internal Consistency Reliability. All research variables have an Extracted Average Variance greater than 0.6 which states acceptable Convergent validity. Thus it can be concluded that the construct used has good reliability.

3.3.2.2. Discriminant validity. Discriminant validity of the measurement model with reflective indicators is assessed based on the crossloading of measurements with constructs. If the construct’s correlation with the

| Table 2. Measurement model fit of latent variables. |
|-----------------------------------------------|
| Variable | Indicator | SLF | Error | CR | VE | Notes |
| Environmental dynamics (ed) | market turbulence (edmt) | 0.77 | 0.4 | 0.84696 | 0.650896 | Reliable |
| | technological turbulence (edtt) | 0.92 | 0.16 | | | |
| | competitive intensity (edic) | 0.72 | 0.49 | | | |
| Entrepreneurial mindset (em) | Traits (emtr) | 0.75 | 0.44 | 0.803661 | 0.577933 | Reliable |
| | Spirits (emsp) | 0.71 | 0.5 | | | |
| | Skills (emsk) | 0.82 | 0.33 | | | |
| Entrepreneurial orientation (eo) | Innovativeness (eoin) | 0.84 | 0.29 | 0.90697 | 0.706943 | Reliable |
| | risk-taking (eort) | 0.84 | 0.3 | | | |
| | Proactiveness (eopr) | 0.84 | 0.29 | | | |
| | competitive aggressiveness (eoca) | 0.84 | 0.29 | | | |
| Market orientation (mo) | market intelligence generation (momg) | 0.64 | 0.59 | 0.832875 | 0.557024 | Reliable |
| | intelligence dissemination (mosd) | 0.73 | 0.47 | | | |
| | market responsiveness (moms) | 0.84 | 0.29 | | | |
| | consumer responsiveness (mocr) | 0.76 | 0.42 | | | |
| Business performance (bp) | Growth (bpg) | 0.93 | 0.14 | 0.867727 | 0.692043 | Reliable |
| | Sales (bps) | 0.91 | 0.18 | | | |
| | Profit (bpper) | 0.63 | 0.61 | | | |

Notes: SLF = Standardized loading factor, CR = construct reliability, VE = Variance extracted.

| Table 3. Internal Consistency Reliability and Convergent validity. |
|-----------------------------------------------|
| Variable | Cronbach’s Alpha | rho_A | Composite Reliability | Average Variance Extracted (AVE) |
| Business performance | 0.856 | 0.908 | 0.912 | 0.777 |
| Entrepreneurial mindset | 0.803 | 0.811 | 0.884 | 0.717 |
| Entrepreneurial orientation | 0.907 | 0.907 | 0.934 | 0.781 |
| Environmental dynamics | 0.841 | 0.847 | 0.904 | 0.759 |
| Market orientation | 0.833 | 0.851 | 0.888 | 0.667 |
measurement item is greater than the size of the other constructs, then this indicates that the latent construct predicts the size of their block better than the size of the other blocks (Fornell and Larcker, 1981). Cross loading in Table 4 below shows the comparison between the correlation of each item to its variable and others variables. The results of the cross loading as seen in Table 4 showed that Discriminant validity is established given that any items are strongly related to their respective variable than any other variables (Fornell and Larcker, 1981). The correlation between the business performance construct and its indicators is higher than the correlation between the business performance indicator and other constructs. This also applies to other constructs. This finding shows that latent constructs predict indicators in their block better than indicators in other blocks.

Afterwards we will look at the Fornell and Larcker (1981) in Table 5 who mandated that the square root of AVE of each latent variable should not be greater than the correlation among the latent variables to demonstrate validity. However recently, Henseler et al. (2015) argued that in the situation where the indicator loading on variables differ only slightly, the Fornell and Larcker (1981) criterion will not perform well. Henseler et al. (2015) proposed the heterotrait-monotrait (HTMT) instead. A threshold value of 0.90 is set for variables that are conceptually very similar (above 0.90 would suggest that discriminant validity is not present) and a lower threshold of 0.85 for more distinct variables (Hair et al., 2019). Table 5 presented that all variables measured in this study satisfy both yardsticks.

