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ISSN 2398-7812
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Asia Pacific Journal of Innovation and Entrepreneurship
Indexed and abstracted by:
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Antecedents of entrepreneurial intentions amongst business students in a tertiary institution

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Abstract
Purpose – The purpose of this paper is to examine the antecedents of entrepreneurial intentions amongst open and distance learning students during employment crisis. To achieve the purpose of this study, Ajzen’s theory of planned behaviour (TPB) was applied and empirically tested on the sample population.
Design/methodology/approach – Data were taken from a sample of university students pursuing business-related courses in Open and Distance Learning mode. Self-reported questionnaires were handed to a total of 500 students to complete and return. Returned and usable questionnaires numbered 245 in total, giving a return rate of 49 per cent. Descriptive statistics and regression analyses were utilised to analyse data. Structural equation modelling incorporated into SPSS was used to assess the structural model.
Findings – The key finding reveal that Ajzen’s TPB can partially be applied in determining entrepreneurial intentions in the developing economy. The study results also revealed that perceived behavioural control, personal attitude and subjective norm (SN) explained 62.5 per cent of variations in entrepreneurial intention, which surpasses many other studies conducted previously.
Research limitations/implications – Present study relied on cross-sectional data using quantitative design, therefore limiting the full understanding of the causal relationship between variables.
Originality/value – The study developed a conceptual framework based on literature that was empirically tested, which has rarely been done.

Keywords Entrepreneurship, Botswana, Innovation, Employment, Students, Graduates

Paper type Research paper

1. Introduction
Economic crunch has created an unprecedented high unemployment rate amongst the students, more specifically in developing countries than the developed world (Dvouletý, 2017;

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Gelaidan and Abdullateef, 2017; Papzan et al., 2013). To alleviate the situation, governments around the world have always encouraged their respective citizens to explore alternative sources of employment and wealth creation in the form of entrepreneurship (Buli and Yesuf, 2015; Papzan et al., 2013). The rationale for entrepreneurship amongst students is due to its recognition as a source of employment and wealth creation (Arrighetti et al., 2016). In addition, evidence suggests that entrepreneurship is a source of economic growth and development, specifically if such ventures mature into real and successful business entities (Arrighetti et al., 2016).

Therefore, the purpose of the present study is to investigate the antecedents of entrepreneurial intentions amongst business students in a tertiary institution in Botswana, using theory of planned behaviour (TPB) control. The study is motivated first by the fact that entrepreneurship is seen as a viable option that can address unemployment amongst graduates and reduce crimes associated with unemployment. Of the studies conducted on entrepreneurial intentions, the closest that could be found was Plattner et al.’s (2009) study on entrepreneurial readiness of university students in Botswana. Most studies have concentrated on entrepreneurial intentions in the Western world with little focus on Africa, ignoring the fact that there is evidence of differences in entrepreneurial intentions across regions and countries (Gurel et al., 2010; Nabi et al., 2016; Anne-Støren, 2014; Tolentino et al., 2014).

2. Theoretical foundation and hypotheses development

2.1 Theory of planned behaviour

The TPB proposes that intentions to perform behaviours of different kinds can be predicted with high accuracy from attitudes toward the behaviour, subjective norms, and perceived behavioural control (PBC) (Ajzen, 1991). The TPB posits that intentions are determined by attitude towards the act, subjective norm (SN) and perceived behavioural control. The Ajzen (1991) theory states that an individual’s intentions are determined by at least three independently constituents, namely, the attitude towards the act, which refers to the degree to which a person has favourable or unfavourable appraisal of the behaviour in question, subjective norm (SN), the degree a person perceive social pressure to perform or not to perform the behaviour, and PBC, which refers to the perceived ease or difficulty of performing the behaviour (Hussain, 2018; Vinogradov et al., 2013).

The assumption of TPB theory is that a person when faced with a myriad of problems viz-a-vis alternative opportunities may opt to react or not to react depending on earlier appraisal of the behaviour. Ajzen (1991) posits that intentions are assumed to capture the motivational factors that influence behaviour, because they are indicators of how hard people are willing to try and how much of an effort they are planning to exert to perform the behaviour (Al-Mamun and Fazal, 2018). The TPB further states that behavioural intentions can find expression in behaviour only if the behaviour is under volitional control, that is, if the person can decide at will to perform or not to perform the behaviour (Farrukh et al., 2018; Park, 2017). The TPB hypothesises that three key antecedents determine behavioural intentions: attitudes towards the behaviour, SNs and PBC. Actual behaviour, in turn, is determined by intentions. However, the theory also postulates that PBC is related to actual behaviour and further considers attitudes, SNs and PBC to be related to each other (Ajzen, 1991; Iakovleva et al., 2011). In addition, it also cautions that this volitional control to some degree depends on the availability of requisite opportunities and non-motivational factors such as time, money, skills and cooperation from others to act. During difficult times, external environment exerts pressure on individuals to perform the act to attune themselves to the environment (Al-Mamun and Fazal, 2018).
2.2 Entrepreneurial intentions

Shiri et al. (2012) define entrepreneurial intentions as “a state of mind that guides individual actions in order to create and develop a new business or entrepreneurial activity”. Entrepreneurs are people who have the ability to see and evaluate business opportunities, collect the resources needed to take advantage of those opportunities and take the appropriate measures in order to ensure success (Davey et al., 2011; Yusuf, 2013). A lot has been debated regarding the relevance of personality traits for entrepreneurship intentions, with some debates generating contradiction by confirming a significant relationship between several personality dimensions such as extroversion, conscientiousness, openness to experience and emotional stability and entrepreneurship intentions and performance, with risk propensity also linked to intentions (Hussain, 2018; Zhao et al., 2010). The literature reveals that the person’s decision to become an entrepreneur is deliberate and consciously made, that is, entrepreneurial intention (EI) is the conscious state of mind that precedes action and direct attention toward a goal (entrepreneurship). From a behavioural perspective, entrepreneurship is practiced by individuals who passionately believe they have identified a unique solution to an unmet need or unresolved problem and are willing to expend great effort to satisfy these demands (Kirkley, 2016; Lee-Ross, 2017). Such persons in their minds are ready to do anything to be entrepreneurs (Kirkley, 2016). Thus, it is hypothesised that:

**H1.** Personal attitude (PA) towards entrepreneurship has statistically positive influences on entrepreneurial intention (EI).

2.3 Personal attitude

PA is the main driving force behind a person’s success or failure to overcome obstacles when faced with ambiguous events in life (Darren Lee-Ross, 2017; Sullivan and Meek, 2012). The more a person has positive attitude towards a given situation (entrepreneurial intentions), the more that person is likely to succeed. The evidence suggests that attitude towards the behaviour refers to the extent to which an individual has a favourable evaluation of starting a new business (Aragon-Sanchez et al., 2017). Similarly, Lee-Ross’s (2017) study suggests that attitude towards entrepreneurial behaviour concerns a general evaluation of that behaviour; in other words, whether it is attractive or not. Hence, during a period of employment crisis, one would expect students with personal positive attitude towards entrepreneurial intentions more likely to pursue entrepreneurial ventures as opposed to those with negative attitude. Moreover, in other studies, a link between risk attitude and entrepreneurial intentions has been established (Kebaili et al., 2017). In addition, starting a new business venture involve uncertainties and risks that can only be overcome by individuals with personal positive attitude towards entrepreneurship as opposed to those people with negative PA (risk averse). PAs are viewed as an individual’s own judgments and evaluations in relation to certain action that the person perhaps may take when faced with tough decisions. Thus, we pose the following hypotheses to guide the research as:

**H2.** PA mediated by subjective norm (SN) will have a statistically positive influence on entrepreneurial intentions (EI).

2.4 Subjective norms

It is obvious that family plays an important role in a person’s life irrespective of their age. In most cases, a person would not want to deviate from the norm and value held by close family, and even friends with whom he/she interacts on a daily basis (Hussain, 2018). In
addition, Gelaidan and Abdulateef (2017) study claim that relation support is a crucial factor in developing entrepreneurial intentions in people. This crucial factor can be seen in the form of emotional support or access to start-up capital from family and friends (Baughn et al., 2006; Gelaidan and Abdulateef, 2017). While this has been seen to boost people’s confidence to venture into new ventures, the same could not be said when it comes to lack of support from family and friends (Hussain, 2018; Ismail et al., 2009; Laylo, 2018). The argument here is that lack of such support would naturally discourage people from venturing into a new business. Alongside role model, family members and friends can supply economic and emotional backing to the new entrepreneur (Gelaidan and Abdulateef, 2017; Al-Mamun and Fazal, 2018; Turker and Selcuk, 2009). Subjective norms define how a person would act in a given situation (Aragon-Sanchez et al., 2017; Kirkley, 2016). Entrepreneurship comes with a lot of changes and risks that may not be easily tolerated in an individual’s lifestyle. SN refers to the perceived social pressure to perform or avoid behaviour (Laylo, 2018; Park, 2017). This type of pressure could come from family, or society in general, which forces someone to do or not perform specific tasks (Farrukh et al., 2018; Hussain, 2018). Therefore, for our research, we hypothesised that:

**H3.** SN will have statistically positive influence on EI.

### 2.5 Perceived behavioural control

Research findings have long established the relationship between PBC and EI (Farrukh et al., 2018; Hussain, 2018). PBC is a product of Ajzen’s (1991) theory of TPB that has been used over time by researchers in entrepreneurship, and now has become one of the outstanding seminal works in the study of entrepreneurship intentions among people (Jarvis, 2016; Shook et al., 2003). PBC relates to the individual’s control beliefs relating to the action being monitored (Iakovleva et al., 2011). This factor relates to the perceived relative ease (or difficulty) of performing the monitored action. PBC was found in both studies to explain more of the variance in the intention than attitude towards the behaviour or subjective norms. Additionally, theory states that PBC is related to actual behaviour, and further considers attitudes, SNs and PBC to be related to each other (Solesvik et al., 2012). Also, PBC concerns the individual’s control beliefs regarding behaviour in question. PBC can be perceived as the ease or difficulty of performing the behaviour (Engle et al., 2010; Iakovleva et al., 2011). Moreover, evidence suggests that the individual’s environment, resources and processes can have a more profound influence on such individual intentions to become an entrepreneur (Buli and Yesuf, 2015; Solesvik et al., 2012). We therefore thus hypothesised that (Figure 1):

**Figure 1.** Conceptual framework and hypotheses development
H4. PBC mediated by SN will have a statistically positive influence on EI.

H5. PBC will directly have a statistically positive influence on EI.

3. Research methodology

This study was conducted at one of the public owned higher learning institutions in Botswana. The institution offers business and management programmes for the students pursuing their career while working through Open and Distance Learning mode. The rationale for the choice of this institution was informed by the facts that, the majority of these students are pursuing careers in business programmes not only to secure jobs but also career progressions as they are already employed elsewhere.

3.1 Sample

The present study was conducted at the Botswana Open University (BOU) using students as respondents. The questionnaire was self-administered to the participants from January 2018 to April 2018. Study sample comprises 245 out of 500 students pursuing diploma, degree and postgraduate programmes in business through Open and Distance Learning (ODL) mode. This gave a return rate of 49 per cent of fully completed and returned questionnaires. Using purposive sampling method, only those students who were pursuing career in business programmes at diploma level and above were requested to participate in the study. The researchers’ self-administered questionnaires to the students during class contact after obtaining their consent. This method was found convenient, because it is easy to access the majority of the students during the residential sessions.

3.2 Measurement instrument development

The study adapted Buli and Yesuf’s (2015) measurement instrument, and this was refined using Ajzen’s (1991) theory. The questionnaire consisted of five questions, namely, PA, SN, PBC, EI and demography. The scale measurement was based on a five-point Likert scale ranging from 1 (strongly disagree – SD) to 5 (strongly agree – SA). The items in the measurement instrument were as follows: PA (five items), subjective norms (three items), PBC (six items), EI (six items) and demography (gender and age).

4. Results

4.1 Descriptive statistics

The results presented here were obtained after performing descriptive statistics, correlations, regression analysis and AMOS and to portray the main features of variables under study and the relationship between them. Respondents ranged in age between 20 and 51 years, with a mean age value ($M = 2.19$) and standard deviation ($SD = 0.702$). From the respondents’ profile, it is evidenced that women are 154 (62.9 per cent) in number compared to 60 men, representing 24.5 per cent, respectively. Age wise, a small number (31) are below the age 31 years. In terms of age, 68.5 per cent are 40 years of age or less, meaning a significant number of the participants is considered to be in their youthful years. A good number of the respondents (47.8 per cent) fall between 31 and 40 years, followed by those who are 41-50 years old (25.7 per cent) and those who are 51 years old above, representing (2.0 per cent).
4.2 Validity and reliability tests

This is a report on the validity of the model and the values of the regression weights. Convergent validity refers to the extent to which indicators of a construct converge or share a high proportion of variance in common (Hair et al., 2010). This tests the convergent and discriminant validity of the critical constructs and can be assessed by referring to the measurement model. Fornell and Larcker’s (1981) study suggest that to test for the convergent validity for a measurement model, the following three criteria must be met; first, all factor loadings should be significant and higher than 0.50 (Janssens et al., 2008), second, the scale composite or construct reliability should exceed 0.70 (Nunnally and Bernstein, 1994), and last, the average variance extracted (AVE) for each construct should be 0.5 or above (Hair et al., 2010).

Table I indicates measures of convergent validity of the model. In the present study, we tested convergent validity of the measurement model utilising AVE and composite reliability (CR). To assess the discriminant validity, use of the AVE is recommended. To this end, the square root of the AVE (diagonal of Table I) is compared with the correlations between the constructs (the off-diagonal elements of Table I). As can be seen, the square root of the AVE for all the constructs is greater than the correlation between them, suggesting that each construct relates more strongly to its own measure than to others.

CR is a less biased estimate of reliability than Cronbach’s alpha, and the acceptable value of CR is 0.7 and above. The values in italics are the square roots if each AVE (i.e. square root of 0.567 = 0.753), and the values in red are the bivariate correlation values. It can be observed in Table IV that PA, SN and EI are all above the recommended value of 0.7, except for the PBC, which is 0.647. From Table I, AVE values talk about the validity of the model. AVE values should be above 0.5. In the table, it can be observed that PBC does not have high enough validity as it is below 0.5. We can therefore safely say that all the constructs in the measurement model showed adequate convergent validity and reliability, except for the PBC that fell below the recommended threshold of 0.5 levels.

To test discriminant validity, sometimes it is advisable to use standardised regression weights significant at 0.05 levels. Table II shows the standardised regression weights of the model. It can be observed from the table that regression weights, which are significant, are those of SN-PBC, SN-PBC, EI-PA and EI-PBC, while SN-PA and EI-SN are not. It is recommended that these should not be more than 0.05 significant levels.

Discriminant validity is achieved by considering correlations between constructs or factors. It is postulated that items should correlate more strongly with their own construct as
opposed to any other, indicating that they are perceived by the respondents as belonging to their theoretical constructs (Buli and Yesuf, 2015). In our case, as demonstrated in Table III, all constructs, PA, SN, EI and PBC, correlate strongly with their constructs than any other. Therefore, we conclude that there was no problem with discriminant validity in this study.

On the one hand, variables PBC and PA have a positive and significant correlation with EI measures. On the other hand, variable SN has a negative and significant correlation with EI. In addition, SN and PBC have a positive and significant correlation with each other.

4.3 Structural equation modelling
Reliability measures refer to the internal consistency of the factors. The scale was assessed using Cronbach’s alpha coefficient to test its internal consistency and reliability. A minimum cut-off for Cronbach’s α coefficient is always recommended to range between 0.6 good to 0.9 best measures. Therefore, any measures that fall below the 0.6 cut-off point marks were deemed not suitable in this study. This is always achieved by performing factor analysis using Cronbach’s α coefficient (Agolla and Van Lill, 2016; Andy, 2005). As shown in the Table I, the values of Cronbach’s α coefficient are above the minimum (0.6) threshold that is recommended (Nunnally, 1978) (Table IV).

Table V indicates the results of Kolmogorov–Smirnov (K-S) Lilliefors correction test to determine data distribution. Assessing normality assumption should be considered for using parametric statistical tests. In this scenario, it is recommended that K-S alone should not be relied on due to its low power; hence, the normality tests was conducted using S-W as shown in the table (Ghasemi and Zahediasl, 2012; Yap and Sim, 2011). From Table V, our study validated data, and correct statistical tests have been used.

<table>
<thead>
<tr>
<th>Latent constructs</th>
<th>PBC</th>
<th>PA</th>
<th>SN</th>
<th>EI</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBC</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA</td>
<td>0.486**</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SN</td>
<td>0.149*</td>
<td>−0.144*</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>EI</td>
<td>0.711**</td>
<td>0.657**</td>
<td>−0.105</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Notes: **Correlation is significant at the 0.01 level (two-tailed); *correlation is significant at the 0.05 level (two-tailed)

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Mean</th>
<th>SD</th>
<th>Cronbach’s α coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBC (6 items)</td>
<td>3.40</td>
<td>1.02</td>
<td>0.91</td>
</tr>
<tr>
<td>PA (5 items)</td>
<td>4.67</td>
<td>0.98</td>
<td>0.84</td>
</tr>
<tr>
<td>SN (3 items)</td>
<td>2.31</td>
<td>1.33</td>
<td>0.86</td>
</tr>
<tr>
<td>EI (6 items)</td>
<td>4.17</td>
<td>0.78</td>
<td>0.86</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Kolmoorov–Smirnova Lilliefors correction test Statistic</th>
<th>df</th>
<th>Sig.</th>
<th>Shapiro–Wilk Statistic</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SN</td>
<td>0.148</td>
<td>245</td>
<td>0.000</td>
<td>0.883</td>
<td>245</td>
<td>0.000</td>
</tr>
<tr>
<td>EI</td>
<td>0.124</td>
<td>245</td>
<td>0.000</td>
<td>0.876</td>
<td>245</td>
<td>0.000</td>
</tr>
</tbody>
</table>
To examine the conceptual framework of the present study, we performed “structural equation modelling technique”. Structural equation modelling (SEM) is a multivariate technique used to test this type conceptual framework because of its ability to simultaneously examine a number of dependent linear relations in a situation where one or more constructs (variables) are both dependent and independent (Agolla and Van Lill, 2016; Mbrokoh, 2016).

To perform SEM analysis, there are certain common fit measures that are available to statisticians. In this case, the common fit measures adopted (CMIND.F, GFI, CFI, RMR and root mean square error of approximation [RMSEA]) were applied to appraise the overall model fit. The overall fit values of the study model are summarised as shown in Table VI, and their scores fulfil the acceptable levels.

Chi-square test tests the null hypothesis that the over-identified (reduced) model fits the data and does a just-identified (full, saturated) model. In a just-identified model, there is a direct path (through an intervening variable) from each variable to each other variable. When one or more of the paths deleted, we obtained an over-identified model. The non-significant Chi-square here (0.974) indicated that the fit between our over-identified model and the data is not significantly worse than the fit between the just-identified model and the data. This can be seen from the just-identified model in this study. A good fit model is one that can reproduce the original variance-covariance matrix (or correlation matrix) from the path coefficients, in much the same way that a good factor analytic solution can reproduce the original correlation matrix with little error.

NPAR is the number of parameters in the model. In the saturated (just-identified) model there are 210 parameters – 20 variances (one for each variable) and 190 path coefficients. For our tested (default) model, there are 79 parameters. For the independence model (one where all of the paths have been deleted), there are 20 parameters. CMIN is a Chi-square statistic comparing the tested model and the independence model to the saturated model (Table VI). We saw the former a bit earlier. CMIN/DF, the relative Chi-square, is an index of how much the fit of data to model has been reproduced by dropping one or more paths. One rule of thumb is to decide which paths you have to drop if too many index exceeds 2 or 3. In this case, the CMIN/DF is much less than 3 and the $p$-value > 0.05, which points to a good fit of the model.

GFI, the Jöreskog’s goodness of fit index, tells what proportion of the variance in the sample variance-covariance matrix is accounted for by the model. This should exceed 0.9 for a good model. For the saturated model it will be a perfect 1. Adjusted GFI (AGFI) is an alternate GFI in which the value of the index is adjusted for the number of parameters in the model. The fewer the number of parameters in the model relative to the number of data points (variances and covariances) in the sample variance-covariance matrix, the closer the AGFI will be to the GFI. The PGFI (P is for parsimony), the index is adjusted to reward simple models and penalise models in

### Table VI. Model fit

<table>
<thead>
<tr>
<th>Overall fit of the model</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Root mean square error of approximation (RMSEA)</td>
<td>0.000</td>
</tr>
<tr>
<td>Comparative fit index (CFI)</td>
<td>1.100</td>
</tr>
<tr>
<td>IFI</td>
<td>1.061</td>
</tr>
<tr>
<td>RFI</td>
<td>0.762</td>
</tr>
<tr>
<td>Goodness fit index (GFI)</td>
<td>0.958</td>
</tr>
<tr>
<td>Chi-square (CMIN/D.F)</td>
<td>0.775</td>
</tr>
</tbody>
</table>
which few paths have been deleted. This goodness of fit indices compares model (default) to the independence model rather than to the saturated model. The Normed Fit Index (NFI) is simply the difference between the two models' Chi-squares divided by the Chi-square for the independence model (Mbrokoh, 2016). For our data, that is \((617.312 - 101.504)/617.312 = 0.836\). Values of 0.9 or higher (some say 0.95 or higher) indicate good fit (Table VI).

The comparative fit index (CFI) uses a similar approach (with a non-central Chi-square) and said to be a good index for use even with small samples. It ranges from 0 to 1, like the NFI, and 0.95 (or 0.9 or higher) indicates a good fit (Table VI). RMSEA estimates lack of fit compared to the saturated model. RMSEA of 0.05 or less indicates good fit, and 0.08 or less adequate fit. LO 90 and HI 90 are the lower and upper ends of a 90 per cent confidence interval on this estimate. PCLOSE is the \(p\)-value testing the null that RMSEA is no greater than 0.05.

### 4.4 Model testing

From Table VII, it can be observed that standardised regression weights for the paths SN to PBC, EI to PA, and EI to PBC are significant, while SN to PA and EI to SN are non-significant.

This result is similarly to the study (Buli and Yesuf, 2015), which found that SN and EI not significantly related. Contrary to (Ajzen, 1991; Iakovleva et al., 2011) assertion that there is a relationship between PA, SN, PBC and EI.

In Figure 2, the values of the standardised regression weights PA, PBC, SN and EI are presented. The \(R^2\) change for regression PA toward EI was 0.49 (\(p < 0.05\)). \(R^2\) Change for regression for PA towards SN was \(-0.15 (p < 0.05)\), \(R^2\) change for variable PBC toward SN

---

**Table VII.**

<table>
<thead>
<tr>
<th>Structural path analysis (hypotheses testing)</th>
<th>Estimated regression weight</th>
<th>Sig</th>
<th>Estimated standardised regression weight</th>
<th>Accept/Reject</th>
</tr>
</thead>
<tbody>
<tr>
<td>SN (\rightarrow) PA</td>
<td>(-0.196)</td>
<td>0.078</td>
<td>(-0.150)</td>
<td>Not supported</td>
</tr>
<tr>
<td>SN (\rightarrow) PBC</td>
<td>0.374</td>
<td>0.028</td>
<td>0.204</td>
<td>Supported</td>
</tr>
<tr>
<td>EI (\rightarrow) PA</td>
<td>0.569</td>
<td>&lt;0.001</td>
<td>0.488</td>
<td>Supported</td>
</tr>
<tr>
<td>EI (\rightarrow) PBC</td>
<td>0.725</td>
<td>&lt;0.001</td>
<td>0.441</td>
<td>Supported</td>
</tr>
<tr>
<td>EI (\rightarrow) SN</td>
<td>(-0.059)</td>
<td>0.124</td>
<td>(-0.066)</td>
<td>Not supported</td>
</tr>
</tbody>
</table>

**Figure 2.**

Redrawn model with standardised regression weights

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was $0.20 (p < 0.05)$, $R^2$ change for regression PBC toward EI was $0.44 (p < 0.05)$. Our model explains 62.5 per cent of variance in EI due to PA, SN and PBC.

5. Discussion
The results of the present study answer at least 3 hypotheses and rejected 2 hypotheses. The squared multiple correlation coefficients, i.e. $R^2$, of each path in the model, whereas EI is the dependent, $R^2$ is 0.625 (62.5 per cent) accounting to variations in the independent variable. Thus, the 62.5 per cent of the variation in EI is directly due to the variation in the independent variables PBC, PA and SN. In other words, 37.5 per cent of the variance is unexplained or, due to other factors, not accounted for in the TPB. Nonetheless, this was a significant result and exceeded those found by other comparable researchers (Buli and Yesuf, 2015; Karimi et al., 2013, 2014; Linan and Chen, 2009), which suggest that attitudes toward behaviour (PA), SNs and PBC typically explain 30-50 per cent of the variance in EI, hence leaving out nearly 50 per cent of the variance in the EI unexplained. It can be concluded that this result is highly satisfactory, because most previous research using models typically have only managed to explain between 30-50 per cent (Ferreira et al., 2012; Linan and Chen, 2009).

In our study, we confirmed partially that (Ajzen, 1991) TPB theory could be applied when studying entrepreneurial intentions among students. Study confirmed statistically positive significant relationship between PA and EI, indicating that students view entrepreneurship as attractive career, advantageous, given opportunity and resources, and would pursue entrepreneurial ventures. Therefore, conforming $H1$ of the study, that PA will have statistically positive influence on entrepreneurial intentions (EI). This result confirms other studies (Buli and Yesuf, 2015; Ferreira et al., 2012), which also found positive relationships between PA and EI amongst tertiary students. Alternatively, $H2$, which hypothesised a relationship between PA and SN, was found to be a non-significant, indicating that family and friends influences may hold so much when it comes to pursuing entrepreneurial ventures. Another study (Do Paço et al., 2011) found that PA and PBC have a significant influence on entrepreneurial intentions, while the influence of subjective norms is weaker. SN toward EI showed a non-significant relationship. Our result supports another study (Arrighetti et al., 2016), which found that family support is not relevant in explaining entrepreneurial intentions amongst the students. This, contrary to result, did not confirm (Ferreira et al., 2012) similar studies on the effect of SN on EI, which found that SN has a significant relationship. Our study also corroborates Vinogradov et al. (2013), who found PA and PBC to be strong predictors of entrepreneurial intention, while SN had no significant effect. These differences in the results can be interpreted to mean that most of the students have control of their lives given that majority are employed adults who are only furthering their education for various reasons such career shift and progression as opposed to getting employment for the first time. Other study (Vinogradov et al., 2013) found that entrepreneurial intention increases with more favourable SN, but at a greater rate for those respondents who have few satisfactory employment opportunities. This further confirm our assertion that, those adults' students may not be influenced by family and friends when it comes to desire to pursue entrepreneurial activities.

PBC had multiple correlation coefficients ($R^2$) of the path PBC explained $0.20$ (20 per cent) variations in SN. Indicating that PBC had positive effects on the SN. This means that those who students who have desire to venture into business though may
not have the support from their family and close friends, could still venture into business so long as they have strong PBC. Students who view themselves as able to start businesses and keep them running, have control of start-ups, know the necessary practical details to start a firm, and believe in profitability of such venture would still have intentions without necessary support or influence from their family and close friends. On one hand, the present study reveals that PBC has influence on EI. $R^2$ change standardised regression weight is 0.44, that is, 44 per cent of PBC explained variations in EI. This result corroborated other studies (Ajzen, 1991; Iakovleva et al., 2011) findings, which found a strong relationship between PBC and EI.

6. Concluding remarks
The present study result offers a worthwhile understanding into the landscape of the entrepreneurial setting in Botswana from an ODL tertiary institution students’ perspective. We confirm that TPB can partially be applied in other environment in studying entrepreneurial intentions. Our study achieved statistically significant explanatory power of 62.5 per cent of the variations in EI, due to PA, SN and PBC that is considered to be more robust, given most studies have only managed to attain 30-50 per cent of variations in EI.

The study first contribution is refining the Ajzen’s TPB through essentially introduction of SN as intervening variable between PA and EI, again SN between PBC and EI as a direct antecedent to intentions. In the literature we could not find much studies that have included SN and intervening variable; therefore, this study has explored the relationships between PBC and SN and found a positive significant effect that have added another dimension to the study of entrepreneurial intentions scale. The study also extends the literature in this interesting field that has long over-relied on literature generated in the Western world, through empirically testing the Ajzen’s theory in the context of Botswana a developing country particularly from Africa. It is worth noting that the study of entrepreneurship is culture context in that, different regions or cultures are likely to have different factors intentions. The reason here is cultural values are likely to influence attitudes (Iakovleva et al., 2011). Moreover, the paper implores scholars to question the validity of inclusion of the variable SNs in the study of entrepreneurial intentions given that it is receives strong support in other cultures. Last, the scale developed can also be useful in gauging the likelihood of unemployed students venturing into entrepreneurial activities.

This study contributes to the practice through the framework presented here that could be useful to the financiers of the potential entrepreneurs as this may offer guidelines in which to base their decisions on when deciding to fund new entrepreneurial ventures. In addition, government particularly, the Botswana government can find this result useful as this may inform decisions when granting students funds for new ventures. This is because not all unemployed graduates will have the desire to venture into business; therefore, funding them without first determining their intentions first may be foolhardy. Gauging entrepreneurial intentions among students involve a complex process such as knowing values and cultural aspects impacts on an individual. We opined in this study that, the main intellectual contribution of this manuscript could influence the ways grants are disbursed to various students, and also financiers can use the results to select the entrepreneurs with the highest likelihood of long-term success. This will ensure that only those students or students who qualify based on those criteria
are eligible for funding, hence increasing the number of successful start-ups with possible successful rate.

Our main limitations of the present study come from cross-sectional data, entrepreneurial intentions cannot be perfectly measured in a snapshot type of situations, but rather may require monitoring over a period of time. This is because people and circumstances that drive or motivate them to venture into businesses are likely to change over time, hence creating new intentions. Methodologically we relied purely on quantitative data, therefore could not establish deep reasons behind intentions amongst the students. However, we suggest for triangulation approach as a way of in-depth inquiry to corroborate these findings in the context of Botswana. We could not establish significant effects of SN on EI, which is contrary to most studies. It is suggested that other research need to establish this relationship in the future. Given entrepreneurial intentions depends upon various factors, we recommend for further studies using similar variables in other cultural and geographical settings a way to validate the TPB theory as well as our results. Therefore, this study advances entrepreneurship research by addressing the call for more studies in developing countries context.

References


Further reading


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Impact of founder CEO and CEO ownership on entrepreneurial orientation, moderating role of CEO narcissism

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Abstract

Purpose – This study aims to explore the moderating impact of narcissism overload on the relation between founder CEO and entrepreneurial orientation (EO) in registered private schools of Pakistan.

Design/methodology/approach – Data were collected through a stratified random sampling method with the help of previously validated questionnaires. A sample of 121 replies was gathered for analysis. SPSS has been used to find the results.

Findings – Results depict that CEO narcissism moderates the relation between founder CEO and EO and does not moderate the relationship between and CEO ownership and EO.

Originality/value – Many studies focused on the founder personality characteristics (such as generalized self-efficacy or locus of control) are not directly observed, but rather inferred their effect indirectly. The study contributes to examine how the founder CEO variable interacts with CEO personality to influence EO. This study will propose a practical approach to investigate whether and how the narcissism constructs moderate the founder CEO–EO relationship. Direct association between stock ownership and EO will also be examined.

Keywords Founder CEO, CEO Ownership, Entrepreneurial Orientation, CEO Narcissism

Paper type Research paper

1. Introduction

Entrepreneurial behaviors and entrepreneurial conducts are very famous among the current organizational researchers (Lumpkin and Dess, 2001). Until now, we have little knowledge about the impact of these behaviors on entrepreneurial aspects which are very important for organizational success (Stam and Elfring, 2008). In routine work circumstances, the role of a leader or a chief executive officer and its impact on employees’ behavior is an undeniable fact. Therefore, it is very appealing to investigate how distinct leadership status and attitudes support the entrepreneurial orientation (EO) (Murad, 2014). The perspective of the current study is the relation between funder leader and EO and the moderating role of narcissism of a leader.

It has been established that the founder CEO is a better protector of the original mission by which the organization was constructed as compared to agent CEO (Randøy et al., 2015).
Thus, the EO of the organizations led by founder CEO is better than those led by a hired CEO. Research on entrepreneurship has put forward that founder CEOs are above all superior at encouraging expansion by creating and applying strategic schemes to take advantage of on latest opportunities (Jayaraman et al., 2000). Agency theory states that ownership makeup may shape decision-making behavior and organization’s performance.

However, the meanings of entrepreneurship varies because it depends on the business nature and the specific situation of the business which can be changes country to country and generation to generation but the main definition used in the current studies Miller’s (1983) notion of definition which demonstrates the entrepreneurship is the name of behavior that redistributes the business resources with enterprising spirit and innovativeness by considering risk-taking mind set to create a new worth of theses and resources and business. The purpose of this study is to investigate that how narcissism construct moderating effect between CEO and the EO in small firms i.e. registered private schools in different cities of Pakistan. Where it will also be tested the direct relationship between stock ownership and EO.

2. Literature review and hypotheses
2.1 Founder CEO
Founders have unique relationships with their firms. Because of their privileged position, founders may be able to extract higher private benefits of control (Jayaraman et al., 2000). A person who is founder CEO may also distort decisions related to investment(s) as they are not well-diversified (Fahlenbrach, 2009). Firms do also evolve; people who were founders may no longer possess the necessary expertise to run such companies; at the same time, they may be hesitant to relinquish control (Wasserman, 2003). In case they give up control, it may be a preference for transferring it to the potentially under-qualified person because he is a family member. It is the other thought that founders may be more aligned toward outside shareholders instead of managers who may be professional; this could be due to longer investment horizon and the high ownership percentage they have in the firm (Agrawal and Knoeber, 1996). This may be due to high care for the firm being found by them so they may like to exert more high efforts for the ownership structure woven around them.

2.2 CEO ownership
There is a mixed answer from research findings for considering the effect of ownership percentage by CEO on the value of the firm and EO (Liu et al., 2011; Wang, Sun, Yu, and Zhang, 2014). Few researchers have a firm opinion that there exists a non-linear relationship within percentage ownership of top executives and firm value and some researchers also highlight non-monotonic relationship amongst CEO ownership and value of the firm (Schmidt and Fahlenbrach, 2017). Few also suggest a formula whose value increases if percentage ownership remains 0-15 per cent, declines in the range of 15-50 per cent and finally increases again upon 50 per cent or more ownership level by CEO (Boone et al., 2007). Many researchers investigated the relationship of a firm’s value with the structure of equity ownership (Demsetz and Lehn, 1985; McConnell and Servaes, 1990). Another researcher has investigated this relationship of value and ownership by taking the hypothesis that amount of only the ownership of CEO as a singular individual has a significant impact on firm’s value (McConnell and Servaes, 1990).

2.3 Entrepreneurial orientation
This specific finding associated with the recent studies by Dess and Lumpkin (2005) and Sanchez (2013), who explained that entrepreneurs have the capability to deliver an
innovative and resourceful solution to sort out the business problems. Thus, creativity and innovativeness had statistically insignificant but positive effect on the performance of enterprise (Dimitratos et al., 2014).

Study of EO concerning literature, people define EO as structure, processes and behaviors characterized through proactiveness, innovativeness, risk-taking, autonomy and competitive aggressiveness (Dai et al., 2014). The five dimensions of EO explained as follows: innovativeness (encouraging and supporting new ideas by encouraging creativity and experimentation); risk-taking (allowing to move in support when the possibility of success is considered low); and proactiveness. According to the Schumpeter (1942) entrepreneurship theory, within a given period, an entrepreneur has a new opportunity to attempt an innovation using his or her skill and knowledge.

The current study states entrepreneurship on the basis of EO by Miller (1983), who has been gained attention of so many researchers recently.

From previous research, EO is found to have three (3) dimensions, these are risk-taking, innovativeness, and pro-activeness (Rauch et al., 2009), alternatively other researchers perceive EO as having five (5) dimensions, these further include competitive aggressiveness and autonomy (Narayanan, 2017). For entrepreneurship, EO is considered the valid concept, due to its ability to act as a tool for evidence gathering for actions of entrepreneurs and decision-making by them across multiple geographic and organizational contexts (Fernández-Mesa and Alegre, 2015).

2.4 CEO narcissism

Narcissism is an inflated but fragile view of one’s self-importance; further, it is a construct which generated widespread interest within social science discipline for few decades (Gerstner et al., 2013). It is evident from the literature that negative consequences relating to narcissism are well documented (Chatterjee and Hambrick, 2007). It is true that narcissistic individuals are found principally concerned only with those actions that reflect favorably for themselves, which most of the time leads to perceptions like taking of entitlement, excessive arrogance, shameless self-admiration, and hostility for external criticism (Aktas et al., 2016).

CEO narcissism is considered as charisma in many studies (Agle et al., 2006; Deluga, 1997). In this context, few positive attributes from narcissism operate similarly as those evident from charisma. First of all, both of them may inspire commitment and devotion in others to achieve a higher performance level for the organization (Galvin et al., 2010). This resemblance helps to understand why sometimes individuals are attracted by narcissistic leaders, people may, in this case, view the leadership as transformational. While narcissism at its extreme is considered a personality disorder which can be diagnosed also. Second, research in social science generally views this behavior measured in degree of disorder, ranging from severe to mild. In line with contemporary research in strategic management and social psychology, researchers view narcissism trait among executives like the one which is not necessarily reflecting a personality disorder that presents the disorder in a binary state (Galvin et al., 2015).

2.5 Founder CEO and entrepreneurial orientation

Research related to entrepreneurship suggests that CEOs who are founder are principally excellent in promoting development by devising and carrying out strategic enterprises to take advantage of latest opportunities and taking risks which are core factors of EO (Adams et al., 2009; Wasserman, 2003). Founders, as shown by the word, have more significant occupancy and additional firm related understanding. They are always the expert in internalizing the targets and goals of the firm (Willard et al., 1992) and they pay attention
entirely to accomplish all such goals. For instance, it has been reported in detail that founders, because of their more considerable reputational hazard, possibly will put forth new endeavor to assure firm achievement as compared to non-founders (Willard et al., 1992). Moreover, the existence of a founder as CEO potentially diminishes the chances of conflict and power politics (De Jong et al., 2013). Furthermore, founder CEO has a more extensive business and additional establishment know-how (Zheng et al., 2015), and usually generate commerce in manufacturing wherever they have understanding; which time and again allows competitive advantage (Chen et al., 2015). This show that founder CEO have a direct link to EO.

2.6 Stock ownership and entrepreneurial orientation
The relationship between CEO ownership and EO is mostly advocated through classical agency theory, which states that stockholders stock owner and employee have different interests; hence, when the CEO has a huge ownership share, then interests are shared and EO increases (Eisenhardt, 1989). Moreover, stock ownership has a direct impact on various aspects of EO like risk-taking and strategic proactiveness (Bammens et al., 2015; Zona et al., 2013). Various aspects of stock ownership have been associated to elements of EO such as risk-taking (Dong, Meng, Firth, and Hou, 2014) and innovation (Chen et al., 2014; Shapiro et al., 2015). Usually, the ownership structure of large firms has been discussed where CEO has a small portion of the total fraction, and there is much dispersion in ownership (Zajac and Westphall, 1994). On the contrary, it has been observed that when the ownership increases, the risk-taking ability and intentions decreases (Wright et al., 2002). As CEO of a small firm owns a more substantial part of the firm, hence, the findings of large firms can be applied to the small firms. This shows that stock ownership is associated with EO.

2.7 CEO narcissism and entrepreneurial orientation
The narcissist CEOs are more prone to struggle for daring activities which add to their position by enhancing their leadership level (Pan and Yu, 2017). Narcissists always have competitive intentions; hence, they take risks and dare to do what they want to achieve (Luchner et al., 2011). This is why, narcissistic CEOs inspire their followers to get more out of available resources (Braun et al., 2018). EO relates to the policy-making that firms use to recognize and start on an innovative undertaking (Wales et al., 2013). EO demonstrates a superior degree of being innovative and being proactive; therefore, EO captivates the level to which firm may be dealt entrepreneurial strategic conducts (Lechner and Gudmundsson, 2014). Numerous characteristics of a narcissistic character add to the probability that narcissistic leader behavior will be strongly associated with entrepreneurial, managerial plans (Engelen et al., 2015). This distinctiveness of narcissistic people comprises prejudiced outlook that goal achievement will be winning, a wish to motivate fear and respect between supporters and require of worry for supply limitation when chasing their schedule (Stöckmann et al., 2015).

2.8 Moderating role of CEO narcissism between founder CEO and entrepreneurial orientation
The term narcissism an exaggerated, but the delicate concept that a person may have for his influence and importance (Gerstner et al., 2013). Research work on this term to date has explored only negative implications stem from this phenomenon especially for leadership and individual-level functioning (Gerstner et al., 2013). Despite the research also indicated that quite a many Chief Executive Officers (CEOs) who were considered narcissistic were leading companies which were highly successful (Navis and Ozbek, 2016). Primarily, the
research concerning narcissism revealed the negative effect of the conduct for organization whereas a few works also commented that many narcissistic CEOs pull out enormously prosperous management (Colbert et al., 2014). The originator CEOs of the organization experience individuality regarding personal and production wellbeing thus the central undertaking is the growth of the CEOs personal goals, in the course of heavy affecting affiliations between the originator CEO and their firms (Gali et al., 2016). It is suggested in the present literature that future scholars should find out narcissism as a moderator in the association between founder CEO and EO (Deb and Wiklund, 2017).

2.9 Moderating role of CEO narcissism between CEO ownership and entrepreneurial orientation

One of the critical reasons narcissists tend toward organizational leadership roles is the desire to have an admirable legacy left behind for the achievement being made (Simsek et al., 2010). At few places, Organizational settings are such that it may provide narcissistic leaders opportunities via power and authority that can help facilitate achieve personal ambitions of those persons (Lee and Walsh, 2014). So in general, a role taken as CEO provides a narcissists person with the highest authority; therefore, studies in management discipline’s literature were previously focused only on examining CEOs narcissism (Gerstner et al., 2013). The researchers noted about narcissism that typically it is viewed being detrimental, but it can be considered as beneficial in situations for firm's leaders and then it can be linked to EO (Engelen et al., 2016). The CEO who has a more substantial portion of stock ownership are more narcissist and tend to have a more risk-taking and strategic nature (Liu et al., 2011). The moderating role of CEO narcissism can be proven by the upper echelon theory which refers that all the behaviors of the upper echelon, i.e. CEOs may impact the plans and strategies made and patterns taken on by a firm (Seaton and Boyd, 2007). The managerial features change the strategies made and then impact the result for the firm (Higgins and Gulati, 2003), as the CEOs having larger stock and their EO are affected by their narcissist behavior.

The above discussion has made us able to hypothesis the research model as depicted in Figure 1, and the hypotheses are stated as below:

\[ H1 \]. There is a direct relation between founder CEO and EO.
\[ H2 \]. There is a direct association between stock ownership and EO.
\[ H3 \]. There is a significant impact of CEO narcissism on EO.
\[ H4 \]. CEO narcissism plays a role of moderator between founder CEO and EO.
\[ H5 \]. CEO narcissism has a moderating role between CEO Ownership and EO.
3. Research methodology

3.1 Sampling and measurement

The population for the current study consists of CEO heads of private schools in Pakistan. These schools are registered in respective district education offices. They have registered NTN numbers and paid income tax. For getting the data of the survey, the respondents from all four provinces of Pakistan have been approached. Initially, 200 questionnaires (50 to each province) were sent out, of which 121 utilizable questionnaires have been collected. Hence, the rate of response was 60.5 per cent. The scales for all the four variables of interest, which are founder CEO, CEO ownership, EO and CEO narcissism, were used as per literature to produce a questionnaire for the current study. Questions regarding demographics were also included in the questionnaires. The question regarding CEO being a funder or otherwise was asked in Yes or No. The same was later on coded as 1 and 0 in SPSS during data entry.

While designing the questionnaire, the ownership was asked in five major categories. First was 20 per cent ownership, and value below this was coded as 1 in SPSS during data entry. The second was 21-40 per cent, which was coded as 2 in SPSS, third was between 41 and 60 per cent, which was coded as 3, the fourth category was between 61 and 80 per cent, which was coded as 4, and the 81 per cent and above was coded as 5 in SPSS.

The scale of EO was adopted from the previous study by Kam-Sing Wong whereby the full scale has been given (Kam-Sing Wong, 2014). Examples of items are “Rates of change in R&D investment of our industry are very high,” “Our firm has a strong proclivity for the high-return high-risk project” and “Our firm typically initiates actions to which competitors have to respond to”.

The CEO Narcissism scale was adopted from the paper of Ames, Rose, and Anderson which gives as 16 items scale (Ames et al., 2006). Examples of items of the scale are “I know that I am good because everybody keeps telling me so,” “I am going to be a great person” and “I like to be the center of attention”.

The data for the study was taken from the CEOs of private schools of all four provinces through a stratified random sampling method where the representation of all four provinces of Pakistan was shown. The total sample was 121 among which 29 samples were from Punjab, 28 from KPK, 40 from Karachi and 24 were from Baluchistan based on the rational estimate of private schools in the provinces.

The two scales of EO and CEO narcissism in the questionnaire were devised on the five-point Likert scale. In SPSS, strongly disagree was coded as 1, disagree was coded as 2, neutral was coded as 3, agree was coded as 4 and strongly agree was coded as 5 on the scale. At the end of the questionnaire, questions regarding demographic variables, i.e. CEO education, CEO tenure, CEO age, CEO gender, board size and firm inheritance, were asked.