### 3.3.3. Structural model fit

Structural models used are as follows:

\[
\begin{align*}
\text{mo} &= \beta_{32}\text{eo} + \gamma_{21}\text{ed} + \zeta_3 \\
\text{eo} &= \beta_{31}\text{em} + \zeta_2 \\
\text{em} &= \theta_{11}\text{ed} + \zeta_1 \\
\text{bp} &= \beta_{43}\text{mo} + \beta_{42}\text{eo} + \zeta_4
\end{align*}
\]

Structural model fit was evaluated using \( R^2 \) for the dependent construct, \( Q^2 \) test for predictive relevance, \( t \) test and examination of the significance of the estimated coefficients. As a comprehensive measure of the structural equation, the overall coefficient of determination (\( R^2 \)) is used. The \( R^2 \) measures the model’s exploratory power (Shmueli and Koppius, 2011) and the in-sample predictive power (Rigdon, 2012). \( R^2 \) values of 0.75, 0.50, and 0.25 are regarded as substantial, moderate, and weak, respectively (Hair et al., 2011). \( Q^2 \) value measures how well the observation value generated by the model and its parameter estimates are. A \( Q^2 \) value greater than 0 indicates that the model has predictive relevance, while a \( Q^2 \) value less than 0 indicates that the model lacks predictive relevance (Chin, 1998; Geisser, 1975; Stone, 1974). The smaller the difference between predicted and original values the higher the \( Q^2 \) value which stipulates the higher predictive accuracy. \( Q^2 \) value should be bigger than zero with 0, 0.25 and 0.50 as the threshold for small, medium and large predictive relevance to the model (Hair et al., 2017).

Before evaluating the Structural Model Fit, a test will first be conducted on the possibility of collinearity issues between variables using the inner VIF score. The VIF value of 5 or higher indicates a potential collinearity problem (Hair et al., 2011). The results of the Collinearity test (Inner VIF) are listed in the Table 6. It can be seen that the VIF value for all variables in this study is lower than 3 which means that there is no indication of multicollinearity.

Evaluation of the structural model fit produces the following structural equations:

\[
\begin{align*}
\text{mo} &= 0.38*\text{eo} + 0.16*\text{ed}, \text{Errorvar.} = 0.80, R^2 = 0.20 \\
& (0.086) (0.079) (0.17) \\
\text{eo} &= 0.70*\text{em}, \text{Errorvar.} = 0.51, R^2 = 0.49 \\
& (0.086) (0.085) \\
\text{em} &= 0.34*\text{ed}, \text{Errorvar.} = 0.88, R^2 = 0.12 \\
& (0.083) (0.16) \\
\text{bp} &= 0.39*\text{mo} + 0.12*\text{eo}, \text{Errorvar.} = 0.79, R^2 = 0.21 \\
& (0.090) (0.080) (0.10) \\
& 4.10 5.59 \\
& 4.31 1.55 7.59
\end{align*}
\]

As Joreskog (1999) stated that \( R^2 \) in the structural equation does not have a clear interpretation and to interpret \( R^2 \) as in the regression equation, we must take it further from the reduced form equation as follows:

**Reduced Form Equations**

\[
\begin{align*}
\text{mo} &= 0.25*\text{ed}, \text{Errorvar.} = 0.94, R^2 = 0.063 \\
& (0.082) \\
& 3.07 \\
\text{eo} &= 0.24*\text{eo}, \text{Errorvar.} = 0.94, R^2 = 0.057 \\
& (0.061) \\
& 3.95
\end{align*}
\]
The coefficient of determination (R²) and the validated redundancy measure Q² resulting from this study are presented in Table 7 below. All the resulting R² values represent the model’s exploratory power weak to moderate. All the resulting Q² values are greater than 0 indicating that the model has predictive relevance. The range of Q² values from 0.046 to 0.268 represents small to large predictive relevance to the model.

3.4. Hypothesis analysis

Table 8 showed results of hypothesis analysis at the 0.05 significance level. Environmental dynamics positively and significantly affects entrepreneurial mindset. Based on this finding it can be concluded that a more prevalent environmental dynamics will incite more entrepreneurial mindset of batik retailers in Jakarta. Batik retailers are urged to develop their entrepreneurial mindset in dealing with a more dynamic environment because the new dynamics can not be dealt with previously used strategic business and behavior. Next, entrepreneurial mindset positively and significantly affects entrepreneurial orientation of batik retailers in Jakarta. Entrepreneurial mindset that was developed in the face of a more competitive business environment created more opportunities for entrepreneurial orientation to grow. Nowadays business opportunities for batik retailing are more varied and vast, where in previous times some options are not viable or unthinkable or even impossible to do, are now doable as a result of the technological advancement and the growth of market dynamics. Environmental dynamics positively and significantly affects marketing orientation of batik retailers in Jakarta. This suggests that environmental dynamics force business owners to develop new market orientation because previous market orientation that was effective in the past became obsolete and insufficient in dealing with market turbulence.