4. Results and discussion

The data was examined through SPSS by carrying on statistical analysis of demographics, construct, and hierarchical regression analysis.

The profile of respondents has been given in Table I, showing complete details of all demographic variables.

Before the testing of hypothesis, we performed two types of analysis i.e. validity analysis and reliability testing. Analysis of the reliability test of measurements list means respectively measurement of the identical concept to develop identical progress. The reliability score shows the internal consistency which can be analyzed by using Cronbach’s Alpha. It is also called Cronbach’s coefficient a. Analysis of validity of the measurement list examines whether measurement list was available to assume that what this survey proposed to achieve. Our paper used hierarchical regression analysis. As two scales were
adopted from earlier papers, the Cronbach’s alpha was checked using SPSS to find their T2 internal reliability. The values of Cronbach’s alpha are given in Table II.

To analyze the collected data to accept or reject our hypothesis, we conducted hierarchical regression analysis through SPSS according to the assumptions laid down by Baron and Kenny (Baron and Kenny, 1986). The results are shown in Tables IV and V.

Table III shows the correlation analysis among all variables. This shows that our four main variables are well associated hence we can move toward regression analysis.

<table>
<thead>
<tr>
<th>Demographic variables</th>
<th>F</th>
<th>(%)</th>
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</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>65</td>
<td>53.7</td>
</tr>
<tr>
<td>Female</td>
<td>56</td>
<td>46.3</td>
</tr>
<tr>
<td><strong>CEO education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate</td>
<td>20</td>
<td>16.5</td>
</tr>
<tr>
<td>Bachelor</td>
<td>21</td>
<td>17.4</td>
</tr>
<tr>
<td>Master</td>
<td>21</td>
<td>17.4</td>
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<tr>
<td>MPhil</td>
<td>26</td>
<td>21.5</td>
</tr>
<tr>
<td>PhD</td>
<td>33</td>
<td>27.3</td>
</tr>
<tr>
<td><strong>CEO tenure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-6 years</td>
<td>63</td>
<td>52</td>
</tr>
<tr>
<td>7-10 years</td>
<td>41</td>
<td>33.9</td>
</tr>
<tr>
<td>11-12 years</td>
<td>17</td>
<td>16.1</td>
</tr>
<tr>
<td><strong>CEO age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28-38 years</td>
<td>48</td>
<td>39.7</td>
</tr>
<tr>
<td>39-49 years</td>
<td>28</td>
<td>23.1</td>
</tr>
<tr>
<td>50 and above</td>
<td>45</td>
<td>37.2</td>
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<tr>
<td><strong>CEO gender</strong></td>
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<td></td>
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<tr>
<td>Male</td>
<td>59</td>
<td>48.7</td>
</tr>
<tr>
<td>Female</td>
<td>62</td>
<td>51.2</td>
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<tr>
<td><strong>Board size</strong></td>
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<td></td>
</tr>
<tr>
<td>10</td>
<td>8</td>
<td>6.6</td>
</tr>
<tr>
<td>9</td>
<td>6</td>
<td>5.0</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
<td>7.4</td>
</tr>
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<td>7</td>
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</tr>
<tr>
<td>1</td>
<td>16</td>
<td>13.2</td>
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<tr>
<td><strong>Firm is inherited</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>65</td>
<td>53.7</td>
</tr>
<tr>
<td>No</td>
<td>56</td>
<td>46.3</td>
</tr>
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</table>

Table I. Statistical analysis of demographics

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cronbach’s Alpha</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>EO</td>
<td>0.770</td>
<td>16</td>
</tr>
<tr>
<td>CEO Narcissism</td>
<td>0.817</td>
<td>16</td>
</tr>
</tbody>
</table>

Table II. Statistical analysis of construct
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**H5** states that CEO narcissism has a moderating role between CEO ownership and EO. Table V shows that moderation does not exist ($\beta = 0.055$, $R^2 = 0.133$, adjusted $R^2 = 0.111$); hence, $H5$ has been rejected. This may be due to weak questionnaire formulation or a lack of understanding by the respondent. **H1** states that there is a direct relation between founder CEO and EO. The relation is evident from both the correlational analysis and regression analysis where the values are significant ($r = 0.282^{**}$, $\beta = 0.282^{***}$). Hence, **H1** is accepted.

The result is in line with the findings of earlier papers (Adams *et al.*, 2009; Wasserman, 2003).

The study on EO has revealed that there are positive and negative aspects of the high level of EO (Wiklund and Shepherd, 2011). It seems that EO works like a double-edged sharp sword where high-level EO linked with short term relative performances in the result of failure with the highest probability. Therefore, managers of small business need to balance both situations. We applied governance as a lens to explain variation in EO across firms which largely support for the future theoretical predictions. The CEO in small business and private firms have the overruling power and this is linked to the related flaws of the board (Uhlaner *et al.*, 2007). So, this study reveals that ownership, Narcissism, and CEO Founder status influence EO (Figure 2).

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<tbody>
<tr>
<td>CEO education</td>
<td>0.086</td>
<td></td>
<td></td>
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<tr>
<td>CEO tenure</td>
<td>0.076</td>
<td>0.002</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>CEO age</td>
<td>0.016</td>
<td>0.106</td>
<td>-0.036</td>
<td></td>
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<tr>
<td>Board size</td>
<td>0.012</td>
<td>0.179*</td>
<td>0.061</td>
<td>0.015</td>
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<tr>
<td>Firm is inherited</td>
<td>0.042</td>
<td>0.045</td>
<td>-0.168</td>
<td>0.125</td>
<td>0.057</td>
<td></td>
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<tr>
<td>Founder CEO</td>
<td>0.079</td>
<td>-0.020</td>
<td>0.042</td>
<td>-0.058</td>
<td>-0.001</td>
<td>-0.076</td>
<td></td>
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<tr>
<td>CEO ownership</td>
<td>0.108</td>
<td>-0.095</td>
<td>-0.007</td>
<td>-0.052</td>
<td>-0.033</td>
<td>-201*</td>
<td>0.296**</td>
<td></td>
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<tr>
<td>EO</td>
<td>0.165</td>
<td>0.045</td>
<td>-0.093</td>
<td>-0.074</td>
<td>-0.119</td>
<td>-0.046</td>
<td>0.282**</td>
<td>0.291**</td>
<td></td>
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<tr>
<td>Correlation analysis</td>
<td>CEO narcissism</td>
<td>0.011</td>
<td>-0.016</td>
<td>0.013</td>
<td>0.046</td>
<td>0.005</td>
<td>-0.148</td>
<td>0.221*</td>
<td>0.327**</td>
</tr>
</tbody>
</table>

**Table III.**

**Interaction effects of CEO**

![Figure 2.](image)

**Notes:** Founder status and CEO prior; start-up managerial experience on EO
$H2$ states that there is a direct association between stock ownership and EO. Like earlier relation, $H2$ is accepted as both the correlation and regression values are significant ($r = 0.291^{**}$, $\beta = 0.291^{***}$). The link is established as earlier researchers has been supported (Bammens et al., 2015; Zona et al., 2013). As far as $H3$ is concerned, the supposition that there is a significant impact of CEO narcissism on EO has been accepted as the correlation values are $r = 0.302^{**}$ and $\beta = 0.252^{***}$. Thus the studies of Pan and Yu (2017) Luchner et al. (2011) are again supported by the current study.

$H4$ states that CEO Narcissism moderates the relation between founder CEO and EO. The results shown in the regression Table IV states that the significant moderation exists in the immediate relation ($\beta = -1.251^{*}$, $R^2 = 0.367$, adjusted $R^2 = 0.112^{**}$). The results are in line with the recommendation Deb and Wiklund (2017), which is the fundamental study to theorize about the current model. This study is very consistent in regard that the founder CEO has the highest risk-taking tendency as compared to the CEOs who are just CEOs but not the founder as well (Begley 1995). Additionally, some other studies (Schulze et al., 2001) claim that founder CEO can construct serious like agency problem. Because the founder CEO will take decision linked with an uncertainty that may threaten the long term existence of the firm. $H5$ states that CEO Narcissism has a moderating role between CEO Ownership and EO. CEO Narcissism is a crucial aspect in the life of CEO especially in small firms like private schools where all responsibility is considered on the shoulder of CEO. In such circumstances, a person having too much responsibility also devises innovative plans, takes risks and competes in the environment. Therefore, CEOs of such organizations can attend training for a better understanding of the narcissist behaviors so that their decisions may not be impacted by the negative impacts of narcissism which may alternatively decrease productivity. Regular meditation and self-analysis may help the CEOs to control the negative impacts of narcissism and thus increase the EO to increase the performance of the firm. Table V shows that moderation does not exist ($\beta = 0.055$, $R^2 = 0.133$, adjusted $R^2 = 0.111$); hence, $H5$ has been rejected. This may be due to weak questionnaire formulation or a lack of understanding by the respondents.

This study makes also theoretical contribution in the literature on the governance of small firms. The literature has mainly consist on traditional industry perceptions (Beuselinck and Manigart 2007). However, calls have been prepared to integrate unconventional theoretical perspectives, i.e. steward theory and also principal–principal agency theory toward small firm’s literature (George et al., 2005; Uhlaner et al., 2007; Wasserman, 2003).

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
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<tbody>
<tr>
<td><strong>Step 1</strong></td>
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<td></td>
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</tr>
<tr>
<td>CEO ownership</td>
<td>0.291***</td>
<td>0.085</td>
<td>0.077***</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
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<td></td>
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<tr>
<td>CEO ownership</td>
<td>0.216**</td>
<td>0.133</td>
<td></td>
</tr>
<tr>
<td>CEO narcissism</td>
<td>0.232*</td>
<td>0.133</td>
<td>0.118**</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>CEO ownership</td>
<td>0.17</td>
<td>0.133</td>
<td></td>
</tr>
<tr>
<td>CEO narcissism</td>
<td>0.213</td>
<td>0.133</td>
<td></td>
</tr>
<tr>
<td>EO* CEO narcissism</td>
<td>0.065</td>
<td>0.133</td>
<td>0.111</td>
</tr>
</tbody>
</table>

**Table IV.** Regression analysis

*Note: *, ** and *** denote significance at 1%, 5% and 10%, respectively*
5. Conclusion
As it has been established from that EO may give inconsistent results when tested in empirical studies and so is the case of narcissism (Wiklund and Shepherd, 2011). Similarly, the personality of CEO is also vital which is impacted by its ownership and shares. However, the force represented by CEO's personality is not sufficient to thoroughly explain the phenomena of changes in performance of the firm. For CEO ambitions and attributes to exert influence upon organizational outcomes, it is a must that those ambitions be translated into the behavior of specific firm-level strategy. On the other hand, EO is considered the valid concept, due to its ability to act as a tool for evidence gathering for actions of entrepreneurs and decision-making by them across multiple geographic and organizational contexts. Such features make it interesting for a comparative study like this. Based on these concepts five hypotheses have been developed which have been discussed in detail below.

CEO Narcissism is a crucial aspect in the life of CEO especially in small firms like private schools where all responsibility is considered on the shoulder of CEO. In such circumstances, a person having too much responsibility also devises innovative plans, takes risks and competes in the environment. Therefore, CEOs of such organizations can attend training for a better understanding of the narcissist behaviors so that their decisions may not be impacted by the negative impacts of narcissism which may alternatively decrease productivity. Regular meditation and self-analysis may help the CEOs to control the negative impacts of narcissism and thus increase the EO to increase the performance of the firm.

Like all other studies, the current study has some limitations. First of all, data was collected in a cross-section manner from various schools of all four provinces located at Lahore, Karachi, Peshawar, and Quetta to give a representation of all provinces. Second, the data were collected through self-reported questionnaires which may bring self-serving bias among the respondents. Third, a sample size of 121 is a bit low because the population was loose and only one respondent, i.e. that the head of the school could respond to our questionnaire. Fourth, the two scales were adopted from previous studies which were not validated in Pakistan. Last, the population comes from only one industry.

Given the above discussion, some directions for future research are advocated. Leading factor is that of sample size which may be so high to support views of all industries and markets. In future studies data from many industries may be collected. Second, EO has five dimensions which could be tested separately in future studies. Last, of all, the present study is restricted to only one moderating variable.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Founder CEO</td>
<td>0.282***</td>
<td>0.226**</td>
<td>1.421**</td>
</tr>
<tr>
<td>CEO narcissism</td>
<td>0.252***</td>
<td>0.252***</td>
<td>0.407***</td>
</tr>
<tr>
<td>EO* CEO narcissism</td>
<td>-1.251</td>
<td>0.407***</td>
<td>-1.251</td>
</tr>
</tbody>
</table>

Table V. Regression analysis  
Note: *, ** and *** denote significance at 1%, 5% and 10%, respectively
References


Further reading


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Marketing and entrepreneurial success in emerging markets: the nexus

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Department of Marketing, Central University, Accra, Ghana and

Solomon Abekah Keelson
Department of Marketing, Takoradi Technical University, Takoradi, Ghana

Abstract

Purpose – This paper aims to examine the interconnection between marketing and entrepreneurship among small and medium scale enterprises in emerging markets.

Design/methodology/approach – Quantitative data were obtained from 113 micro, small and medium scale enterprises (SME) into services, manufacturing and agriculture selected conveniently within the Tema metropolis, a harbour city in Ghana; however, purposive sampling was used to choose owners and managers as respondents pre-occupied with marketing and entrepreneurial roles. These voluntary informants have operated between 4 and 9 years.

Findings – The study reveals a significant relationship between five dimensions of the study including market orientation and entrepreneurial success; customer orientation and entrepreneurial success; competitor orientation and entrepreneurial success; intelligence generation; and entrepreneurial success, including information dissemination and entrepreneurial success.

Research limitations/implications – Blending marketing with entrepreneurial initiatives has the propensity to accelerate success for wealth and job creation for national development especially in emerging markets where poverty and under development abounds. Adoption of basic marketing principles enables local entrepreneurs to become vehicles for social re-engineering and for rapid socio-economic growth, which ultimately affects lives at the local level. The study was limited to opinion of SME managers and owners of a harbour city.

Practical implications – Application of basic marketing principles influences entrepreneurial success in emerging markets (EMs) highlighting opinions of managers and owners of SMEs strategy warranting attention of stakeholders. Thus, the study validates theoretical model of how prudent marketing and entrepreneurial attitude contributes entrepreneurial success. It also provides a new perspective on marketing principles and success in emerging markets.

Social implications – Consciously incorporating basic marketing principles into operations of MSMEs will impact performances; hence, social lives of entrepreneurs will be affected positively.

Originality/value – This study being among the few in sub-Saharan Africa highlights how application of marketing principles to entrepreneurial operations is a vital role in growing local MSMEs unto the world stage. Therefore, blending basic marketing principles with entrepreneurial initiatives will accelerate wealth and job creation and national development to achieve the world’s sustainable development goals aimed at reducing poverty.

Keywords Entrepreneurship, Ghana, Marketing orientation, Emerging markets, Entrepreneurial success

Paper type Research paper
Introduction
Entrepreneurial activities driven by active involvement of micro, small and medium scale enterprises (MSMEs) remain the surest economic vehicle for attaining rapid socio-economic development in emerging markets (EMs) and fulfill the ideas of world’s Sustainable Development Goal One. This will reduce extreme poverty by 2030 as envisaged in the world’s poverty reduction agenda. However, sustainable and competitive MSMEs performance will thrive on market focused policies and strategies for entrepreneurial success. The term entrepreneurial marketing remain a thriving (Ferreira et al., 2019; Gilmore et al., 2013) and evolving subject area that is somewhat fluid in the minds of as researchers hence the boundaries of its definition seem extended.

In this article, we argue, with empirical literature support, that researchers seek to establish an interconnection between marketing and entrepreneurship, particularly from the perspective of MSMEs. It is hypothesized that the level of market orientation of a firm determines the degree of entrepreneurial behaviour (Morris and Paul, 1987). Further, development of prudent marketing policies remains the pivot for true entrepreneurial success. In other words, entrepreneurial principles anchor on marketing thoughts in a highly uncertain business environment affect MSME growth (Cho and Lee, 2018).

The marketing philosophy has been touted globally by academics and top corporate executives as a catalyst for achieving robust corporate performance for rapid socio-economic development, especially in competitive markets. This unique business philosophy compels organizations, especially marketing managers, to recognize the customer as the power and source for attaining sustainable, competitive and profitable business outcomes (Kuada, 2016). Indeed, true, marketing is therefore a careful application of customer-focused business principles in all facets of the organization that primarily satisfy consumer excitement and experience compared to activities of peers in the market.

Fundamentally, marketing is all about creating, communicating and delivering valuable products and services to satisfy customers better than peers by leveraging on basic marketing thoughts. Market orientation (MO) philosophy allows organizations to appreciate the customer in attaining all corporate vision within the context of the environment (Amirkhani and Reza, 2015; Deutscher et al., 2016). Thus, with sound marketing and entrepreneurial posture, activities of entrepreneurs will appeal to customers and the public to patronize products offered. Indeed, Mahmoud and Hinson (2012), Mahmoud et al. (2016) including Appiah-Adu et al. (2016), argues that MO principles coerces organizations to operate competitively and profitably compared to lesser market-oriented organizations. Sheth et al. (2016) upholds that organizations operating in emerging or developing economics can announce their presence at the world stage by creatively varying marketing strategies as much as possible to be competitive through product or service differentiation.

More so, the entrepreneurial principle (Diochon and Anderson, 2011; Huybrechts and Nicholls, 2012; Kantur, 2016; Cho and Lee, 2018) is all about wealth creation by individuals, families, corporate organizations and the state for improved living standards. This involves identification of profitable business opportunities or market segments, evaluating and exploiting such opportunities to benefit key stakeholders of the firm. Indeed, individuals and entities in business known as entrepreneurs primarily assume risk for economic gain (Woodfield et al., 2017). Therefore, daring entrepreneurs are expected to develop and manage businesses by taking calculated risks profitably.

In addition, such players operating as SMEs proactively compete (Kocak et al., 2017) for market opportunities, creation of wealth, jobs and for national development (Nagler and Naude, 2013a; Boohene and Agyapong, 2017). Activities of SMEs are crucial as they are a force to reckon with globally since their operations are wide spread into micro economies...
In an emerging market, such as Ghana, the existence of SMEs is essential because they operate at the forefront of local industrialization, change and innovation, value creation, wealth generation, and poverty reduction through job and wealth creation (Agyapong, 2010; Dauda and Akingbade, 2010; Mukhamad and Kiminami, 2011; Donkor et al., 2018).

Edelman and Yli-Renko (2010) and Carter (2011) aver that wealth and job creation contributes to improved living standards of citizens and the promotion of rapid economic growth through tax and commercial activities (Naudé, 2010; Nagler and Naudé 2013b; Desai, 2011). Locally, they manifest as micro, small and medium enterprises (MSMEs) described as vibrant engines of national economic development (Jovanović et al., 2018). It is therefore not surprising that, for many decades, Government of Ghana has labelled its SME sector as “the nation’s engine for rapid economic development and growth”. Again, their survival and success is considered essential to realize rapid socio-economic growth and national competitiveness.

Currently, there are concerns from the academic community regarding the need to establish the link between marketing and entrepreneurial philosophies (Hultman and Hills, 2011; Miles et al., 2011; Donkor et al., 2018). Some argument countered on entrepreneurial marketing (Jones and Rowley, 2011), while others focused on SME marketing (Harrigan et al., 2012). The rest were concerned about the relationship between entrepreneurship and the marketing concept (Bengtsson et al., 2007).

Despite the fact that many authors have established some interconnection between marketing and entrepreneurship, other studies show that marketing cannot have a relationship with entrepreneurship because the former has long been recognized and practiced as an entrepreneurial function (Gungaphul and Boolaky, 2009; Lam, 2011). In another development, a longitudinal study found that marketing is integral to entrepreneurial activities.

On the contrary, Webb et al. (2011) found no relationship between marketing and entrepreneurship. A cursory review of literature seems to suggest that there is no consensus regarding the interrelationship between marketing and entrepreneurship hence a gap in the extant literature. It is on this basis that this current study seeks to establish the nexus between marketing and entrepreneurship to further contribute to the ongoing debate of the relationship between marketing and entrepreneurial performance. This study therefore seeks to evaluate the interconnection between marketing and entrepreneurial performance in EMs using Ghanaian entrepreneurs as a case.

**Literature review**

**Emerging markets**

Emerging markets (EMs) represent a wonderful mix of the world’s fastest growing developing segment with a growing middle to high income class (Sudhir and Talukdar, 2015). This market has witnessed increasing economic growth leveraged on market liberalization plus relatively growing economic infrastructure (Puffer et al., 2010). It is therefore not far-fetched that emerging economics like Brazil, Russia, India, China and South Africa (BRICS) are blazing the trail by attaining rapid socio-economic growth, creating jobs for the growing unemployed, and creating wealth for daring investors operating in this unique market (Guillén and Garcia-Canal, 2009).

In sub-Saharan Africa, countries such as Botswana, Ghana, Ethiopia, Kenya, Rwanda and South Africa are making giant strides in the midst of challenging socio-economic and political space (Babarinde, 2012) as some developed economies. This development requires critical academic inquest by researchers to appreciate the nature of this unique market and
how its distinctive nature impacts SME performance. To cope with economic, political and socio-cultural challenges of EMs, entrepreneurs are required to re-configure and appreciate the power of marketing principles to drive competition, sustainable, novel customer strategies that benefits stakeholders.

Unfortunately, the marketing philosophy is perceived to be evolving from the periphery of core business strategy in EMs, a development attributable to developmental antecedents of the market segment. Sheth (2011) posits that most EMs are associated with the sale and use of unbranded products, poor packaging and branding due to the extent of market’s vulnerability of superb marketing strategy. Literature further confirms that most emerging developing economies (EDCs) are limited in market heterogeneity, stable political regime, poor market insight, chronic shortages of essential development infrastructure such as electricity, water, appropriate entrepreneurial technology and healthcare (Khanna and Palepu, 2010; Sauvant et al., 2010; Sinha and Sheth, 2017).

Again, countries with the segment are experiencing growing youthful population with diverse demographics, unique socio-cultural values, high illiteracy and poor regulatory laws which affect marketing. Particularly, there are limited empirical research studies into activities of micro, small medium scale enterprises. Such unfriendly developments pose enormous challenge to socio-economic growth of MSMEs and improved living standards of citizens. The question is:

Q1. Do entities like MSMEs in Ghana operating middle income developing economy, apply basic marketing principles to enhance operational success?

Happily, some countries within the segment over the past two decades have imbibed multi-party democracy, transitioned from controlled regimes into liberalized markets to engender business confidence that aids entrepreneurial ventures (Burgess and Steenkamp, 2013). In all spheres, EMs remain a fertile ground for developing ground breaking developmental thoughts to benefit humanity, and ultimately customers (Burgess and Steenkamp, 2013; Sheth et al., 2016). This calls on daring entrepreneurs worldwide to exploit for gain.

The significance of this study can be credited to the following: firstly, Ghana is famously noted as being the golden gateway to a safe and stable investment destination in Africa (Appiah-Adu et al., 2016). It was the first sub-Saharan African economy to gain independence from colonial rule and it boasts a healthy multi-party democratic economy for more than two decades supporting business growth. Ghana’s MSME (Abor, 2007; Narteh, 2013) require continuous application of innovative ideas to mitigate key market risks, generate profit and higher gross domestic rate (Kurgun et al., 2011). In an era of high unemployment, MSMEs must become the true catalytic conduits to curb increasing unemployment. Therefore, owners and managers of MSMEs must appreciate and advocate applicable marketing thoughts as perquisite operational tools for winning critical market battles in contemporary global competitive space. This study therefore seeks to evaluate the interconnection between marketing and entrepreneurial performance in EMs using Ghanaian entrepreneurs as a case.

Entrepreneurship
Entrepreneurial activities have been with mankind since the mediaeval days contributing significantly towards survival and well-being of humanity. Entrepreneurial orientation defines patterns of entrepreneurial behaviours including postures that push people to engage in business. Entrepreneurial orientation reflects how a firm’s strategic attitude produces entrepreneurial practices and behaviours (Cho and Lee, 2018; Gupta and Batra, 2015; Zahra et al., 2014). This attitude is rooted in the belief that specific management values
and strategy decision which together signify the firm’s structure and knowledge embodied in production of new products, processes and operational activities (Wiklund and Shepherd, 2005).

Therefore, a firm’s strategic orientation must capture specific entrepreneurial decision-making styles, methods and practices (Hernández-Linares et al., 2018; Lumpkin and Dess, 1996). Such innate behaviour involves risk taking, innovation, and a proactive attitude to enhance performance (Covin and Slevin, 1989; Kilenthong et al., 2016). Such attitude stems from positive work behaviour for success (Mintzberg, 1973). Such individuals engage current and potential marketing activities possessing sound market insight to inform business strategy. Innovative attitude motivate market actors to develop and implement new ideas (Tseng and Tseng, 2019; Kim et al., 2018; Van de Ven, 2017). Drucker (2002) succinctly describe innovation function of entrepreneurship as the power for creating new wealth or return on investment.

Entrepreneurship thrive on two key operational legs. First, exploiting lucrative opportunities for return; and, secondly, passionately driving enterprising individuals to engage markets synonymously as marketers. Indeed believes successful entrepreneurs are individuals possessing requisite market insight for positive marketing outcomes. This unique philosophy thrives on deliberate investment in product development, distribution and promotion of products across markets championed by entrepreneurs (Kantur, 2016). Actors in this market, mobilize resources from friends, relations and others to produce attractive brands to attract customers for return (Kantur, 2016; Engelen et al., 2015; Gupta and Gupta, 2015). Entrepreneurial philosophy encourage market actors to use ingenious, and innovative marketing strategies to surpass competition for long-term sustainable growth Narver and Slater (1990).

At the firm-level, policy makers must fashion out policies to produce quality brands (Lumpkin and Dess, 2001; Boso et al., 2012) while taking calculated risks for good returns (Bruton et al., 2008; Basile, 2012). They also tend to develop products in expectation of growing market new opportunities, taking into consideration conscious posture of competitors’ while risk-averse entrepreneurs may not. Such strategic maneuvers are taken in the midst of market opportunities against being risk averse (Covin and Lumpkin, 2011; Kuratko and Audretsch, 2013; Kantur, 2016). With this background, only daring entrepreneurs must have the capacity to deploy requisite resources to fully exploit available market opportunities. From the above discourse, it is clear that entrepreneurial theory stand firmly on basic marketing principles to satisfy customers and for profit.

**Entrepreneurial success**

Say (1971) defined entrepreneurial success as an outstanding business quality in decision making for profit. Entrepreneurial success depends on entrepreneur’s psychological, competence, work-stress management and commitment to task (Gupta and Mirchandani, 2018). Other success qualities include strong internal locus of control (Asante and Affum-Osei, 2019), self-confidence, independence (Saptono and Najah, 2018), innovative attitude, effective communication and negotiation skill, and prudent decision-making attitude (Setiawan and Erdogan, 2018; Toms et al., 2019). Successful entrepreneurs are alsoconfident risk takers (Li and Ahlstrom, 2018) possessing the ability to grab juicy business deals for positive performance.

Unfortunately, market players are yet to reach consensus on effective ways of measuring MSME success (Karpak and Topcu, 2010). However, corporate performance is a determinant of firm resource endowment (Day, 1994) represented through production processes, knowledge, assets and overall competitive posture, which enables organizations to create wealth, generate
profit and to survive during challenging times (Rapp et al., 2010). Cho and Lee (2018) succinctly defines business performance as how firms cope with changing market challenges, generate profit, remain productive, satisfy employees, survive and become socially responsible. In developing countries, successful entrepreneurs have the ability to find solutions to economic challenges to create jobs. At the micro economic level, highly motivated MSMEs become active economic participants and particularly in Sub-Saharan Africa, improving living standards for the family is primary responsibility (Eyana et al., 2017; Vermeire and Bruton, 2016).

Performance of SMEs remains crucial to all stakeholders connected: a factor that enhances SMEs’ success. Strong and sustainable MSMEs are characterized with positive behaviours like self-involvement, risk taking, and innovative (including proactive) behaviour often described as successful (Irwina et al., 2018). It is therefore the responsibility of entrepreneurial academics in EMs to appreciate the significance and challenges associated with entrepreneurial performance to influence advocacy at all levels. They ought to also ought to understand how entrepreneurial roles on rapid socio-economic development to reducing poverty at the community.

Marketing orientation
The role of marketing is central for successful implementation of all business strategies because the essence of business is profits that come from customers. Today, competitive business battles are won in the market by continuous delivering superior quality products and services to customers (O’Dwyer and Gilmore, 2018; Tajeddini, 2010). Traditionally, the emphasis on marketing orientation (MO) was customer oriented, that is focusing on consumer needs and making profits by creating customer satisfaction (Kotler and Armstrong, 2010). Likewise, Ruekert (1992) defines customer orientation as the “degree to which the business unit obtains and uses information from customers, develops a good strategy to meet ever changing customer needs for corporate survival and profits”. Hence the customer is believed to be the most critical external environmental factor in developing sustainable market orientation (Tajeddini, 2010).

The link between marketing and entrepreneurship orientations was theorized and empirically tested some four decades ago (González-Benito et al., 2009). Literature empirically relates incidence of entrepreneurship and marketing having an inter-related consequence on high businesses performance (González-Benito et al., 2009). MO and entrepreneurship complement each other, as entrepreneurs depend on marketing principles for effective planning and execution of strategies. Indeed, both philosophies thrive on innovative abilities to satisfy customers for the attainment of competitive advantage and market exploitation. Morris et al. (2002) literally coined the term “entrepreneurial marketing” integrating entrepreneurship with the marketing philosophy into a single domain.

Even though entrepreneurship philosophy predates MO (Dess et al., 1997), prudent marketing strategies are championed by corporate managers who are mostly entrepreneurs with critical marketing insight. Jaworski and Kohli (1996) contend that innovation is a precursor of MO and encourages product differentiation for market exploitation for high performance. Entrepreneurial marketing incorporates prudent marketing thoughts into SME policy to win customer interest (Hinson, 2010). Again, both concepts complement each other to satisfy firm motivation for profit (Morris et al., 2002). Therefore, the nexus of both orientations helps to predicate value proposition for customer, wealth creation and for long term gain (Miles et al., 2011).

The MO concept emerged from the seminal works Narver and Slater (1990) and Kohli and Jaworski (1990) to emphasize how marketing process and culture influence

Narver and Slater (1990) proposed three behavioural thoughts defining MO: firstly, customer orientation involves a careful understanding of buyer and consumer over a period to create superior value for targets; secondly, competitor orientation encompasses acquiring information on existing and potential competitors to inform corporate strategy to appreciate both short-term strengths and weaknesses as well as long-term capabilities of key current and potential competitors; and thirdly, inter-functional coordination is the coordination and use of corporate resources in creating superior value for customers. These three critical corporate behaviours of MO - customer orientation, competitor orientation, and inter-functional coordination - depict germane MO culture for market success (Narver and Slater, 1990; Wang et al., 2012; Long, 2013). Narteh (2013) notes that behaviours like gathering and analyzing market data enables firms to fully appreciate and satisfy customers and competitors effectively (Saini and Mokolobate, 2011).

On the other hand, Jaworski and Kohli’s (1993) description of MO is purely a corporate wide generation, dissemination, and responsiveness of management to market intelligence gathered. Kohli and Jaworski (1990) believe that organizations must: first, deliberately generate data from the market; second, disseminate critical market data among colleagues to understand the market; and finally management has the responsibility to react to market developments to remain competitive. They believe organization-wide generation of data must pertain to current and future customer needs, and disseminate critical market intelligence across departments with responsive action from top management projects and organizations.

Even though performance is not so conclusive, success in business depends on finding ways to mediate operational marketing variables or tools to influence customers (Singh, 2009; Julian et al., 2014). Practically, the marketing mix remains the oldest marketing construct and strategy applicable across all sectors especially at the implementation strategic marketing plans (Kotler and Armstrong, 2010). These variables or tools known often as the traditional 4Ps: product, price, promotion and place or distribution (McCarthy in 1964).

For example, product managers and entrepreneurs must develop products to satisfying customer needs (Oktemgil and Greenley, 1997), they must price products for value and for purchase attention. In addition, they promote market offerings using a communication mix: personal selling, advertising, sales promotions, public relations, sponsorship and direct marketing (Kotler et al., 2011). In contemporary times, with the advent of new media including social media driven by ubiquitous internet, marketers depend on digital media to reach clients directly through websites, and mobile channels including social media platforms such as Facebook, Instagram, WhatsApp and SMS messaging. Again, market specific channels enhance smooth ordering, processing and delivery of products to delight targets. One can conclude that entrepreneurial success is all about the creation and spotting of prudent market opportunities to satisfy customers for sustenance and for profit (Farrukh et al., 2017; Aparicio et al., 2016; Audretsch et al., 2015a, 2015b; Alvarez and Barney, 2014). From the above the following hypotheses were proposed:

From the above the following hypotheses were proposed:
H1. Customer orientation will have a significant positive effect on entrepreneurial success.

H2. Competitor orientation will have a significant positive effect on entrepreneurial success.

H3. Market intelligence generation will have a significant effect on entrepreneurial success.

H4. Intelligence dissemination by entrepreneurs has significant positive effect on entrepreneurial success.

H5. Prudent entrepreneur marketing decisions will have significant positive effect on entrepreneurial success.

Methodology

Sampling and instrument development
Quantitative data was obtained from 113 MSMEs operating within Tema metropolis, a harbour city close to capital between January and June, 2017. These MSMEs were conveniently selected (Creswell, 2012), but respondents were purposely sampled (Patton, 2002) to reflect owners and managers pre-occupation with marketing roles and entrepreneurial insight. Respondents were asked to indicate the extent of disagreement and agreement with the aid of a five-point Likert Scale ranging from 1 to 5 (strongly disagree to strongly agree). With aid of multi-scales, constructs of market orientation customer and competitor orientations were adapted from Narver and Slater’s (1990) intelligence generation and dissemination (Kohli and Jaworski, 1990) and marketing mix decision (McCarthy, 1964). Entrepreneurial success constructs – innovation, risk taking and technology adoption (Park, 2017; Covin and Slevin, 1989; Wiklund and Shepherd, 2003) were modified. To ensure validity, the questionnaire was pre-tested for smooth answering of research statements (Saunders et al., 2009). Pilot testing involved 20 respondents from the Accra Metropolitan Assembly, which bares common characteristics of Tema due to it close proximity and the fact that both are hubs of entrepreneurial ventures.

Reliability analysis
In addition, subjective performance indicators were employed to assess reliability and validity (Appiah-Adu, 2000). Cronbach’s alpha variables estimate scores of variables attributable to randomized errors (Sellitz et al., 1976). As a general rule, any greater coefficient than or equal to 0.7 is considered an acceptable good indication of construct reliability (Nunnally, 1978). Hair et al. (1998) recommends a cut-off point of 0.6 for exploratory research. In this study, all constructs met recommended cut-off point of 0.60 (as presented in Table I), indicating high internal consistency of construct measures. Constructs adapted from literature exhibited acceptable construct validity. Entrepreneurship success or business performance was assessed using seven items tapping into various aspects of entrepreneurial performance indicators ranging from non-economic to economic performance. Descriptive statistics helped to describe respondent’s profile. One sample t-test helped to determine the extent of practice of MO among the entrepreneurs. Finally, regression equation model measured the overall effect of MO on entrepreneurship success.
The majority of respondents (54 per cent) were males and the rest (46 per cent) females demonstrating an even gender distribution. The majority (51.4 per cent) had operated between 4 and 6 years with those below 4 years, 10 years and above (16.2 per cent) and periods between 7 and 9 years respectively. In addition, the majority (77.8 per cent) operate within service sectors as clearing agents and freight forwarders followed by retail sector (20.5 per cent) with (1.7 per cent) agriculture and manufacturing sectors. These are represented on Table I.

**Measurement**

The majority of respondents (54 per cent) were males and the rest (46 per cent) females demonstrating an even gender distribution. The majority (51.4 per cent) had operated between 4 and 6 years with those below 4 years, 10 years and above (16.2 per cent) and periods between 7 and 9 years respectively. In addition, the majority (77.8 per cent) operate within service sectors as clearing agents and freight forwarders followed by retail sector (20.5 per cent) with (1.7 per cent) agriculture and manufacturing sectors. These are represented on Table I.

**Relationship between marketing orientation and entrepreneurial success**

First, researchers examined the extent to which MO is practised among the entrepreneurs. This was done using one-sample *t*-tests as shown in Tables II to VI for each of the five dimensions of MO. Next, we examined the effects of MO on entrepreneurial success using multiple regression analysis as shown in Table VII. The regression equation on the above results is as follows:

Let \( Y \) = Entrepreneurial Success  
\( X_1 \) = Customer Orientation  
\( X_2 \) = Competitor Orientation  
\( X_3 \) = Intelligence Generation  
\( X_4 \) = Intelligence Dissemination

### Table I. Coefficient alpha and descriptive statistics

<table>
<thead>
<tr>
<th>Constructs</th>
<th>No. of items</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer orientation</td>
<td>5</td>
<td>0.635</td>
</tr>
<tr>
<td>Competitor orientation</td>
<td>3</td>
<td>0.606</td>
</tr>
<tr>
<td>Intelligence generation</td>
<td>3</td>
<td>0.622</td>
</tr>
<tr>
<td>Intelligence dissemination</td>
<td>5</td>
<td>0.602</td>
</tr>
<tr>
<td>Marketing mix decisions</td>
<td>5</td>
<td>0.620</td>
</tr>
<tr>
<td>Entrepreneurial innovation</td>
<td>4</td>
<td>0.682</td>
</tr>
<tr>
<td>Risk taking</td>
<td>3</td>
<td>0.619</td>
</tr>
<tr>
<td>Technology adoption</td>
<td>4</td>
<td>0.770</td>
</tr>
<tr>
<td>Non-economic performance</td>
<td>3</td>
<td>0.616</td>
</tr>
<tr>
<td>Entrepreneurial success</td>
<td>4</td>
<td>0.614</td>
</tr>
</tbody>
</table>

**Notes:** Table I shows the Coefficient alpha of the five market orientation, as well as the performance of entrepreneurial performance in Ghana. The table is showing the reliability of scales used in the research to confirm the justification of their use in measuring market orientation and entrepreneurial performance in Ghana.  
**Source:** Field Data (2017)

### Table II. Customer orientation

<table>
<thead>
<tr>
<th>Items</th>
<th>Mean</th>
<th>SD</th>
<th><em>t</em></th>
<th><em>p</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>I strongly believe success of my business depends on my customers</td>
<td>4.43</td>
<td>0.74</td>
<td>26.16</td>
<td>0.00***</td>
</tr>
<tr>
<td>I have a good relationship with my customers at all times</td>
<td>4.43</td>
<td>0.56</td>
<td>34.79</td>
<td>0.00***</td>
</tr>
<tr>
<td>Satisfying customer needs with superior value is my ultimate goal in business</td>
<td>4.48</td>
<td>0.55</td>
<td>36.46</td>
<td>0.00***</td>
</tr>
<tr>
<td>I am willing to provide excellent service to my customers</td>
<td>4.59</td>
<td>0.50</td>
<td>43.10</td>
<td>0.00***</td>
</tr>
<tr>
<td>I am ready to go the extra mile to delight my customers</td>
<td>4.46</td>
<td>0.53</td>
<td>37.47</td>
<td>0.00***</td>
</tr>
</tbody>
</table>

**Notes:** Table II is an estimate of customer orientation among entrepreneurs in Ghana. \( N = 113 \); \( **p \) is significance at 0.01 level  
**Source:** Field Data (2017)
\[ Y = 1.03 + 0.25X_1 + 0.12X_2 + 0.15X_3 + 0.12X_4 + 0.14X_5 + E \]

Customer orientation and entrepreneurial success
Corporate success thrives on the customer being the essence of serious business. In line with Narver and Slater (1990)’s argument on MO, a mean of above 4 (Agree)
connects to five statements about customer orientation demonstrating how respondents agreed to the fact that customer orientation was practiced by entrepreneurs, to a large extent, to remain in business as shown in Table II. Table VII below shows a significant positive relationship between customer orientation and entrepreneurial success ($\beta = 0.26$, $t = 3.76$, $p < 0.01$). Therefore hypothesis one ($H1$) is supported in the present context. This implies that entrepreneurs having a good relationship with customers will be able to satisfy customer needs with superior value thereby providing them with excellent services, which ultimately impacts entrepreneurial success. These revelations stress the fact that customer orientation was critical to entrepreneurial success in EMs since marketing success depends on having a clear customer insight and approval to remain competitive at all times as suggested by O’Dwyer and Gilmore (2018).

**Competitor orientation and entrepreneurial success**

Strategically, serious organizations spy on competitor action to influence strategic moves. Furthermore, a mean of 4 (Agree) was obtained for all the three scales that measured competitor orientation, indicative to how respondents agreed to the fact that competitor orientation was critical to marketing practice among entrepreneurs in EMs as shown in Table III. This was confirmed based on Narver and Slater’s commendation on MO. The study further revealed a significant relationship between competitor orientation and entrepreneurial success ($\beta = 0.14$, $t = 2.05$, $p < 0.05$) as shown in Table VII. Therefore, hypothesis two ($H2$) is supported in the present context. This implies that entrepreneurs

<table>
<thead>
<tr>
<th>Items</th>
<th>Mean</th>
<th>SD</th>
<th>T</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our promotion strategy helps increase sales</td>
<td>4.11</td>
<td>0.91</td>
<td>16.74</td>
<td>0.00**</td>
</tr>
<tr>
<td>We use social media to promote our business</td>
<td>4.04</td>
<td>0.77</td>
<td>18.36</td>
<td>0.00**</td>
</tr>
<tr>
<td>We offer quality products/services to meet customer need/demand</td>
<td>4.44</td>
<td>0.66</td>
<td>29.75</td>
<td>0.00**</td>
</tr>
<tr>
<td>We use customer oriented delivery channels to service clients</td>
<td>4.17</td>
<td>0.72</td>
<td>22.03</td>
<td>0.00**</td>
</tr>
<tr>
<td>Our pricing strategies are market and customer friendly</td>
<td>4.26</td>
<td>0.78</td>
<td>22.00</td>
<td>0.00**</td>
</tr>
</tbody>
</table>

Table VI.
Marketing mix decisions

Notes: Table VI is an estimate of customer orientation among entrepreneurs in Ghana. N = 113; **$p$ is significance at 0.01 level
Source: Field Data (2017)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>$\beta$</th>
<th>S.E</th>
<th>$t$</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.03</td>
<td></td>
<td>0.30</td>
<td>3.44</td>
<td>0.00**</td>
</tr>
<tr>
<td>Customer orientation</td>
<td>0.25</td>
<td>0.26</td>
<td>0.07</td>
<td>3.76</td>
<td>0.00**</td>
</tr>
<tr>
<td>Competitor orientation</td>
<td>0.12</td>
<td>0.14</td>
<td>0.06</td>
<td>2.05</td>
<td>0.04**</td>
</tr>
<tr>
<td>Intelligence generation</td>
<td>0.15</td>
<td>0.21</td>
<td>0.05</td>
<td>3.11</td>
<td>0.00**</td>
</tr>
<tr>
<td>Intelligence dissemination</td>
<td>0.12</td>
<td>0.18</td>
<td>0.04</td>
<td>2.88</td>
<td>0.00**</td>
</tr>
<tr>
<td>Marketing mix decisions</td>
<td>0.14</td>
<td>0.18</td>
<td>0.05</td>
<td>2.80</td>
<td>0.01**</td>
</tr>
</tbody>
</table>

Table VII.
Regression results for market orientation and entrepreneurial success

Notes: **Significant at $p < 0.01$, Dependent variable: Entrepreneurial success
Source: Field Data (2017)
aspiring to do better out compete competitors through product and service differentiation and will ultimately be successful in gaining through continuous operation and increase revenue flow. Thus, entrepreneurs in EMs consider competitor orientation as a means to remain successful. As a result, entrepreneurs must pay greater attention to understanding competitive behaviour to influence marketing policies. Furthermore, having a sound competitor conscious entrepreneurial attitude will enable and owners of MSMEs to predict competitive actions and inactions of key actors in the market to strategize are recommended by Narver and Slater (1990).

Market intelligence generation and entrepreneurial success
Market intelligence gathering contributes to understanding real market situations for policy development and, ultimately, success. As shown in Table IV, a high mean of above 4 (Agree) was achieved in all the three scales used for determining intelligence generation as suggested by Kohli and Jaworski (1990). The study suggests that entrepreneurs deliberately generate relevant market data regarding markets to influence periodic marketing strategy deemed relevant. MSMEs were concerned and committed to generating relevant market data to inform entrepreneur marketing strategy. The study revealed a significant positive relationship between intelligence generation and entrepreneurial success ($\beta = 0.21, t = 3.11, p < 0.01$) as shown in Table VII. Therefore, hypothesis three ($H3$) is supported in the present context. This implies that having regular customer contact, being fully equipped with in-house research capacity, and reviewing environmental changes to inform marketing strategy will ultimately lead to entrepreneurial success. Daily and periodic appetite for market data remains the source for development and predicting competitive moves in the market.

Information dissemination and entrepreneurial success
Kohli and Jaworski (1990) argue that critical marketing decisions thrive on effective sharing of market data to key internal stakeholders. As indicated by Table V, a mean of close to 4 (Agree) was obtained from four scales (Agree) which define sound intelligence dissemination ability, suggesting that entrepreneurs adopt and disseminate necessary intelligence as a marketing practice to understand and manage the market. Moreover, from Table VII, a positive and significant relationship exists between information dissemination and entrepreneurial success ($\beta = 0.18, t = 2.88, p < 0.01$). Therefore, hypothesis four ($H4$) is supported in the present context. In view of these results, it is suggested that disseminating information to the various aspects of business is a characteristic of entrepreneurs, which contributes to their business success. Thus, more information is transmitted among stakeholders for timely decision making for greater entrepreneurial success.