Entrepreneurial orientation positively and significantly affects market orientation. Entrepreneurial orientation positively affects business performance but not significant. The positive and significant effect of entrepreneurial orientation on business performance occurred through the mediating effect of market orientation. Hence, entrepreneurial orientation alone without consideration of market orientation cannot help business owners to satisfy market needs and consequently batik retailers in Jakarta could not boost their business performance significantly. Market orientation positively and significantly affects business performance. Improvement in market orientation should significantly improve business performance of batik retailers in Jakarta.

4. Result and discussion

Regarding ambidexterity orientation as the main focus of this study, results showed that only market orientation had effects on business performance. Entrepreneurial orientation did not affect business performance. Batik retailers in Jakarta have a more reactive characteristic and tend to comply with market needs, instead of being more proactive that lead to innovation (Schindehutte et al., 2008; Kocak et al., 2017;
In a turbulent environment full of uncertainties, batik retailers as small enterprises, with their limited resources, need to develop excellent adaptabilities to be able to survive and improve their performance as well as their competitive advantage (Chakravarthy, 1982; Tuominen et al., 2004). Batik retailers were faced with a relatively stable environmental dynamics and these conditions made them less proactive in making changes and innovations (Benner and Tushman, 2003). The development of entrepreneurial orientation with focus on the proactiveness dimension that leads to opportunity-seeking behavior as an anticipation for changes in future demands became less prominent in its role. Batik retailers focused more on implementing a competitive aggressiveness dimension to overcome their competitors (Lumpkin and Dess, 2001). Batik retailers in existing markets that are relatively easy to comprehend tend to implement market orientation, instead of developing proactive behaviors (Ottesen and Gronhaug, 2004; Otero-Neira et al., 2013). This will certainly create problems in the future when there are shifts in market conditions and changes in customer needs (Frösen et al., 2016).

Limited resources forced batik retailers to rely only on existing technological or marketing trajectories. They will only make adaptations when there are changes in their environments. With limited resources at hand, they tend to develop exploiting behaviors (Lubatkin et al., 2006). In actuality, batik retailers should be able to develop capabilities to look for business opportunities that were overlooked by their competitors by developing new resources and more innovative competitive advantage. Their entrepreneurial mindset bases can empower their entrepreneurial orientation in improving their business performance (Naumann, 2017). However, the limitations of their own resources and their range of customers forced batik retailers to rely more on fostering personal contact with their customers to better understand and meet customer needs (Mashahadi et al., 2016). Most of the batik retailers in this study (70.5%) run their business in a relatively short span of time (within 10 years), this may result in their orientation being more market-oriented.

As a part of small and medium enterprises in Indonesia, batik retailers in Jakarta focused more on gaining short-term profits. Market orientations that were developed by batik retailers focused more on short term exploitations using their knowledge about current market and existing competitors (Jansen, 2008; Andorta and Gupta, 2016). Decision-making in the batik retailing industry was predominantly held by the business owner that focused heavily on cutting costs down and competing in price war. Oftentimes, batik retailers did not have strategic planning to gain and maintain their competitive advantage (Verhees et al., 2010). Their decision-making was in the hands of its business owner (Felício et al., 2019). This condition led them to make short-term incremental changes that relied heavily on market orientation. This is consistent with findings in Kumar et al. (2011) that market orientation should be focused more on customer retention and gaining long-term profits than on customer acquisition and instantaneous sales. Batik retailers with their relatively small business scales opted to try cutting costs down that led to efficiency rather than focus-oriented on developing innovative activities (Tajeddini et al., 2013). This was because batik retailers in Jakarta mostly sold relatively lower quality batik products and competed in price wars. Orientation that focuses on efficiency will lessen business owner's willingness to make ambidexterity activities and put aside efforts to make innovations (Suzuki, 2014). Batik retailers were more adaptive toward customer needs and competitions thus depended more on offensive strategies to gain sales increase (Spillan and Parnell, 2006).