Marketing mix decision and entrepreneurial success
Critical entrepreneurial action is visible through policies and decisions. From the study, a mean of approximately 4 (Agree) was obtained for all the five statements advancing marketing mix decisions, implying that entrepreneurs in EMs were of the view that quality market information actually informs daily marketing decisions for entrepreneurial success as shown in Table VI. Indeed, good marketing decisions ultimately leads to entrepreneurial success ($\beta = 0.18, t = 2.80, p < 0.01$) as is evident in Table VII. Therefore, $H5$ is supported in the present context. These further results suggest a positive relationship between marketing mix application and entrepreneurial success in EMs. Thus, the better entrepreneurs of this unique market segment understand this market the better as they are able to apply the marketing mix to positively influence the market and ultimately achieve success. Therefore,
there is the likelihood that entrepreneurial marketing decisions will positively influence entrepreneurial success.

Conclusion
This study evaluates the interconnection between marketing and entrepreneurship to realize entrepreneurial success in EMs. It demonstrates how entrepreneurs of EMs adopt market-focused behaviour to drive growth as indicated by Dess and Lumpkin (2005) and Gupta and Batra (2015). It further highlights how deliberate application of basic marketing principles leads to achieving entrepreneurial performance in Ghana. Adoption of basic marketing principles and strategies, local entrepreneurs become vehicles for social re-engineering for rapid socio-economic development, which ultimately affect the lives of people. Therefore, business and marketing oriented principles must precede all entrepreneurial decisions to satisfy customers, create jobs and improve living standards in the long term.

A conscious market behaviour leads to higher firm performance (Slater and Narver, 1994). Entrepreneurs in EMs must evolve to be involved in planning and implementing marketing strategies. They must tailor daily decisions along changing market conditions since marketing policies thrive on sound market knowledge. It ought to be stressed further that the marketing function is responsible largely for corporate success but requires total support of all to champion customer interest. The study proves that marketing decisions require spying on activities of peers in the market to inform strategic polices for success at MSMEs level (Bayraktar et al., 2017).

Local entrepreneurs are expected to acquire, disseminate and respond timely to customer channel and competitor demands aggressively to fully optimize market performance (Covin and Kuratko, 2010; Kuratko et al., 2011; Kuratko and Audretsch, 2013). These findings are consistent with the works of Jaworski and Kohli (1993) and Baker and Sinkula (1999) who argues that marketing remains the vehicle for winning customers and markets, implying that more local entrepreneurs must appreciate the benefit of strategic marketing. With this background, decision makers of MSMEs must be pragmatic and careful to think about the customer first all policy plans.

This study offers noted contributions to marketing and entrepreneurship literature as it provides the research community and practitioners critical insight vital for entrepreneurial success especially in EMs where marketing operates at the periphery of business strategy. Application of basic marketing principles to entrepreneurial success drives MSME success because marketing principles attracts and maintains clients. Again, this behaviour has the capacity to grow to local MSMEs unto the world stage common in most economies. It is obvious that, as growth plateaus in most of the developed world, daring entrepreneurs in the developing market can create jobs for the masses.

Dimensions of MO: deliberate intelligence gathering and dissemination of same to top management for responsive action will create an opportunity for management to manipulate a critical marketing mix to aid entrepreneur success. To this end, local entrepreneurs must consciously build a user-friendly customer database on customer transactions to facilitate customer engagements profitably. In addition, an effective market-oriented culture predicates customer and competitive behaviour for winning decisive market battles. Entrepreneurs of EMs must constantly probe markets to fully appreciate new customer expectation to inform new customer direction.

Finally, they must anchor operational policies on customer satisfaction before profit goals. They must deliberately invest in customer initiatives that advance entrepreneurial achievement backed with desired commitment to be adjudged customer advocates. To conclude, prudent marketing policy affects entrepreneurial performance (Deutscher et al.,
2016; Gnizy et al., 2014); thus, this study adds to existing scholarly thoughts in EMs. It our fervent believe that this study serves as a catalyst for appreciating how SMEs in emerging like Ghana operate to benefit from application of marketing strategy.

This study does have some limitations that highlight exciting opportunities for future research. Our sample was limited to entrepreneurs operating within the port city of Ghana, which to some extent could limit full generalization of findings. Notwithstanding its limitations, our study methodology and findings is worth considering by future researchers. Future researchers could consider investigating challenges associated with implementing marketing policies by MSMEs to achieve entrepreneurial success in emerging or developing countries.

References


Further reading


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Brand image and consumer satisfaction towards Islamic travel packages
A study on tourism entrepreneurship in Malaysia

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Faculty of Entrepreneurship and Business, Universiti Malaysia Kelantan, Pengkalan Chepa, Malaysia

Abstract

Purpose – This study aims to examine the factors affecting brand image and consumer satisfaction towards Islamic travel package in Malaysia.

Design/methodology/approach – This study used a cross-sectional design and quantitative method in examining the factors affecting the brand image and consumer satisfaction on Islamic travel package. This study has chosen Google form as a platform to collect the data.

Findings – The findings revealed that product quality, Islamic physical attribute and Islamic belief have a significant positive effect on brand image and consumer satisfaction. The findings confirmed that product quality, Islamic physical attribute and Islamic beliefs are the crucial tools for brand image that leads to the satisfaction of Muslim consumers on the Islamic travel package.

Originality/value – This paper addresses understudied aspects of brand image and consumer satisfaction towards Islamic travel package in Malaysia. It provided useful insights into the product quality, Islamic physical attribute and Islamic belief on brand image and consumer satisfaction towards Islamic travel packages.

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This study was funded by the RMIC, Universiti Malaysia Kelantan, Malaysia, under the grant titled “Short Term Research Grant (SGJP)” Project title: The roles of Islamic religiosity, brand image and knowledge on the relationship between perceived value and tourist satisfaction in Malaysia. Total Grant: RM 5,000.00 (Ringgit Malaysia).
packages. Tourism companies should improve and update their package based on the religious perspective to attract Muslim consumers.

**Keywords**  Brand image, Consumer satisfaction, Tourism entrepreneurship, Islamic travel package

**Paper type** Research paper

### 1. Introduction

Entrepreneurial activities in tourism sector has been known to be one of the most powerful economic strategies for quite some time, as one of the most effective approaches for developing a country’s economy and sustaining its competitiveness. The number of Muslim tourists has been snowballing and interesting to be studied. It was assumed that the Muslim population is about 2.14 billion in 2018 and increases to 2.25 billion in 2019 (Muslim Population Worldwide Data, 2019). The increase of 1.84 per cent in the number of Muslim population is advantageous for the market of Muslim consumers. As a result, the Islamic travel packages have become the concern of the Halal tourism market. The information on Muslim behaviours and need can be used to develop the image and offer an Islamic travel package that matches the requirements of the new market. According to Eid (2013), a better understanding of Muslim consumer will allow the tourism activities to expand the Islamic travel package.

For the new market, Malaysia has established halal and Islamic products and services such as Islamic travel package. According to the Islamic Tourism Centre (2014), there were five millions Muslim tourists from the 25.03 million tourists. However, most of the studies in Malaysia only focussed on Islamic brand equity in Malaysia (Shafaei, 2016; Rahman, 2014; Eid, 2013; Zulkharnain and Jamal, 2012) and rarely studied the factors that affect the brand image and consumer satisfaction in Islamic hub. In marketing, the brand image is the awareness about a brand from the view of the consumer (Shafaei, 2016) while consumer satisfaction means the emotion and consumer reaction after purchasing the product (Tu et al., 2012). Satisfaction is attached to a satisfying or pleasant level of consumption linked to fulfilment that leads to a loyal customer (Oliver, 1997).

Although Islamic tourism is expanding worldwide, there is limited understanding on the Islamic package, religious perspective and the need of Islamic consumer (Hughes et al., 2013). According to Kartal et al. (2015), there are still lacking the studies on Islamic tourism and researchers have been very careful on the relationship between religious and tourism (Collins-Kreiner and Wall, 2015). World Tourism Organisation (UNWTO, 2011) stated that religious tourism has not been truthfully studied due to the sensitivity of the field. As stated by Eid and El-Gohary (2015), Muslim consumers are the majority in tourism market. Collins-Kreiner and Wall (2015) affirmed that the relationship between religious and tourism focussed on two different topics which are either religious or tourism. It is believed that better knowledge about tourism cannot be proven without a better understanding about the religious and the significance impacts (Collins-Kreiner and Wall, 2015). Hence, there is the need to conduct a study that examines the connection between religious, tourism, and marketing. Thus, this study aimed to examine the factors affecting the brand image and consumer satisfaction towards the Islamic travel package in Malaysia.

### 2. Literature review and hypotheses

#### 2.1 Product quality

Product quality is connected to brand image, which is basically the consumers’ perceptions of the products and services (Nikhashemi et al., 2017). Zeithaml (1988) stated that product quality refers to the consumer judgement about general product excellence. Juran (1988)
stated that product quality is divided into two different terms which are the product degree that meets the consumer needs and wants and the product degree which is free from deficiencies. According to Anderson et al. (1994), product quality depends on the gap between the perceived performance and expected product that can affect the brand image. Caruana and Malta (2002) mention that consumers perceived the quality of the product as the result of the assessment on what was predictable and what was experienced by considering the effect of brand image. Some studies indicated that product quality is the final long-term assessment for brand image that can lead to satisfaction (Sultan and Wong, 2012). The finding by Ghobehei et al. (2019) was consistent with Sultan and Wong (2012), which explained the relationship between quality, image, and satisfaction. Hence, this study proposed the following hypothesis:

$H1$. Product quality has a significant positive effect on brand image towards Islamic travel package in Malaysia.

The brand image is viewed as a significant element of consumer satisfaction, and the company invested in improving the quality of the product to attract consumers (Chen, 2010). Other than that, the quality of the product helps the company to generate a more positive image which turns into consumer satisfaction (Zhu and Sarkis, 2006). Anderson et al. (1994) mentioned that customer satisfaction needs the consumer to experience with the products or services which can be influenced by product quality and the value of the services. When it is challenging to evaluate the quality of the products or services, the brand image can be a significant factor that inspires consumer assessment of satisfaction with the products or services (Fornell, 1992; Oliver, 1980; Kim and Choi, 2016). It can be concluded that consumer satisfaction is influenced by the perception of product quality, marketing services, and brand image. For marketing studies, brand image is identified, as the perception of product quality is associated with consumer satisfaction. Ghobehei et al. (2019) mentioned that the positive relationship between quality and brand image that can lead to better consumer satisfaction. A positive brand image is considered as a tool of the company’s ability to maintain the market position and brand image that can lead to the satisfaction of the consumers (Korgaonkar et al., 1985). Based on literature review, this study formulated the following hypothesis:

$H7$. Brand image has a mediating effect on the relationship between product quality and consumer satisfaction towards Islamic travel package in Malaysia.

2.2 Islamic physical attribute

It is important to understand Muslim behaviour through Islamic attribute in the study. The Islamic physical attribute is one of the significant tools when the Muslims decide to buy a tourism product or service. According to Battour et al. (2014), the Islamic physical attribute of Islamic travel packages can attract Muslim consumers such as a restaurant with a halal logo or Islamic free dress code. The finding by Battour et al. (2014) was consistent with Eid and El-Gohary (2014). They mentioned that the Islamic physical attribute in the Islamic travel package should be improved for the purpose to attract more Muslim consumers to purchase the Islamic travel package. Ozdemir and Met (2012) stated that Muslims normally avoid free mixing and they prefer a restaurant which has a halal logo. Muslims prefer to choose a travel package that has the Islamic symbol. Based on the discussion above, this study proposed the following hypothesis:
H2. Islamic physical attribute has a significant positive effect on brand image towards Islamic travel package in Malaysia.

In the services industry such as marketing tourism, consumer satisfaction is an experience of the consumer that is indefinable and subjective (Sweeney and Soutar, 2001). The Muslim consumers expect that the Islamic physical attributes include prayer facilities, halal food, and Shari’ah-compatible toilet (Eid and El-Gohary, 2015). Eid and El-Gohary (2015) found that Islamic physical attributes can affect consumer satisfaction. In other words, Muslim consumers with a high level of religious believe, perceived the ‘value of Islamic physical attribute’ have a greater importance compared to other factors in choosing a tourism package. According to Rice and Al-Mossawi (2002), the Muslims have a solid Islamic identity that might be interested in Islamic-oriented appeals. It is believed that the product must have an Islamic brand image to attract more Muslim consumers. Thus, the key question is whether brand image of Islamic physical attribute can lead to consumer satisfaction. Therefore, the following is the research hypothesis that supports this study:

H8. Brand image has a mediating effect on the relationship between Islamic physical attribute and consumer satisfaction towards Islamic travel package in Malaysia.

2.3 Islamic non-physical attribute

The accessibility of the Islamic non-physical attribute is one of the tools that can be used when the Muslims choose the tourism product. Battour et al. (2011) and Eid and El-Gohary (2014) stated that Islamic non-physical attributes such as Islamic entertainment, Islamic dress code, Islamic call of prayer, and general Islamic morality can attract the Muslim consumers to buy the Islamic travel package. Muslim consumers avoid free mixing, as they prefer to have separate recreational facilities (Ozdemir and Met, 2012). Furthermore, Stollery and Jun (2017) emphasised that hosts should not take for granted the importance of uniqueness and differentially in creating delightful experience. Thus, the Islamic travel package may be the best solution for Muslim consumers who follow the Islamic religiosity. It is assumed that Islamic non-physical attributes have a positive effect on brand image. Based on the discussion above, this study proposed the following hypothesis:

H3. Islamic non-physical attribute has a significant positive effect on brand image towards Islamic travel package in Malaysia.
2.4 Islamic belief

According to Gardiner et al. (2013), the Islamic perspective on brand image and purchasing decision process is preferable in the additional segmentation of variables such as age, gender, and lifestyle, which can be used to detect the market sections. Religious belief can influence the Muslims’ attitudes, behaviours, perceptions, and emotions to choose the products and services (Jafari and Scott, 2013; Essoo and Dibb, 2004). Islam requires a positive practice regarding health and hygiene such as washing before prayer and selecting halal food (Hodge, 2002; Marks and Dollahite, 2001). Due to the importance of these practices, brand image is important when the Muslim consumers are choosing their travel package. However, there were limited research done on the impact of Islamic beliefs on brand image towards Islamic travel package. Based on the discussion above, this study proposed the following hypothesis:

**H4.** Islamic belief has a significant positive effect on brand image towards Islamic travel package in Malaysia.

Religious beliefs act as a critical tool in consumer satisfaction among Muslim consumers. Islam teaches the behaviours codes that encourage Muslim to buy or use products with a halal symbol. The brand image for the Muslims should follow their Islamic belief as they might use the products or services that represent the Islamic image that can contribute to the value of consumer satisfaction (Eid and El-Gohary, 2014). For every Muslim, the Shari’ah principles are very sensitive and important as the source of references because it is obligatory for appropriate execution (Alam et al., 2011; Zamani-Farahani and Henderson, 2010). The Quran provides guidance in the aspects of human activities, and the religious beliefs can influence consumer satisfaction as consumers choose products and services based on brand image. Atteeq-Ur-Rehman (2010) mentioned that religion can affect the satisfaction of the Muslim consumers by influencing their beliefs about the products and services. Based on the discussion above, this study proposed the following hypothesis:

**H10.** Brand image has a mediating effect on the relationship between Islamic belief and consumer satisfaction towards Islamic travel package in Malaysia.

2.5 Knowledge

Consumers’ knowledge of the products or services has been acknowledged as a tool that affects the buying decisions (Bettman and Park, 1980) and consumers’ phases of knowledge tend to change their opinions through brand image (Laroche et al., 2003). Knowledge about the brand enables consumers to develop a positive brand image that leads to consumer satisfaction (Wang et al., 2019; Mohd Suki, 2016; Laroche et al., 2001). According to Padel and Foster (2005), consumers desire better information about the product based on brand image when they make a purchase that could lead to better satisfaction. Chang and Wu (2015) noted that consumer knowledge and positive attitudes towards brand images can influence the purchasing intentions. Based on the discussion above, this study hypothesised following:

**H9.** Brand image has a mediating effect on the relationship between Islamic non-physical attribute and consumer satisfaction towards Islamic travel package in Malaysia.
Knowledge has a significant positive effect on brand image towards Islamic travel package in Malaysia.

According to Smith and Paladino (2010), the knowledge of the product will positively affect customer satisfaction. However, Padel and Foster (2005) stated that the lack of the information on product knowledge will negatively affect brand image and satisfaction. Several studies stated that the knowledge of the product can positively affect consumer satisfaction (Mohd Suki, 2017; Mohd Suki, 2016; Rahardjo, 2015; Chen and Chang, 2012). Currently, the study on marketing tourism is in its initial stage. Therefore, this study aimed to examine whether brand image has a mediating effect on the relationship between brand image and consumer satisfaction towards Islamic travel package in Malaysia. This study formulated the following hypothesis:

H11. Brand image has a mediating effect on the relationship between brand image and consumer satisfaction towards Islamic travel package in Malaysia.

2.6 Brand image and consumer satisfaction

In the marketing research, the term brand image is common and it changes according to different authors with different perspectives. According to Hung (2008), brand image occurs in consumer awareness as the consumers perceive and interpret the brand and marketing activities. According to Johnson et al. (2001), brand image is linked to consumer satisfaction that influences customer loyalty. Brand image is defined as a series of brand associations by the consumers (Keller, 1993). According to Tu et al. (2012), brand image is a company’s intangible assets that are difficult to be copied by competitors. When consumers bought a product, they are not purchasing the product but also the company set value (Ind, 1997). Jeon (2017) found that consumers’ commitment is positively influenced by consumers’ emotional attachments. Chiu et al. (2017) also noted that trust is crucial in creating positive emotional relationship. The positive effect of brand image has increase consumer satisfaction and encourages consumers to re-purchase the product (Johnson et al., 2001). According to Olsen and Johnson (2003), consumer satisfaction can be separated into two meanings which are after purchase and the general decision about the purchasing behaviour. Consumer satisfaction is the combination of consumer emotion and response (Oliver, 1997). Zhang (2015) mentioned that brands image is related to the symbol of the companies that can attract the consumers to buy their products with functional effects. Severi and Ling (2013) mentioned that the strong brand image can strengthen the competitiveness of the brand. They also stated that brand image is one of the factors that can influence consumers’ decision-making by the impression and experience of the consumers. It is believed that a product or service with a good image will turn into satisfaction that could lead to consumers in repurchasing the product (Tu et al., 2012).

According to Mohammad and Rashid (2018) and Giebelhausen et al. (2016), satisfaction refers to the emotion and pleasurable degree of brand experienced by consumers. Wu (2011) mentioned that brand image is considered as a critical antecedent of consumer satisfaction. Davies et al. (2003) found a positive relationship between brand image and consumer satisfaction. The result is consistent with Martineau (1958) who proposed a theory that the consumers will develop a certain degree of satisfaction when they support the brand image of the company. Brand image is important for customer satisfaction that can lead to the success of the businesses. Studies found a positive relationship between brand image and consumer satisfaction (Tu et al., 2012; Wu, 2011; Ibrahim and Najjar, 2008; Oliver, 1997; Selnes, 1993). Based on the discussions, the following hypothesis is proposed:
3. Methodology
This study used a cross-sectional design and quantitative method to examine the factors affecting brand image and consumer satisfaction on Islamic travel package. The platform was Google form to collect the data. This platform is chosen due to its features such as linking Google account and Docs editor. Then, the data were imported into Statistical Package Social Science (SPSS) and Smart-PLS for further analysis.

3.1 Research instrument
The questionnaire for the online survey was designed using simple and unbiased wordings so that the respondents could easily understand the questions. Table I shows the summary of each variable and its sources. A seven-point Likert scale (very strongly disagree, strongly disagree, disagree, neutral, agree, strongly agree, and very strongly agree) was used for all the variables.

3.2 Sample selection and data collection
The target population for this study was customers who participated in Islamic travel package from several companies that offer Islamic products and services. This study calculated the minimum sample size using G-Power software which required a sample size of 146 to test the model with six predictors. The researcher obtained a list of 2,000 customers who travelled with Islamic travel packages offered several companies. An email with an online survey link was sent to the listed customers and a total of 163 respondents completed the form within a week, which was more than the required sample size.

4. Results
4.1 Descriptive analysis
The data were collected from customers who participated in Islamic travel package. The majority of the respondents were female (77.9 per cent). A total of 118 respondents (72.4 per cent) were in the age range of 21 to 30 years old. For income status, 96 or 58.9 per cent of the respondents have an income of RM 2,000 and below. For marital status,
the majority of the respondents were single (85.9 per cent) and 23 respondents (14.1 per cent) were married.

4.2 Reliability and validity
Table III shows the reliability and validity measured for all the items. Table II shows that all the Cronbach’s alpha values exceeded the 0.7 threshold (Nunnally, 1978), indicating that all the items in this study are reliable. Without exception, all the composite reliability values in this study exceeded 0.7 (Hair et al., 2011), showing a high internal consistency of indicators measuring each item and verifying the construct reliability. Additionally, the Dillon–Golstein rho was used to evaluate the construct reliability. In this study, the Dillon–Golstein rho values for all indicators are more than 0.7 which confirm the reliability of all items. This study examined the average variance extracted (AVE) for convergent validity. Table II shows that all AVE values for all constructs exceeded 0.5 which indicate acceptable convergent validity. The multicollinearity issues are measured by calculating the variance inflation factor (VIF) to determine the redundancy.

The presence of discriminant validity is examined by cross loading and the Fornell-Larcker criterion (Hair et al., 2014). Table III shows that all the indicator loadings exceeded 0.7 which indicate that all the components are reliable and all the indicator loadings are higher than the entire cross loading which confirm the discriminant validity.