Referring to entrepreneurship definition as suggested by Masurul (2019) who mentioned three elements of entrepreneurship: creation, discovery, and exploitation of value-adding opportunities, our finding that market orientation affects business performance indicated that batik retailers in Jakarta employed only the last element of entrepreneurship which was exploitation of value-adding opportunities for their batik products. Batik retailers were reluctant to take risks in anticipating changes in customer demands and focused more to develop their businesses as merchandisers (Tang, 2016). Creation and discovery that lead to innovations as important dimensions of entrepreneurial orientation were not employed by batik retailers in Jakarta, but were mostly employed by batik makers in their home cities (Pekalongan, Solo, Jogjakarta, and others) as well as by batik stores that sell premium batik products. Entrepreneurial orientation that includes both innovativeness and proactiveness to exploit business opportunities has not been proven to be able to play a significant role in the batik retailing industry (Kollmann and Stöckmann, 2012; Ghanous and Alnawas, 2020). The findings of this study indicated that while entrepreneurial orientation has positive effect on business performance, it is not yet statistically significant. However the findings of this study tended to be in line with the findings of previous studies and were not opposed to previous literatures and research studies. By finding a positive sign on the effect of entrepreneurial orientation on business performance, it means that an increase in entrepreneurial orientation leads to an increase in business performance. However, it is still possible that the increase in business performance is still by chance due to the impact of entrepreneurial orientation that is not declared to have a significant effect on improving business performance.

Integrating entrepreneurial orientations of batik retailers and batik makers in a supply chain collaboration should, in theory, be able to create a co-creation value that supports the development of ambidexterity behaviors (Shen et al., 2006; Chakraborty et al., 2014). This is consistent with suggestions of Dyer and Singh (1998), that relationships between batik retailers and batik makers will improve innovation performance not only incrementally but also creating radical innovations that lead to the creation of competitive advantage (Tushman and O'Reilly, 1996; Suzuki, 2014). These can be realized through knowledge sharing, creation of relational assets, mutual complementarities of resources and capabilities, and development of governance structure to facilitate the conception of co-creation values. These relationships will improve collective

| Table 8. Hypothesis analysis. |
|-------------------------------|
| No | Hypothesis                  | Estimates | SE | t-value | Description | Conclusion |
|----|-----------------------------|-----------|----|---------|-------------|------------|
| 1  | Environmental dynamics → entrepreneurial mindset | 0.34      | 0.083 | 4.10    | Significant | Supported  |
| 2  | Environmental dynamics → market orientation | 0.16      | 0.079 | 2.02    | Significant | Supported  |
| 3  | Entrepreneurial mindset → entrepreneurial orientation | 0.70      | 0.086 | 8.11    | Significant | Supported  |
| 4  | Entrepreneurial orientation → market orientation | 0.38      | 0.086 | 4.46    | Significant | Supported  |
| 5  | Market orientation → business performance | 0.39      | 0.090 | 4.31    | Significant | Supported  |
| 6  | Entrepreneurial orientation → business performance | 0.12      | 0.080 | 1.55    | Not Significant | Not supported |

Notes: SE = Standard Errors.
innovation capabilities through development of know-how and knowledge sharing (Saunila, 2016). Batik retailers should collaborate with batik makers in developing ambidexterity strategy for products and markets. This ambidexterity shall lead to the creation of new products and markets, and at the same time exploiting existing products and markets (Voss and Voss, 2013).

5. Implications

Batik retailers in Jakarta should simultaneously develop both market orientation and entrepreneurial orientation to improve their business performance. Market orientation that focuses on current situations is important for improving competitive advantage that will lead to the survivability of existing business, while entrepreneurial orientation that focuses more on future situations also needs to be developed in order to gain new competitive advantages to ensure business survivability in the future. To be able to deal with environmental dynamics, batik retailers need to develop their learning ability, an important factor of entrepreneurial orientation, so that they can gain knowledge and new competitive methods in doing businesses (Diabate et al., 2019). Batik retailers as the business owner commonly act as the business operators, and simultaneously play a strategic role. This condition imposes a dilemmatic situation for batik retailers as well as for other SMEs, whether they should develop new methods and technology to anticipate changes in market demands or instead exploiting the existing ones even though it might not be optimal for current market conditions. It is necessary for batik retailers to develop new ways and innovative designs to be able to satisfy the ever-changing customer demands (Lubatkin et al., 2006). As a part of SMEs, batik retailers must be able to develop strategic entrepreneurship with capability to integrate opportunity seeking perspective and advantage-seeking one (Ireland et al., 2003; Simsek et al., 2017).