4.3 Path analysis
According to Hair et al. (2011), the primary evaluation criteria of the structural model are the level and significance of path coefficients. Table IV presents the path coefficient between product quality, Islamic physical attribute, Islamic non-physical attribute, Islamic belief and knowledge on brand image. The path coefficient value for product quality is positive ($\beta = 0.372$) and significant ($p$-values of 0.000 < 0.05). Thus, $H1$ is accepted. For $H2$, the coefficients value for Islamic physical attribute on brand image is 0.296 with a $p$-value of 0.000 < 0.05, indicating that Islamic physical attributes have a positive and significant effect on brand image; $H2$ is accepted. However, the coefficient value for Islamic non-physical attribute ($H3$) has a positive (0.087) and insignificant effect ($p$-value more than 5 per cent level of significance) on brand image. Thus, $H3$ is rejected. For $H4$, the coefficient value of Islamic belief is 0.103 with a $p$-value of 0.039. Islamic belief has a positive and significant effect on brand image; $H4$ is accepted.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Items</th>
<th>CA</th>
<th>DG rho</th>
<th>CR</th>
<th>AVE</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product quality</td>
<td>4</td>
<td>0.940</td>
<td>0.943</td>
<td>0.957</td>
<td>0.847</td>
<td>1.612</td>
</tr>
<tr>
<td>Islamic physical attribute</td>
<td>4</td>
<td>0.824</td>
<td>0.856</td>
<td>0.882</td>
<td>0.652</td>
<td>2.269</td>
</tr>
<tr>
<td>Islamic non-physical attribute</td>
<td>3</td>
<td>0.752</td>
<td>0.791</td>
<td>0.854</td>
<td>0.663</td>
<td>1.319</td>
</tr>
<tr>
<td>Islamic belief</td>
<td>4</td>
<td>0.881</td>
<td>0.921</td>
<td>0.917</td>
<td>0.736</td>
<td>1.600</td>
</tr>
<tr>
<td>Knowledge</td>
<td>4</td>
<td>0.833</td>
<td>0.849</td>
<td>0.889</td>
<td>0.669</td>
<td>1.675</td>
</tr>
<tr>
<td>Brand image</td>
<td>4</td>
<td>0.926</td>
<td>0.928</td>
<td>0.947</td>
<td>0.818</td>
<td>1.000</td>
</tr>
<tr>
<td>Customer satisfaction</td>
<td>4</td>
<td>0.941</td>
<td>0.960</td>
<td>0.958</td>
<td>0.850</td>
<td>–</td>
</tr>
</tbody>
</table>

Notes: CA: Cronbach’s Alpha; DG rho – Dillon-Goldstein’s rho; CR – Composite Reliability; AVE – Average Variance Extracted; VIF – Variance Inflation Factors

Table II. Reliability analysis
**H5**, the coefficient value for knowledge on brand image is 0.102 with a \( p \)-value of 0.090, indicating that knowledge has an insignificant positive effect on brand image and **H5** is rejected. Finally, the coefficient value for brand image on customer satisfaction (**H6**) is 0.706 with a \( p \)-value of 0.000, indicating that brand image has a positive and significant
effect on consumer satisfaction. Hence, $H_6$ is accepted. Looking at the effect size ($f^2$) of Islamic physical attribute, it has a small effect size on brand image. In contrast, product quality has a large effect size on brand image. However, the effect size of Islamic non-physical attribute, Islamic belief, knowledge on brands image are not significant. Finally, the effect size of brand image on consumer satisfaction has a large effect size.

Table V shows the path coefficient of mediating effect on brand image. The coefficient value for product quality has a positive and significant effect on consumer satisfaction. This result indicates that brand image has a mediating effect on the relationship between product quality and consumer satisfaction; thus, $H_7$ is accepted. For $H_8$, the coefficient value for Islamic physical attribute on consumer satisfaction is 0.209 with a $p$-value of 0.000 < 0.05, indicating that the brand image has a mediating effect on the relationship between Islamic physical attribute on consumer satisfaction. Hence, $H_8$ is accepted. Islamic non-physical attribute has a positive and insignificant effect ($p$-value more than 5 per cent level of significance) on consumer satisfaction. Brand image has no mediating effect on the relationship between Islamic non-physical attribute and consumer satisfaction; thus, $H_9$ is rejected. The coefficient value for Islamic belief on consumer satisfaction is 0.073 with a $p$-value of 0.037. This result indicates that brand image has a mediating effect on the relationship between Islamic belief and consumer satisfaction; hence, $H_{10}$ is accepted. Finally, the coefficient value knowledge has a positive ($\beta = 0.072$) and insignificant effect ($p$-value more than 5 per cent level of significance) on consumer satisfaction. This result indicates that brand image has no mediating effect on the relationship between knowledge and consumer satisfaction; hence, $H_{11}$ is rejected.

5. Conclusion
The results of this study confirmed that product quality has a positive and significant effect on brand Image. The findings support $H_1$ and the result was consistent with the findings

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>$t$-value</th>
<th>$p$-value</th>
<th>$f^2$</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product quality → Brand image</td>
<td>0.372</td>
<td>4.833</td>
<td>0.000</td>
<td>0.207</td>
</tr>
<tr>
<td>Islamic physical attribute → Brand image</td>
<td>0.296</td>
<td>3.825</td>
<td>0.000</td>
<td>0.093</td>
</tr>
<tr>
<td>Islamic non-Physical attribute → Brand image</td>
<td>0.087</td>
<td>1.321</td>
<td>0.093</td>
<td>0.014</td>
</tr>
<tr>
<td>Islamic belief → Brand image</td>
<td>0.103</td>
<td>1.763</td>
<td>0.039</td>
<td>0.016</td>
</tr>
<tr>
<td>Knowledge → Brand image</td>
<td>0.102</td>
<td>1.340</td>
<td>0.090</td>
<td>0.015</td>
</tr>
<tr>
<td>Brand image → Consumer satisfaction</td>
<td>0.706</td>
<td>15.578</td>
<td>0.000</td>
<td>0.994</td>
</tr>
</tbody>
</table>

Table IV. Path coefficient

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>$t$-value</th>
<th>$p$-value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product quality → Consumer satisfaction</td>
<td>0.263</td>
<td>4.479</td>
<td>0.000</td>
</tr>
<tr>
<td>Islamic physical attribute → Consumer satisfaction</td>
<td>0.209</td>
<td>3.345</td>
<td>0.000</td>
</tr>
<tr>
<td>Islamic non-physical attribute → Consumer satisfaction</td>
<td>0.061</td>
<td>1.283</td>
<td>0.100</td>
</tr>
<tr>
<td>Islamic belief → Consumer satisfaction</td>
<td>0.073</td>
<td>1.785</td>
<td>0.037</td>
</tr>
<tr>
<td>Knowledge → Consumer satisfaction</td>
<td>0.072</td>
<td>1.313</td>
<td>0.095</td>
</tr>
</tbody>
</table>

Table V. Mediating effect of Brand image
by previous studies (Ghobehei et al., 2019; Nikhashemi et al., 2017; Sultan and Wong, 2012; Caruana and Malta, 2002; Anderson et al., 1994). For H2, Islamic physical attribute is a factor that can significantly affect brand image. Therefore, H_2 is accepted and the results are consistent with the findings of previous studies (Battour et al., 2014; Ozdemir and Met, 2012; Eid and El-Gohary, 2014). For H4, the result reveals that Islamic beliefs can affect brand image and H_4 is accepted. The result is consistent with the findings of previous studies (Gardiner et al., 2013; Jafari and Scott, 2013; Essoo and Dibb, 2004; Marks and Dollahite, 2001). For the mediating effect of brand image, H_7 is accepted in which brand image has a mediating effect on the relationship between product quality and consumer satisfaction. This result is consistent with the previous studies (Ghobehei et al., 2019; Chen, 2010; Zhu and Sarkis, 2006; Anderson et al., 1994). For H8, brand image has a mediating effect on the relationship between Islamic physical attribute and consumer satisfaction; H_8 is accepted. This study is consistent with previous studies (Eid and El-Gohary, 2015; Rice and Al-Mossawi, 2002; Sweeney and Soutar, 2001). Finally, H10 is accepted in which brand image has a mediating effect on the relationship between Islamic belief and consumer satisfaction. This result is consistent with previous studies (Eid and El-Gohary, 2014; Alam et al., 2011; Ateeq-Ur-Rehman, 2010; Zamani-Farahani and Henderson, 2010).

The marketing department in tourism companies can use the results as brand image has a positive relationship with consumer satisfaction as supported by Jeon (2017) who stressed that brand is one of the powerful tools in marketing. As such, tourism companies can enhance their brand image by improving the products and services based on religious perspective that can lead to the increase in consumer satisfaction. For example, tourism companies can improve the quality of Islamic travel package and allow Muslim consumers to have access to the most updated Islamic travel package. These improvements can directly increase the satisfaction of Muslim consumers and the image of Islamic travel package. It is discovered that brand image can significantly affect consumer satisfaction towards Islamic travel package in Malaysia. Tourism companies can focus on these elements to make a long-term connection with loyal customers. Future research can use a different design to examine the relationship of quality or loyalty. Besides that, the research can focus on different industries.

References


Further reading

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Challenges or survival instinct of Tibetan entrepreneurs

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Abstract

Purpose – The purpose of this study is to explore the financial sources and evaluate the credit facilities available to Tibetan entrepreneurs especially residing in the vicinity of the Karnataka district, India. The most significant problem is that lending rates are extremely high and there is a lack of professional skill to manage their operations. Availability of financial support is still a major barrier for established and potential Tibetan entrepreneurs in the growth of their enterprises.

Design/methodology/approach – A sample size of 115 respondents, belonging to the urban and rural districts of Karnataka were interviewed to collect the information as primary data. Correlation analysis, cluster analysis, one-way ANOVA and percent test have been applied for statistical analysis. The interest rate, bank loan, credit, savings, friends and relatives, corporate, retained profits and trade credit are the variables used for the research.

Findings – Personal savings, bank credit and bank loans are the most important variables reflecting the credit activities and are clustered having a total of 3.710. Corporate, trade credit and retained profits form minimal sources of credit having a total of 1.194. Hence, there is an important relationship between the variables and the credit facilities availed by the entrepreneurs.

Originality/value – The research emphasis on their credit facility, financial growth, availability of capital are some of the challenges encountered by the entrepreneurs hindering the growth of the new business. Hence the researcher has focused on understanding and exploring the various challenges faced by these entrepreneurs.

Keywords Refugees, Financial support, Special economic zone, Technopreneurs, Tibetan settlement

Paper type Research paper

1. Introduction
Entrepreneurship is the act of creating a business while building and scaling it to generate a profit. India has been an entrepreneurial society and has the skills sets. Entrepreneurship has been embedded in the Indian genes and is a part of its tradition. According to the research study conducted by NCAER (1993), lack of training and finance are the major problems faced by Small Scale Industries (SSIs) besides procedural hassles, administrative hurdles, lack of infrastructure and counseling (Santoro et al., 2007). Bangalore with salubrious climate has been a major attraction for the Tibetan Diaspora members of Tibet, who settled...
in various colonies of Karnataka, attracting towards both education and employment. In the early 1970s, there were around Tibetan from various southern Tibetan settlements doing sweater business in Bangalore (Santhi and Kumar, 2011). This reduced from the 1990s due to various reasons as many of them went abroad, shifted to other occupations on their own. There is a new wave of entrepreneurship activity among the Tibetan Diaspora in the last ten years in Bangalore at present due to successful Tibetan entrepreneurs. Presently, 40 families are engaged in sweater selling business and 15 families into hoteliers in Bangalore. Most of the Tibetan entrepreneurs have installed their outlets and restaurant in the central and southeastern part of Bangalore, namely, Koramangala, Shivajinagar, Shanthinagar and Brigade road.

Bylakuppe is the oldest and largest group of Tibetan settlement in Karnataka, who were initially two families which later grew into a large township of Tibetans. This township attracts both local and foreign tourists. Shopping complex comprises of traditional Tibetan handicrafts like jewelry, bags, carpets and shawls, restaurants and hotels. The success of the Tibetan restaurants shows that Indians have good taste buds for new food. It also reflects that India can be a destination as a prospective business arena for a migrated community.

The purpose of the study revolves around the evaluation and exploring the probable and suitable financial resources to the prospective entrepreneurs residing in the vicinity of the state considered for the research. Most of the entrepreneurs are deprived of financial assistance for carrying out their traditional business due to lack of education, schemes and provisions offered by the government and illiteracy. It also includes the awareness of the respondents, their reaction and response towards the various financial assistance availed by them to ensure the sustainability of their business.

The Challenges encountered by the respondents were evaluated considering the business location based variables namely interest rate growth, collaterals, legal process, duration of finance, adequate funding, repayment of loans, raw materials, availability of labor, inadequate credit, technology, competition and fall in demand.

Indian economy promotes budding entrepreneurs that can reflect as a panacea to address major problems of employment and poverty. The Government of India has always thrived to cater to the need of the self-employment personnel like Industrial Policies and Five Year Plans specifically focusing on the growth of the small-scale sector, setting up of Special Economic Zones (SEZs), incubation centers, educational institutions exclusively for entrepreneurs, and financial support schemes for the promotion of entrepreneurship. Most the entrepreneurs face challenges and problems due to lack of availability of finance, technical knowledge, managerial skills, availability of resources and infrastructure, awareness about entrepreneurship schemes and regulatory framework, market linkage, etc. which obstruct the growth and development of the entrepreneurship in the country. Lack of training and finance are the major problems faced by Small Scale Industries (SSIs) besides procedural hassles, administrative hurdles, and lack of infrastructure and counseling. Vasper also found that there are many obstacles that affect entrepreneurship and identified a lack of seed capital as one of the major barriers. The Government of India has initiated many policies and developed schemes to facilitate the business that has led to an extraordinary improvement in recent years. India has evolved as the promising country for promotion of arti¢ rafts and handicrafts.

2. Theoretical background
India has been the most sought nation to the refugees hailing from other neighboring nations such as Bhutan, Pakistan, Bangladesh and Nepal, as the nation has always opened
its arms wide to the people looking for hope of survival acceptance by the local citizens. The country has focused on upbringing the talent especially in the small and medium scale business which has the support from the government as well. It has a rich heritage of culture, tribal arts, handicrafts, traditional handmade articles that can be of high exportable quality. This workmanship also attracts tourists drawing their attention towards the handmade articles, ancient arts carried forward generations after generations with an intention of retaining the culture and also promoting their business for livelihood. Some of the folk and tribal arts carry religious faiths creating an aesthetic value based on a certain belief system of the people. The development of any nation lies in the efforts undertaken to retain their ancient and rich cultural aspects held always high. Tibetan refugees who had migrated to India comprises of very small family size, looking for making their survival away from their native. The study reveals that Belgium entrepreneurs are more successful in developing their business in large-scale operations especially by the small firms due to the fact they have an entrepreneurial family background (Donckels and Dupton, 1986). Researchers have opined that financial systems enable in evaluating the probable entrepreneurs who can mobilize savings, improving the productivity based operations, diversifying the associated risks through innovations which also promotes an increase in profits if endogenous growth models are adopted in the business (King and Levine, 1993). Nigerian banks were reluctant in funding small and medium enterprises, stringent monetary policy and financial instability resulted in the credit crunch affecting the development of entrepreneurs (Ogujiuba et al., 2004). A small and medium sector can facilitate the overall development of the capabilities of the entrepreneurs through transitional literature (Aidis and Sauka, 2005). Entrepreneurship, business knowledge, and skills within micro and small businesses play an important part in the economies of countries across the globe by being the drivers of economic growth, as well as creating employment (GRAAF, 2007). Financing constraints are one of the leading challenges faced by the entrepreneurs across the globe that have to be addressed by the economic policymakers by empowering them with suitable and affordable financial sources to incept and develop their business (Kerr and Nanda, 2009). The rapid growth of young firms during various stages of entrepreneurship: This paper aims to examine factors influencing the high growth of new firms in metal-based manufacturing and business service firms in Finland. It seeks to compare the factors of how new firms achieve a high rate of growth during the first four years and years five to eight (Littunen and Niittykangas, 2010).

Pioneer entrepreneurs always stay focused, passionate by exploring various opportunities and converting their weakness into strength, and thrive to improve their abilities and are very resourceful (Santhi and Kumar, 2011). The researcher has attempted to emphasize the impact of microfinance contributing to the entrepreneurial development of small-scale enterprises in Nigeria and its global significance. Microfinance institutions operating in Nigeria are identified as the key players in the financial industry hampering the individuals, business organizations, other financial institutions, the government and the economy at large scale through their stringent services (Osunde and Mayowa, 2012). Social entrepreneurs are those individuals primarily focusing on addressing the social problems and affecting the social well-being with potential qualities of offering creative solutions with great zeal and persistent (Sivathanu, 2013). The author has stressed the importance of the Tibetan community playing a pivotal role in the growth of modern enterprises in sustaining the legal and political hurdles (Rigzin, 2014).

Tibetans in exile in India showcase their entrepreneurial spirit at the Tibetan Entrepreneurship Conference: On August 14, 2015, Your Story to the first-ever Tibetan Entrepreneurship Conference. A Two-day event that would bring together entrepreneurs,
government officials and the youth from the Tibetan community in exile in India (Mehta, 2015). India is one of the destinations for the Tibetan community to venture into small businesses exploring the various avenues in setting a strong base. The society promotes the development of this community by encouraging them to attend various training programs (Yee, 2016). Tibetan refugees to American entrepreneurs: Sharing their culture and making a good living doing it is nothing new to Lhakar Dolma and her parents, Sonam Gyaltsen and Tsering Kyizom — the family has been selling goods from their native Tibet for the past decade and a half in Santa Fe, New Mexico (Inklebarger, 2017).

2.1 Conceptual framework

The entrepreneurs must be fueled with timely financial support to engage them in running the business successfully and for long sustainability. Finance plays a very pivotal role in effectively managing various resources. These refugees are primarily focused on direct selling and setting up roadside stalls to promote their products and intend to increase their sales as well. The existing cycle of their business comprises of obtaining financial assistance from credit and other sources. This engages them in making their potential products that are ready for sales. The revenue generated from the sales must be catered to meet their financial charges and expenses to run their families.

2.2 Proposed promotion of business

The entrepreneurs must adopt a simple but yet effective form of business models to expand their operations and enhance their sales. The conventional style of business may not fetch much revenue to their talent and hard work. The community is migrated and hence people may not be willing to improve their standard of living. Some of the promotional activities that can help these migrants to improve their sales and create a market can be as below. They must get in touch with local NGO’s, rotary club or any other social concern organizations to help them in creating a larger market for their products rather than just confining to few places in Bangalore. Corporate firms can adopt this community through corporate social responsibility and help them to learn basics strategies of the business, set up stalls during any of the events at their campus on special occasions, donate funds to set up retail outlets, many more. The community must seek the help of the government to establish a venue to market their products during any exhibitions, stock clearance sales, promote their products during any local public events through constructive networking skills. The migrants can seek help to be associated with local talent groups to set up a coaching class to train youngsters, children and any interested public to learn their ancient and traditional arts so that it can help them creating better markets as well generate revenue. They must look for creating a market for their products online in association with some social networking sites and promote during the local cultural festivals.

2.3 Proposed sources of funds

The ancient culture and heritage must always be protected which serves as a platform in retaining the value system, beliefs of the community at a larger scale. The current model of business followed by these migrants is very limited in scope for the expansion of business and longer sustainability. Hence, the proposed model can adopt innovation to promote better. It is one of the most common and popular of recent times in seeking help from different groups to assist in offering financial support for the business. Some of the high net worth individuals who belong to a retired group, the aged group would always want to help people in need to develop their small scale business. These are opportunities for the community where different events held on special occasions will look for the potential
entrepreneurs who can create a mark for their business sponsored by these incubators. Small business administration is one of the leading sources of financial support especially focused on the small-scale business owners extending their assistance to provide financial support without complicated legal formalities.

2.4 Economic development
Entrepreneurs are those business leaders always thriving towards the generation of ideas and focusing on nurturing the same in economic growth and development. Key areas that facilitate in the economic development can be discussed as below with special reference to the Indian economy. Capital Formation is created in pooling of the savings of the people by the entrepreneurs who facilitate in promoting capital formation by adding value to the economic and industrial progress. Unemployment is one of the leading issues in an emerging nation like India which can be addressed by offering job opportunities to various levels from artisans to technicians so earn their living. Regional disparities can be curbed by promoting balanced regional development through business set-up in the special economic zones and backward areas that offer benefits to the public in the form of transportation, education, health, etc. People from slums can get exposed to improvement in their standard of living. It facilitates the equal distribution of wealth, improves the standard of living, and increases per capita income for the development of society by reducing the concentration of income and wealth. Entrepreneurs, especially in the area of artisans and craftsmanship have an advantage in promoting the nation’s culture and heritage that always creates a better overseas trade increasing the scope for foreign trade through exports. It serves as a Catalytic agent for the business set-up by the entrepreneurs stimulates industrialization, creating demand for the supplement units that encourage in supporting the economic growth, employment and overall economic development as it connects the various groups of the economy as an agent. Increase in exports promotes the generation of inflow of the foreign currencies, adding more reserves to the nation. Rural and remote areas are always neglecting during the process of economic development due to lack of infrastructure, qualified employees, scarcity of resources, etc. However, the entrepreneurs encourage active participation of these neglected people to be self-employed to develop their community by improvement in health care, education, training and transportation.

2.5 Application of technology
Trello: It is a free project management tool that ensures effective organization of the business by offering various facilities like e-book, e-mails and e-cards with a specific project. Google Docs: This tool eases the person to work on a file with multiple people and easily shared, collect responses through a questionnaire, chatting at the same time, etc. that can be customized as per the needs of the owner. Asana: It is the most prominent facility of real-time integration of teamwork. Dropbox: It is a digital space that can provide awesome plugin apps to improve the experience that facilitates easy access to the files from anywhere at any time. Slack: It is a chat app that serves as a communication tool for teams based on smooth design. Several channels can be created to discuss as either a group or private. The files can be easily shared and archived with messages, notifications. All the devices are automatically synced and can be connected with multiple devices. Momentum: The homepage of the devices can be changed with this app designed to inspire the team when the user browses, greeting the user by their name and picture. Spotify: This is a music app that helps the user to stay focused throughout their day of work which can be played on the integrated devices. 7-Minute workout: It can ensure the shedding of calories during the work with just the help of a chair and wall either at home or office. Boomerang: This is an
excellent app to manage emails where messages can be temporarily removed from the inbox, archived and then retrieved later at the convenience of the user. Emails can be scheduled with timings and date to be sent in the future. Voila Norbert: It is an app which locates the right email addresses when they are not on the list of the website based on the names of the lists of officials in the company. Sidekick: It is an email add-on that provides the information related to recipients of those emails regarding the timings, location when they read the emails. 99 Designs: It is an app that facilitates the user to customize their logo and themes for the product and services offered and the decision can be made after experiencing the results. The designers across the globe will support in creating the designs, which later can be chosen by the user. Canava: This tool is useful in designing the graphics serving as a platform allowing the user to be the designer himself in the form of artwork on the websites. very: It is an innovative tool for users at a very economical price offering designs, business cards, writes messages, translations, etc. Clarity FM: Community experts provide services to the users at the convenience of the user based on the customized queries. Typeform: It is a tool to conduct effective surveys by the users that enable in giving feedbacks from the readers, customers, etc.

2.6 Scope for further research
The study can be conducted in detail by increasing the size of the sample for better data accuracy and the results of the research. There is increasing knowledge, awareness of the schemes, empowerment of entrepreneurs, due to which the country is expanding the boundaries opening its arms towards the youngsters to step forward in venturing into entrepreneurship. This can be focused on the various start-ups initiated by these youngsters. Similar studies can be conducted across other states in India.

3. Empirical research
3.1 Research model
The geographical coverage of this survey belongs to major Tibetan settlements of both urban and rural in Karnataka state namely Bylakuppe, Mungod, Hunsur, Kollegal and Bangalore. The respondents have limited due to the small size of their families migrated to India are still on the process of settling down and creating a mark for themselves. Regarding the research survey on Tibetan entrepreneurs, so far there are few researchers who have emphasized on the developmental of entrepreneurship in the Tibetan exile community and its impediments to the growth of Tibetan entrepreneurial in India. Hence, this highlight of previous research surveys has not covered an extensive study on the obtaining of credit and financial constraints of an entrepreneur. The refugee Tibetan entrepreneurs have great potential in flourishing their culture and craftsmanship in the nation to promote their ancient heritage, earn for survival, and expect to provide education to their children. They are very determined to create an environment for themselves along with their community, capable enough to develop their business with a hope of protection from being exploited and preventing from the involvement of any illegal activities. However, even a small-scale business requires minimum financial support in recovering the cost incurred and for marginal profit earnings. Hence, the researcher has attempted to assess the feasibilities of obtaining such financial support from various sources to sustain in the business, as the refugees have no collaterals. The objectives of the study consist of assessing the financial and credit facilities availed by the respondents to operate the business and challenges encountered by them. The whole analysis for this present study depends on primary sources which are collected with the help of the structured questionnaire prepared and direct interviews to define information from the samples chosen from Tibetan entrepreneurs who
voluntarily participated in the study. Convenience sampling technique has been applied in the study. Secondary data has been obtained from the reports and publications of Government websites. However, secondary data have been collected from the official websites of the government. Some of the respondents have not maintained the records for the business operated by them due to the lack of awareness with regard to accountancy and few were not educated and hence they were reliable on the educated family members to provide the information. Statistical Package for Social Science (SPSS) is the statistical tool used for testing descriptive statistics, one-way ANOVA (Analysis of Variance), correlation analysis and cluster analysis. The current study is confined only to the evaluation of the financial sources and other credit facilities required for the Tibetan entrepreneurs to operate and sustain in the business. There is scope for further research of comparative study of performance in business before and after obtaining financial support, any financial grants or subsidies obtained by the state government, measures and schemes introduced by the state government for the empowerment of these refugee communities, training and development programs, workshops conducted, etc.

3.2 Hypothesis

\begin{itemize}
\item \textbf{H01.} There is no significant relationship between the variables that are chosen for the analysis.
\item \textbf{H02.} There is no significant difference between business location and challenges faced.
\end{itemize}

3.3 Reliability analysis
The results based on the reliability test using Cronbach’s Alpha have been shown in Table I. The coefficient alpha (\(\alpha\)) of the eight items is 0.832, which reflects the reliability of the given factors. The items chosen proves to be statistically significant as the \((p < 0.01)\) at 0.01 per cent level.

3.4 Adequacy and validity analysis
The sampling adequacy and test of Sphericity have been performed to the resultant correlation matrix to test whether there is any relationship between the variables with significance or not. Table II shows that there is a significant relationship among the variable chosen as the “\(p\)” value is less than 0.000 (0.001 per cent level). Adequacy test yielded a KMO result of 0.810 which states that Correlation Analysis can be carried out appropriately for

<table>
<thead>
<tr>
<th>No of items</th>
<th>Cronbach’s alpha</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>0.832</td>
<td>19.554</td>
<td>0.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>KMO sampling adequacy</th>
<th>Bartlett’s sphericity test</th>
<th>Df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.810</td>
<td>321.727</td>
<td>28</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Table I. Reliability analysis on the financial sources of credit

Table II. KMO and Bartlett’s test results
these variables which are also significant at 0.001 per cent level. Hence, the null hypothesis is rejected and the alternative accepted.

3.5 Correlation analysis
The technique applied in this study reflects the respondent’s level towards the source of credit in order to run the business. The factors responsible for sources of credit are B1, B2, B3 . . . B8 is given in the below.

3.6 Factor analysis
The principal component analysis and the rotated factor loading method have been used to understand and evaluate the stimulating factors. From Table III, it is observed that out of eight factors, two-factor values, namely, credit activity and other financial sources, are identified by the rotation method. The total percentage of variation in the factors shows 61.3 per cent.

3.7 Cluster analysis
Table IV depicts the clustering of stimulating factors showing the level of Tibetan Entrepreneur towards the source of credit in order to run the business broadly grouped into credit activity and other financial sources. The variables personal savings (B1), bank credit (B2), Friends and relatives (B3), Bank loans (B5), and TED, CTA (B8) are clustered together as factor 1 forming the components of “credit activity” and have a total of 3.710. The next three variable Corporate (B4), Trade credit (B6), Retained profits (B7) are constituted as factor 2 forming the components of “other financial sources” and have a total of 1.194.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Factor (1)</th>
<th>Factor (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Savings (B1)</td>
<td>0.648</td>
<td>0.161</td>
</tr>
<tr>
<td>Bank Credit (B2)</td>
<td>0.809</td>
<td>0.229</td>
</tr>
<tr>
<td>Friends and Relatives (B3)</td>
<td>0.645</td>
<td>0.360</td>
</tr>
<tr>
<td>Corporate (B4)</td>
<td>0.223</td>
<td>0.809</td>
</tr>
<tr>
<td>Bank Loans (B5)</td>
<td>0.819</td>
<td>0.191</td>
</tr>
<tr>
<td>Trade Credit (B6)</td>
<td>0.247</td>
<td>0.826</td>
</tr>
<tr>
<td>Retained profits (B7)</td>
<td>0.155</td>
<td>0.817</td>
</tr>
<tr>
<td>TED, CTA, etc. (B8)</td>
<td>0.592</td>
<td>0.089</td>
</tr>
<tr>
<td>Total</td>
<td>3.710</td>
<td>1.194</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factors</th>
<th>Particulars</th>
<th>Rotated factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.710 (Credit Activity)</td>
<td>Personal Savings (B1)</td>
<td>0.648</td>
</tr>
<tr>
<td></td>
<td>Bank Credit (B2)</td>
<td>0.809</td>
</tr>
<tr>
<td></td>
<td>Friends and Relatives (B3)</td>
<td>0.645</td>
</tr>
<tr>
<td></td>
<td>Bank Loans (B3)</td>
<td>0.819</td>
</tr>
<tr>
<td></td>
<td>TED, CTA, etc. (B8)</td>
<td>0.592</td>
</tr>
<tr>
<td></td>
<td>Corporate (B4)</td>
<td>0.809</td>
</tr>
<tr>
<td>1.194 (Other Financial Sources)</td>
<td>Trade Credit (B6)</td>
<td>0.826</td>
</tr>
<tr>
<td></td>
<td>Retained profits (B7)</td>
<td>0.817</td>
</tr>
</tbody>
</table>
Sources of credit required to run the business stimulate the level of Tibetan entrepreneur are influenced by the factors comprising of corporate, trade credit, and retained profits.

3.8 One-way ANOVA
Table V shows the business location and challenges faced by the respondents towards obtaining credit and financial growth. The F value at 0.074, 0.006, 0.087, 0.017 and 0.020. Since the F value is significant in the above mention at 5 per cent, 10 per cent and 1 per cent levels, This shows that majority of the respondents are faced a challenge in interest rate too high, lengthy process and complex, provide sufficient funding, labor trouble, and inadequate credit respectively. Hence, the null hypothesis is rejected and accepted the alternative hypothesis that there is a significant difference between the location of business and challenges faced by the respondents. One -way ANOVA was performed to analyze the statistical differences associated between and within the groups of the business location and financial growth. It resulted that there is statistically significant evidence with regards to the legal formalities (F = 3.803, \( p < 0.01 \)), availability of labor (F = 3.160, \( p < 0.05 \)), and inadequate credit supply (F = 3.064, \( p < 0.05 \)).

4. Conclusion
Entrepreneurship enhances economic development by creating new job opportunities, improves skillsets, and contributes to GDP, increases exports, the standard of living. The attempt of the author focuses to understand the challenges of Tibetan entrepreneurs in obtaining credit and financial growth in Karnataka state. These entrepreneurs are not much dependent on accessing credit from the bank, as their source of finance is informal through friends and relatives. Correlation Analysis reflects the source of credit that depicts clustering of stimulating factor in the level of Tibetan Entrepreneur towards the source of credit in order to run the business. Variables B1, B2, B3, B5, and B8 are clustered together as factor 1 and are named as “credit activity “and have a total of 3.710. The next three variables B4, B6, B7 are grouped as factor 2 and is named as “other financial sources “and have a total of 1.194. Hence, the results show a significant relationship between the variables. One-way ANOVA resulted in confirming the statistical significance of the business location based parameters chosen for the study had a strong difference in variance while checked for within and between the population and the sample chosen for the study. Therefore, Legal process, availability of labor, and inadequate credit plays a pivotal role in channelizing the financial credit towards the entrepreneurs based on the location of their business. The process of

<table>
<thead>
<tr>
<th>Challenges</th>
<th>F-value</th>
<th>SIG.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest rate growth</td>
<td>2.197</td>
<td>0.074</td>
</tr>
<tr>
<td>Collateral</td>
<td>1.028</td>
<td>0.396</td>
</tr>
<tr>
<td>Legal process</td>
<td>3.803</td>
<td>(0.006)**</td>
</tr>
<tr>
<td>Duration of finance</td>
<td>0.582</td>
<td>0.676</td>
</tr>
<tr>
<td>Adequate funding</td>
<td>2.090</td>
<td>0.087</td>
</tr>
<tr>
<td>Repayment of loans</td>
<td>0.828</td>
<td>0.510</td>
</tr>
<tr>
<td>Raw materials shortage</td>
<td>0.748</td>
<td>0.561</td>
</tr>
<tr>
<td>Availability of labor</td>
<td>3.160</td>
<td>(0.017)**</td>
</tr>
<tr>
<td>Inadequate credit</td>
<td>3.064</td>
<td>(0.020)**</td>
</tr>
<tr>
<td>Technology</td>
<td>1.813</td>
<td>0.131</td>
</tr>
<tr>
<td>Competition</td>
<td>0.953</td>
<td>0.437</td>
</tr>
<tr>
<td>Fall in demand</td>
<td>1.976</td>
<td>0.103</td>
</tr>
</tbody>
</table>

Table V. Challenges of entrepreneurs between and within the groups of business location towards obtaining credit and financial growth
complete the document verification, submitting of legal documents is very time consuming for these businessmen who are not educationally qualified. The other business location-based variables are proved statistically not significant in deriving the challenges encountered by the respondents in availing the financial credit and support.

References


Further reading


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Which Google keywords influence entrepreneurs? Empirical evidence from Vietnam

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Ho Chi Minh City, Vietnam

Abstract
Purpose – This paper aims to shed light on an impact of Google keywords on the number of new businesses (and an amount of capital registered) in Vietnam, the Southeast Asian country, after the year of an entrepreneur, 2016.

Design/methodology/approach – This study uses a rich set of quantitative techniques from VAR Granger and threshold regression. The whole sample period covers the data (keywords, number of new businesses, an amount of capital invested to register) from the first week of 2016 to October 2018, which includes 144 observations in total.

Findings – The findings suggest that the relationship between Google does not persist in the long run. There is a short-run shock, might cause a change to the frequency of the other keywords rather than the number of firms (or an amount of capital). However, under the number of firms’ threshold, keywords have both positive and negative impacts on entrepreneurs whereas a higher threshold of capital, keywords show their roles to predict an amount of money for registering firms.

Practical implications – The Vietnamese Government and executives are advised to consider the Google keywords “entrepreneur” (in Vietnamese) and “start-up”, which cause a decline in entrepreneurial movements. In addition, the current period is going to inverse from the previous one in terms of the number of firms and an amount of capital. Finally, there are two critical thresholds: 1,602 companies and 35,010m VND for the keywords’ influence.

Originality/value – This study contributes empirical evidence of technological change and entrepreneurship and contributes to the existing literature by discussing how this relationship under the threshold.

Keywords Vietnam, Capital, VAR, Entrepreneurs, Threshold, Google search, Granger

Paper type Research paper

1. Introduction
After “Đoì Mới” (the name given to the economic transformation in Vietnam until 1986), Vietnam changed its policies from the centrally planned economy to the emphasis of...
privatization sectors. The small and medium enterprises (SMEs) in Vietnam contribute to half of the total national GDP. Interestingly, Brandt, Rand et al. (2016) indicate that the SMEs and private sectors have been playing the prominent in the growth of Vietnamese economic. Therefore, the Vietnamese Government is going to generate many policies as well as campaigns to foster the nationally entrepreneurial ecosystem. Since 1997, Vietnam has used the Internet as a member of the global network. According to Statista Portal (Statistics and Studies from more than 22,500 Sources), Vietnam currently has 55.19 million users. Thus, it is not difficult for those who want to find the information through the search engines as well as an Internet system in Vietnam. As other countries, Google is one of the Vietnamese favorite tools. Google Trend declares that they record the users’ history of finding and searching for statistical purpose. Thus, they can pick how frequency the users want to capture keywords by ranking them in the range from 01 to 1000. The more they search, the higher the indicators are. Before doing business, people have a tendency to find whether there exist potential markets for them to penetrate or not. Hence, we can use Google tools for searching the macroscopic determinants as well as microscopic factors. Can that tool use to predict for entrepreneurial activities in Vietnam? Can the groups of these factors such as high internet penetration, high internet feasibility, and high utilization of Google’s search forecast what people react under the information of new business? Our paper is to investigate how Google search influence the entrepreneur on both sides, such as the number of firms and an amount of capital. This is a standard reference for not only academic researchers but also the policymakers when promulgating any policies regarding entrepreneurial movements.

The paper proceeds as follows: Section 2 briefly acknowledges the existing evidence on the subject of the searching engine and entrepreneurial process. Section 3 presents the empirical framework regarding methodology and details on the dataset. Section 4 presents and discusses the empirical findings. Section 5 presents the conclusion and discussion of policy implications.

2. Literature review

It is undeniable that technological change has intervened in almost all areas ranging from medical treatment to economics, which leads to high adaptability by using these widgets. The prediction of technological determinants and entrepreneurship is attracting not only academic researchers but also a businessmen. Google is probably using the most frequent tools for those who apply the searching engine in their lives and work. Most entrepreneurial executives often try to reach those customers, markets, and politics to find their opportunities whether they use their money to commence businesses or not.

The technological change is fostering the current economy by restructuring and repositioning the roles of participants in markets. The Internet is employed as a tool for finding the customers’ needs and reaching new customers, which supports to achieve the companies’ objectives. There are some studies, which adapts the technological movements to financial models such as Bijl (2016) for forecasting the stock return, Neri et al. (2018) to evaluate the stock market activities from Norway or the Gwilym et al. (2016) contribution from the Chinese markets. Many scholars can use Google search to predict their socio-economics, such as the unemployment rate under the study of D’Amuri et al. (2017). As regards economic policy uncertainty, Baker et al. (2016) employ the Google index for predicting employers’ and consumers’ behaviors on employment dynamics. Not only using Google but also employing Twitter is a typical study from Bollen et al. (2011) to investigate for the stock market.
Many previous types of research focus on the personal characteristics or demographic factors, for example, Nga and Shamuganathan (2010) and Scott (2006) or some studies on institutions and entrepreneurship from Acs et al. (2008). However, it is still a gap for using Google Search Engine as a tool to forecast the potential of new businesses as well as the capital invested in markets through the decision's making. From another perspective, Scott (2009) opposes that policymakers should not encourage more people to become entrepreneurs, which results in bad public policy. It is illogical for those who use the internet to find the most successful companies rather than their failures in doing business. In addition, Courtois et al. (2018) indicate that the Google search engine does not support for solving the social and political information.

Why do people search? Yang et al. (2019) referred to the many definitions of searching (Li et al., 2013; Huber, 1991; Kornish and Ulrich, 2011). There is a process that people can learn from failure, find something new, and develop innovation and many different layouts of purposes. However, in the entrepreneurial context, Yang et al. (2019) summarized that the searching process in startup attempts to find information to examine their products by proposing them to customers in specific markets. Therefore, search activities can result from many various forms such as the internet, market survey, or interviewing section. Recently, the study of Google search has caught many scholars’ attention. Carnes et al. (2019) introduced that traditional research organization tends to transform through public entrepreneurship. Then, using the Google search engine is one of their approaches to get further informational questions and possible answers. Yan and Guan (2019) contribute to the existing literature by demonstrating that Google trend is likely to be factors improving entrepreneurial ecosystem cognition in the scope of OECD countries between 2005 and 2014. Noticeably, Askitas and Zimmermann (2009) confirmed that the Google search engine could be used to forecast economic behavior. Hence, this paper attempts to use Google as a proxy to predict the number of businesses in Vietnam through their behaviors. Why is Google? Firstly, Google is still the favorite search engine for the internet with a wide range of users in different countries and regions. Secondly, we based on the assumption from Da et al. (2011) that the searchers are limited to attention. Therefore, the Google Trends (Google Search Engine figures) will provide insightful information regarding active internet search of entrepreneurial activities. Thirdly, Davis and Harveston (2000) indicated that most entrepreneurs collected data from the internet, which becomes a popular and common way to obtain what they need. Meanwhile, Xiang and Gretzel (2010) argued that information from search engine reflects heterogeneous information needs. From this logic, this paper attempts to investigate which keywords drive the entrepreneurs in terms of their behaviors by establishing new companies because entrepreneurial information is very important for doing business (Gifford, 1992).

More interestingly, Al and Fazal (2018) also concluded that entrepreneurial orientation could influence the competency and micro-enterprise performance. In particular, the improvement of creativity and innovativeness could enhance micro-enterprise performance as well as inspire poor households to execute entrepreneurial activities. This is also close literature in terms of the ability to use creativity and innovativeness. The entrepreneurs can take their advantage to find the necessary information based on the searching engine platform, which brings them more perspectives that are different in initiating new businesses. Furthermore, Tran and Von Korfflesch (2016) confirmed that the supporting perception from the social cognitive career theory is also one of the important elements to cause the intention of establishing new social businesses. Currently, in the internet booming context, the searching engines, as well as other platforms, drive human perception, known as the impacting factor on entrepreneurs’ intentions. The study of Lee and Chun (2017)
contributes to the existing literature by building the dynamic ontology through Wikipedia to measure national image. These scholars indicated the role of the internet and relevant online information in terms of driving the human perception regarding the national image. Recently, Ribeiro, and Plonski (2019) used an in-depth interview to show that the entrepreneurship ecosystems can be influenced by the technologies, which includes the searching engine. In brief, there are some several studies investigate the indirect relationship between technological development, particularly searching engine, and entrepreneurial intention. Hence, our paper contributes to the existing literature by adding the Google search engine as a factor explaining the entrepreneurs in a specific context.

In the context of the booming of entrepreneurial movements, people can approach information regarding the ‘new business registration’ or “start-up” everywhere from communication channels or news. Vietnam has become one of the world’s most entrepreneurial nations (ranked #5 in the Approved Index in 2015 from www.approvedindex.co.uk/). Thus, many people are searching for their potential markets before making their decisions on doing business as the study of Kirihata (2018). This research emphasized that not only entrepreneurs but also investors need to have necessary insights before the early-stage. It is too late to find information as well as the procedure in the beginning stage of the entrepreneurship process. Thus, the available information is a channel to transmit their intentions to do business, which might be used as a determinant to predict the business actions in terms of new companies as well as their capital invested. It must be frankly said that overwhelming information is negatively or positively contributed to any economic aspects. Therefore, we decide to employ a rich set of established empirical approaches (included threshold regression) to debate and understand how Vietnamese entrepreneurial markets move after the national campaign.

3. Data and methodology

3.1 Data collection

Our data used is obtained the Google Trends (for the value of searching level) and the gate of Vietnamese Government (specifically Ministry of Planning and Investment) in registering new businesses, starting from the first week of 2016 to the end of October 2018. The main reason for choosing this period for our research is related to political strategy from the Vietnamese Government. At the beginning of the year 2016, the Vietnamese Government officially declares the project called “Startup Nation”, which aims to foster the number of new business reaching at 1 million new firms within the country by 2020. After launching this project, the Vietnamese Government’s propaganda is to target the multimedia communication for spreading this information, which leads to the frequency of searching in Google as regards entrepreneurship.

3.2 Data processing

Our method for processing the data is based on Bijl et al. (2016) and Da et al. (2011). This research proves that the average of the previous 52-week data is subtracted from the raw data. Thus, we also perform the standardized by dividing their discrepancy with standard deviation by the following formula (denoted AGSV, Average Google Searching Value Index; GSVI, Google Searching Value Index):

\[
AGSVI_t^B = \frac{GSVI_t - \frac{1}{52} \sum_{i=1}^{52} GSVI_{t-1}}{\sigma_{SVI_t}}
\] (1)
In which, AGSVI_B is Average Google Searching Value Index at week t whereas GSVI_t is Google Searching Value Index at week t and GSVI_t−1 is Google Searching Value Index at week (t − 1). The main reason why we cannot use the Google Search Value Index for our estimation is the value depending on the period of downloaded data (Neri et al., 2018). In addition, the number of new firms and an amount of capital invested into the Vietnamese market by the percentage of change from the previous week and current week.

3.3 Data analysis

To commence analyzing in the following section, we run a descriptive statistical analysis to get an insight into the features of the data (Table I).

We suggest having further validation such as quantile regression and threshold regression for investigating the insights which keywords drive a change in a number of new business establishment or registered capital (Figure 1).

Interestingly, there is a huge shock in a number of new business establishment and chartered capital at the end of 2016 (the beginning of 2017) over a period from Week 1, 2016 to Week 40, 2018. The main explanation for this phenomenon results from the “January effect” proposed by Thaler (1987), which simulates to the strong motivation for people in the first month of the year. Especially, this phenomenon is intuitively explained by the Asian markets by the chance of Lunar New Year to have a new starting point from a new business. In addition, the movement of a pair keyword between “Entrepreneurship” and “New business” is in-line. Similarly, this is also well-matched with a couple of keyword between “Entrepreneurship’ (in Vietnamese) and “Start-up”.

3.4 Methodology

We use a rich set of quantitative techniques to estimate whether keywords cause a change in the number of new business by shocks and threshold.

As regards “Granger-causes” and Vector Auto Regression (VAR), we refer to Lopez and Weber (2017), Lütkepohl (2005) and Granger (1969) for time-series estimation.