It is highly important for batik retailers to be able to develop ambidexterity behavior in order to compete in existing and future markets. Ambidexterity orientation helps business owners to shift their point-of-views from short-term perspective to long-term one (Rhee and Kim, 2016). The capability to respond to consumer demands and the capability to make radical product innovations must be developed hand in hand (Verhees et al., 2010). Radical innovations need a strong entrepreneurial orientation. Solid business ties must also be developed, in the case of batik retailing industry, between batik retailers and batik makers. Mutual business ties between batik retailers and batik makers will provide sharing of new knowledge that can be integrated with the existing knowledge to create new and better innovations (Sheng et al., 2011; Boso et al., 2013; Crescenzi and Gagliardi, 2018; Zhang et al., 2020).

To survive in an ever-changing business environment, batik retailers need to improve their dynamic capabilities by developing their strategic ambidexterity. While batik retailers must be able to make incremental innovations to adapt to changing business environment and run their business routines (exploitation orientation) that lead to market orientation, they also must be able to simultaneously develop radical and disruptive innovations (exploration orientation) that lead to the development of entrepreneurial orientation (Benner and Tushman, 2003; Jansen et al., 2009; Felício et al., 2019). To develop new competitive advantages, batik retailers need to break out of their business routines; for instance, by creating new batik designs or creating new market segments for their batik products. Batik retailers need to constantly develop their entrepreneurial mindset to be able to adapt to both environmental dynamics and technological changes in order to exploit new opportunities and gain competitive advantage (Kuranko et al., 2015).

Changing business orientation cannot be based only on incremental innovation but also need to be supported by the creation of new markets and technologies that lead to innovations in business models, and these are especially important for entrepreneurs in developing countries such as in Indonesia. SMEs need to create business model innovations that combine market orientation and entrepreneurial orientation to maintain their entrepreneurship and should not just act as merchandisers that focus only on short-term profits. They must think, feel, and run their businesses like a true entrepreneur (Diabete et al., 2019; Kuratko et al., 2020) in order not to get stuck into business routines as merchandisers. Batik retailers need to break out from their operational routines that rely only on existing skill and knowledge and should not focus only on their specialized competence, instead they must be able to think creatively by exploiting new resources as their future competitive advantage (Jansen, 2008; Felício et al., 2019).

6. Limitation and future research

This study showed that batik retailers in Jakarta were more concerned with the role of market orientation in their performance. Therefore, they did not empower their entrepreneurial orientation to make innovation and proactive actions that will have an effect in the long term. Batik retailers in Jakarta, like other SMEs in general, do not have supportive systems to make bigger changes. They rely more on making mutual collaborations within their social and commercial ecosystems; especially with their suppliers (Runyan and Covin, 2019). Further researches should examine how these social and commercial ecosystems might improve small and medium retailers’ performances; especially with their suppliers. Batik retailers and batik makers can hopefully create a better response to changing consumer demands and industry dynamics (Güemes-Castorena and Ruiz-Monroy, 2020).

Further researches can also expand the scope of this study by incorporating other batik retailers in Indonesia. To gain more insights, a comparison can be explored between batik retailers in Jakarta and batik retailers in home cities of batik makers such as in Pekalongan, Cirebon, Solo, and others. Entrepreneurial mindset role in developing entrepreneurial orientation that can affect business performance might also be influenced by other environmental and cultural factors (Naumann, 2017; Pidduck et al., 2021).

Supportive systems from the government are needed for SMEs to be able to make their contributions especially in developing countries. This condition will create an enriched field of study on how the batik industry in Indonesia can flourish. Government can play a role in supporting batik retailers to develop their entrepreneurial capabilities in order for them to play a bigger role in the creation of Indonesian batik product values.

Declarations

Author contribution statement

Anton Wachidin Widjaja: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Sugiarto: Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

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Data availability statement

Data will be made available on request.

Declaration of interest’s statement

The authors declare no conflict of interest.
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