Based on Hansen (2000)’s study, we propose the approachable models as follows:

\[
y_i = \theta'_1 x_i + e_i \quad \text{for} \quad q_i \leq \gamma \\
y_i = \theta'_2 x_i + e_i \quad \text{for} \quad q_i > \gamma
\]

In which, q represents the threshold variable used to separate the sample into one or more regions; x is an m-vector of repressors’ and e is the error term. Then, the algorithm for estimation coefficients is minimized the least squares of the following regression with spitted observations and two regions:

<table>
<thead>
<tr>
<th>Variables</th>
<th>Explanation</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENT</td>
<td>Entrepreneurship</td>
<td>−0.0049972</td>
<td>0.9983</td>
<td>−2.129205</td>
<td>4.918857</td>
</tr>
<tr>
<td>NB</td>
<td>New business</td>
<td>0.0094991</td>
<td>1.009474</td>
<td>−2.042225</td>
<td>2.765448</td>
</tr>
<tr>
<td>ENTVN</td>
<td>Entrepreneurship (Vietnamese)</td>
<td>−0.013445</td>
<td>1.009474</td>
<td>−2.284666</td>
<td>4.164077</td>
</tr>
<tr>
<td>SU</td>
<td>Start-up</td>
<td>−0.0199718</td>
<td>1.024912</td>
<td>−2.875941</td>
<td>3.084342</td>
</tr>
<tr>
<td>PENUM</td>
<td>% new business</td>
<td>0.1141855</td>
<td>0.9667872</td>
<td>−0.857464</td>
<td>10.80159</td>
</tr>
<tr>
<td>PERCAP</td>
<td>% capital new business</td>
<td>0.2282415</td>
<td>1.306732</td>
<td>−0.978095</td>
<td>14.07992</td>
</tr>
</tbody>
</table>

Table I. Statistical description for variables
\[ y_i = \theta' x_i + z_i \delta_1 I(q_i \leq \gamma) + z_i \delta_2 I(q_i > \gamma) + e_i \]  \hspace{1cm} (4)

Then, \( z_i \) is a vector of exogenous variables with region-specific coefficient vectors \( \delta_1 \) and \( \delta_2 \). The estimator for threshold is calculated by:

\[ \hat{\gamma} = \arg \min_{\gamma \in T} S_T(\gamma) \]  \hspace{1cm} (5)

For a sequence of \( T_1 \) values in \( q_i \), where \( T_1 < T \). It implies that \( T_1 \) corresponds to the number of observations between the 10th and 90th percentile of \( q_i \). It might be referred to Hansen (2011) for more information on threshold estimation.

4. Results and discussion

4.1 Test of stationary

We use the Dickey and Fuller (1979) test as one of the most commonly used tests for stationarity. The null hypothesis is that the series has a unit root (Table II).

In addition, to ensure that all variables are stationary, we further use the Phillips and Perron (1988) test that a variable has a unit root. The more advantage of Philips–Perron rather than Dickey–Fuller is to integrate Newey and West (1987) standard errors to account for serial correlation (Table III).

<table>
<thead>
<tr>
<th>Variables</th>
<th>( t )-statistics</th>
<th>Stationary or not</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENT</td>
<td>-11.895***</td>
<td>Stationary</td>
</tr>
<tr>
<td>NB</td>
<td>-9.221***</td>
<td>Stationary</td>
</tr>
<tr>
<td>ENTVN</td>
<td>-2.688*</td>
<td>Non-stationary</td>
</tr>
<tr>
<td>DENTVN</td>
<td>-15.187***</td>
<td>Stationary</td>
</tr>
<tr>
<td>SU</td>
<td>-7.284***</td>
<td>Stationary</td>
</tr>
<tr>
<td>PENUM</td>
<td>-12.221***</td>
<td>Stationary</td>
</tr>
<tr>
<td>PERCAP</td>
<td>-13.470***</td>
<td>Stationary</td>
</tr>
</tbody>
</table>

**Notes:** *, ** and *** significant at 10%, 5% and 1% levels, respectively; because of ENTVN being non-stationary in significance level 1%, we use a further process for this variable by taking the first difference of ENTVN, which is considered as one typical way to deal with stochastic trends (unit root); D denotes “first-difference” for original time series.

Figure 1.
The investigation for percentage in a change of new business establishment and a change in the value of standardized keywords by Google Search Engine.
The alternative specification of unit root tests demonstrates that all variables except ENTVN are stationary at significance level 1 per cent. The first difference of ENTVN (denoted by D.ENTVN) is to reject the null hypothesis for both the Dickeya and Fuller (1979) and the Phillips–Perron (1988) at 99 per cent confidence level. Hence, we use these variables evaluated above for further quantitative analysis.

4.2 Choosing the lag selection by Lütkepohl (2005)

Next, we test of lag-order selection statistics for time series approaches as a pre-estimation. The pre-estimation stage is normally used to choose the lag order for the following appropriate time-series models. We mainly use the study of Lütkepohl (2005) with the represented as the Log-Likelihood (LL), the Likelihood ratio (LR), the Prediction Error (FPE), the Akaike’s Information Criterion (AIC), the Schwarz’s Bayesian Information Criterion (SBIC) and the Hannan and Quinn Information Criterion (HQIC) (Table IV).

Based on the research of Ivanov and Kilian (2001), the AIC criterion is better for the monthly data for Vector Auto Regression (VAR). Then, they also indicate HQIC is well applicable for quarterly data, which is over 120 observations. Then, SBIC usually works for Vector Error Correction (VEC) model. Therefore, our data will be fitted with a lag of three (3) for further implications of VAR and should be used without lag for VEC model after another test.

4.3 Test of Johansen co-integration

After a choice of the lag selection by Lütkepohl (2005), our estimate the cointegrating rank of a VECM is the following step. We refer to the rich sets of quantitative techniques from

<table>
<thead>
<tr>
<th>Lag</th>
<th>LL</th>
<th>LR</th>
<th>df</th>
<th>p</th>
<th>FPE</th>
<th>AIC</th>
<th>HQIC</th>
<th>SBIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>-1,108.58</td>
<td>87.885</td>
<td>36</td>
<td>0.000</td>
<td>0.371547</td>
<td>16.0372</td>
<td>16.0887</td>
<td>16.1638*</td>
</tr>
<tr>
<td>1</td>
<td>-1,064.64</td>
<td>87.885</td>
<td>36</td>
<td>0.000</td>
<td>0.331592</td>
<td>15.9229</td>
<td>16.2832</td>
<td>16.8396</td>
</tr>
<tr>
<td>2</td>
<td>-1,018.74</td>
<td>91.798</td>
<td>36</td>
<td>0.000</td>
<td>0.288371</td>
<td>15.7805</td>
<td>16.4496</td>
<td>17.4271</td>
</tr>
<tr>
<td>3</td>
<td>-915.539</td>
<td>206.81</td>
<td>36</td>
<td>0.000</td>
<td>0.110109*</td>
<td>14.8106*</td>
<td>15.7887*</td>
<td>17.2173</td>
</tr>
<tr>
<td>4</td>
<td>-884.081</td>
<td>62.516*</td>
<td>36</td>
<td>0.004</td>
<td>0.119474</td>
<td>14.8789</td>
<td>16.1657</td>
<td>18.04</td>
</tr>
</tbody>
</table>

**Table IV.** The test of lag selection by Lütkepohl (2005)

**Note:** * Means the suggestions of lag selection order from each method.
Anderson (1951), Johansen (1998), Gonzalo and Pitarakis (1998) and Aznar and Salvador (2002) for producing statistics which are used to determine the number of co-integrating equations in a vector error-correction model (VECM). Based on our characteristics of the data set with the selected lags, we extract the results in Table V.

The results shown in the table above indicates that there is a co-integrating relationship between any of two pairs (for example, these keywords and percentage in a number of new business establishment or capital flow in registered firms). It interprets that a pair of each keyword and number of new business establishment (or chartered capital) does not persist in the long term. Therefore, any change in a number of new business establishments (or the amount of chartered capital) is intuitively triggered by the short-term shock. Hence, it leads us to use the VAR estimation for further investigation.

### 4.4 Vector auto regression estimation and granger causality analysis

In previous studies, Nasir et al. (2019) and Luu Duc Huynh (2019) also used VAR and VAR Granger to see the causal relationship in financial aspect. However, to determine the managerial direction of causality, we performed the Granger causality test and the results presented in Table VI.

The results of Granger causality test showed that there is no keyword, which has strong evidence to cause the new business establishment during the period from the beginning of 2016 to October 2018. This means that the Granger Causality cannot be used to predict the number of new business registration in Vietnam. However, we also find out something interesting from this approach. The number of new companies established in Vietnam has a significant relationship at 1 per cent to cause the value of searching these keywords “entrepreneurship” (for both English and Vietnamese), “new business”, “start-up”. In addition, this test has also explained the behavior of participants, who pay attention to entrepreneurship, seems to not look for only one keyword. For example, the searching keyword “entrepreneur” has strong evidence to predict the actions of finding keyword “start-up” and vice versa on Google Search Engine at significance level 5 per cent. To perform the further test, we still employ Granger Causality for chartered capital registered to answer whether these keywords cause a change for capital (Table VII).

<table>
<thead>
<tr>
<th>Rank</th>
<th>Parms</th>
<th>LL</th>
<th>Eigenvalue</th>
<th>Statistic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>78</td>
<td>−1,084.03</td>
<td>0.66364</td>
<td>324.5915</td>
<td>94.15</td>
</tr>
<tr>
<td>1</td>
<td>89</td>
<td>−1,007.76</td>
<td>0.36301</td>
<td>172.0509</td>
<td>68.52</td>
</tr>
<tr>
<td>2</td>
<td>98</td>
<td>−976.189</td>
<td>0.25888</td>
<td>108.9113</td>
<td>47.21</td>
</tr>
<tr>
<td>3</td>
<td>105</td>
<td>−955.218</td>
<td>0.24973</td>
<td>66.9678</td>
<td>29.68</td>
</tr>
<tr>
<td>4</td>
<td>110</td>
<td>−935.105</td>
<td>0.10313</td>
<td>26.7431</td>
<td>15.41</td>
</tr>
<tr>
<td>5</td>
<td>113</td>
<td>−927.487</td>
<td>0.0789</td>
<td>11.5056</td>
<td>3.76</td>
</tr>
<tr>
<td>6</td>
<td>114</td>
<td>−921.734</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** Sample: 2016 week 5 – 2018 week 40 (with the lags 3); *, ** and *** significant at 10%, 5% and 1% levels, respectively; because of ENTVN being non-stationary in significance level 1%, we employ further process for this variable by taking the first difference of ENTVN, which is considered as one typical way to deal with stochastic trends (unit root); this test is used for ENT, NB, D.ENTVN, SU, PERNUM, PERCAP variables; the Johansen test is used with Maximum Likelihood estimator of the parameters of a co-integrating VECM with function as follows \( \Delta y_t = \alpha \beta' y_{t-1} + \sum_{i=1}^{p-1} \Gamma_i \Delta y_{t-i} + \epsilon_t \). Denoted \( y \) is \((K \times 1)\) vector of I(1) variables, \( \alpha \) and \( \beta \) are \((K \times r)\) parameter matrices with rank \( r < K \), \( \Gamma_1, \ldots, \Gamma_{p-1} \) are \((K \times K)\) matrices of parameters and \( \epsilon_t \) is a \((K \times 1)\) vector of normally distributed errors that is serially uncorrelated (Anderson, 1951) and (Johansen 1998).
Interestingly, there is also no keyword, which causes a change in the amount of chartered capital registered in the research period. However, it is once again to validate the behavioral of users searching the keyword “entrepreneur” and “start-up” is strongly correlated by two sides from Appendix. To clarify the keywords’ impact on a change of new business establishment or an amount of money invested; we use a further set of quantitative techniques to investigate the insights here.

4.5. Threshold regression estimation
Threshold regression allows the model with their coefficients to differ across regions, which is determined by an above or below the threshold. This approach is proposed by Tong (1983, 1990), Hansen (2011). Our estimation is mainly used for conditional least squares to estimate the parameters of the threshold regression model.

We attract our attention to the effect of a change in the new business establishment under the value of keywords searched. In our model, we assume that the Vietnamese Government sets the threshold for the absolute number of firms born. We use the absolute figures for new companies established in Vietnam as one threshold (or two regions). Thus, the model may be written as:

$$\text{PERNUM}_t = \delta_{10} + \delta_{11} \text{PERNUM}_{t-1} + \delta_{12} \text{ENT}_t + \delta_{13} \text{NB}_t + \delta_{14} \text{D.ENTVN}_t + \delta_{14} \text{SU}_t + \epsilon_t \text{ if } -\infty < \text{NUM} < \gamma$$

Table VI.
Granger causality for percentage in a change of new firm establishment

<table>
<thead>
<tr>
<th>Null hypothesis</th>
<th>$\chi^2$</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERNUM does not indicate Granger Causality with ENT</td>
<td>2.3605</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>PERNUM does not indicate Granger Causality with NB</td>
<td>1.096</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>PERNUM does not indicate Granger Causality with D.ENTVN</td>
<td>8.2081**</td>
<td>Reject</td>
</tr>
<tr>
<td>PERNUM does not indicate Granger Causality with SU</td>
<td>5.9447</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>PERNUM does not indicate Granger Causality with all</td>
<td>27.025***</td>
<td>Reject</td>
</tr>
<tr>
<td>ENT does not indicate Granger Causality with PERNUM</td>
<td>2.7838</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>ENT does not indicate Granger Causality with NB</td>
<td>0.93254</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>ENT does not indicate Granger Causality with D.ENTVN</td>
<td>2.7848</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>ENT does not indicate Granger Causality with SU</td>
<td>9.8871**</td>
<td>Reject</td>
</tr>
<tr>
<td>ENT does not indicate Granger Causality with all</td>
<td>18.214</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>NB does not indicate Granger Causality with PERNUM</td>
<td>3.0498</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>NB does not indicate Granger Causality with ENT</td>
<td>0.46674</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>NB does not indicate Granger Causality with D.ENTVN</td>
<td>8.271**</td>
<td>Reject</td>
</tr>
<tr>
<td>NB does not indicate Granger Causality with SU</td>
<td>4.9168</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>NB does not indicate Granger Causality with all</td>
<td>16.435</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>D.ENTVN does not indicate Granger Causality with PERNUM</td>
<td>2.3841</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>D.ENTVN does not indicate Granger Causality with ENT</td>
<td>3.6176</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>D.ENTVN does not indicate Granger Causality with NB</td>
<td>5.6319</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>D.ENTVN does not indicate Granger Causality with SU</td>
<td>5.2743</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>D.ENTVN does not indicate Granger Causality with all</td>
<td>16.589</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>SU does not indicate Granger Causality with PERNUM</td>
<td>4.1606</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>SU does not indicate Granger Causality with ENT</td>
<td>10.116**</td>
<td>Reject</td>
</tr>
<tr>
<td>SU does not indicate Granger Causality with NB</td>
<td>6.0134</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>SU does not indicate Granger Causality with D.ENTVN</td>
<td>8.8352</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>SU does not indicate Granger Causality with all</td>
<td>27.515***</td>
<td>Reject</td>
</tr>
</tbody>
</table>

Note: *, ** and *** significant at 10%, 5% and 1% levels, respectively
The results for threshold regression are illustrated in Table VIII. This table reports the coefficients in threshold regression and the corresponding Sum of Squared Residuals (SSR). We only choose a single threshold, which contributes to the most value in minimizing the SSR. The estimated threshold of 1,602 and 35,010m VND (Vietnam dong, Vietnamese currency) split the sample into two regions. The region 1 corresponds to the portion of the sample in which a quantity of new companies is less than or equal to 1,602 and an amount of money invested to register new ones is under 35,010m VND. Region 2 corresponds to the portion of the sample in which two aforementioned value is greater than 1,602 and 35,010, respectively.

The results for threshold regression are illustrated in Table VIII. This table reports the coefficients in threshold regression and the corresponding Sum of Squared Residuals (SSR). We only choose a single threshold, which contributes to the most value in minimizing the SSR. The estimated threshold of 1,602 firms and 35,010m VND (Vietnam dong, Vietnamese currency) split the sample into two regions. The region 1 corresponds to the portion of the sample in which a quantity of new companies is less than or equal to 1,602 firms and an amount of money invested to register new ones is under 35,010m VND. Region 2 corresponds to the portion of the sample in which two aforementioned value is greater than 1,602 and 35,010, respectively.

<table>
<thead>
<tr>
<th>Null hypothesis</th>
<th>$\chi^2$</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERNUM does not indicate Granger Causality with ENT</td>
<td>2.6267</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>PERNUM does not indicate Granger Causality with NB</td>
<td>3.328</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>PERNUM does not indicate Granger Causality with D.ENTVN</td>
<td>3.6538</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>PERNUM does not indicate Granger Causality with SU</td>
<td>2.3063</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>ENT does not indicate Granger Causality with PERNUM</td>
<td>10.77</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>ENT does not indicate Granger Causality with NB</td>
<td>1.1722</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>ENT does not indicate Granger Causality with D.ENTVN</td>
<td>1.1308</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>ENT does not indicate Granger Causality with all</td>
<td>1.7601</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>ENT does not indicate Granger Causality with SU</td>
<td>9.98**</td>
<td>Reject</td>
</tr>
<tr>
<td>ENT does not indicate Granger Causality with all</td>
<td>16.428</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>NB does not indicate Granger Causality with PERNUM</td>
<td>3.5342</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>NB does not indicate Granger Causality with ENT</td>
<td>0.13862</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>NB does not indicate Granger Causality with D.ENTVN</td>
<td>5.525</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>NB does not indicate Granger Causality with SU</td>
<td>5.9225</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>NB does not indicate Granger Causality with all</td>
<td>16.963</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>D.ENTVN does not indicate Granger Causality with PERNUM</td>
<td>5.6833</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>D.ENTVN does not indicate Granger Causality with ENT</td>
<td>4.0682</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>D.ENTVN does not indicate Granger Causality with NB</td>
<td>6.1207</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>D.ENTVN does not indicate Granger Causality with SU</td>
<td>4.4209</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>D.ENTVN does not indicate Granger Causality with all</td>
<td>20.217*</td>
<td>Reject</td>
</tr>
<tr>
<td>SU does not indicate Granger Causality with PERNUM</td>
<td>3.3163</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>SU does not indicate Granger Causality with ENT</td>
<td>11.782***</td>
<td>Reject</td>
</tr>
<tr>
<td>SU does not indicate Granger Causality with NB</td>
<td>7.5531</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>SU does not indicate Granger Causality with D.ENTVN</td>
<td>6.705*</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>SU does not indicate Granger Causality with all</td>
<td>26.533***</td>
<td>Reject</td>
</tr>
</tbody>
</table>

Note: *, ** and *** significant at 10%, 5% and 1% levels, respectively.

PERNUM<sub>t</sub> = $\delta_{20} + \delta_{21}$ PERNUM<sub>t-1</sub> + $\delta_{22}$ ENT<sub>t</sub> + $\delta_{23}$ NB<sub>t</sub> + $\delta_{24}$ D.ENTVN<sub>t</sub> + $\delta_{24}$ SU<sub>t</sub> + $\epsilon_{t}$ if $\gamma < NUM < +\infty$ (7)

PERCAP<sub>t</sub> = $\delta_{30} + \delta_{31}$ PERCAP<sub>t-1</sub> + $\delta_{32}$ ENT<sub>t</sub> + $\delta_{33}$ NB<sub>t</sub> + $\delta_{34}$ D.ENTVN<sub>t</sub> + $\delta_{34}$ SU<sub>t</sub> + $\epsilon_{t}$ if $-\infty < CAP < \gamma$ (8)

PERCAP<sub>t</sub> = $\delta_{40} + \delta_{41}$ PERCAP<sub>t-1</sub> + $\delta_{42}$ ENT<sub>t</sub> + $\delta_{43}$ NB<sub>t</sub> + $\delta_{44}$ D.ENTVN<sub>t</sub> + $\delta_{44}$ SU<sub>t</sub> + $\epsilon_{t}$ if $\gamma < NUM < +\infty$ (9)

The results for threshold regression are illustrated in Table VIII. This table reports the coefficients in threshold regression and the corresponding Sum of Squared Residuals (SSR). We only choose a single threshold, which contributes to the most value in minimizing the SSR. The estimated threshold of 1,602 firms and 35,010m VND (Vietnam dong, Vietnamese currency) split the sample into two regions. The region 1 corresponds to the portion of the sample in which a quantity of new companies is less than or equal to 1,602 firms and an amount of money invested to register new ones is under 35,010m VND. Region 2 corresponds to the portion of the sample in which two aforementioned value is greater than 1,602 and 35,010, respectively.
When it comes to the coefficients of the number of new companies established, the lower region witnesses the strong relationship by independent variables by the lag of a percentage change in new firm figures, keywords such as “entrepreneur”, “new business”, the first difference in Vietnamese terminology for “entrepreneur” and “start-up”. There are three factors, which cause a negative impact on the number of new companies being initially run in Vietnam, such as L.PERNUM, D.ENTVN and SU. However, the variables ENT and NB positively trigger an increase in new businesses in Vietnam. The lag of L1.pernum will contribute to an increase in the percentage of new business at the significance level of 1 per cent. When users observe the booming of new enterprises in this period, they might take into consideration to register the new ones in the following period. Therefore, if there is an increase in the former week, the next week experiences a decrease from users, which are supposed to carefully observe the markets.

Regards the keywords, we figure out that there are some interesting points. When the users find more and more frequency of “entrepreneur” in English, the number of new businesses will increase at the significance level 1 per cent. In contrast, the possibilities of searching “entrepreneur” in Vietnamese cause a decrease in a number of new companies at the significance level 1 per cent. It can be explained by participation of both foreigners and locals, who are staying in Vietnam for searching these keywords by Google statistical figures. When the foreigners search for information regarding entrepreneurship in English, they might find potential opportunities. Thus, they come into the decision to register a new business in a dynamic market in Vietnam. Hence, we can interpret that the entrepreneurial information in English can be predicted for a rising number of new firms in Vietnam, which is considered as a risk-taking for those finding by English keyword of the entrepreneur. Meanwhile, the Vietnamese information related to entrepreneur negatively influences on statistical figures of new companies established. It is noted that the findings are under the lower region and Searching-Google-based-on-Vietnam-geography.

There are some differences between results from “start-up” and “new-business” keyword in explaining the number of firms in Vietnam. “New-business” is positive co-efficient

\[
Y_1 = \text{PERNUM} \\
Y_2 = \text{PERCAP}
\]

<table>
<thead>
<tr>
<th>Region 1</th>
<th>Coef</th>
<th>Region 1</th>
<th>Coef</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1.PERNUM</td>
<td>-4.055946*** [0.6885654]</td>
<td>L1.PERCAP</td>
<td>-0.106225* [0.0612877]</td>
</tr>
<tr>
<td>ENT</td>
<td>1.019179*** [0.2424065]</td>
<td>ENT</td>
<td>0.0763683 [0.0824977]</td>
</tr>
<tr>
<td>NB</td>
<td>2.179222*** [0.2884519]</td>
<td>NB</td>
<td>0.0292928 [0.0871885]</td>
</tr>
<tr>
<td>D1.ENTVN</td>
<td>-1.177853*** [0.2671696]</td>
<td>D1.ENTVN</td>
<td>-0.1658348 [0.1543781]</td>
</tr>
<tr>
<td>SU</td>
<td>-2.354959*** [0.2797288]</td>
<td>SU</td>
<td>0.0066673 [0.0903958]</td>
</tr>
<tr>
<td>Cons</td>
<td>-0.3830465 [0.249589]</td>
<td>Cons</td>
<td>0.0888611 [0.0841756]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region 2</th>
<th>Coef</th>
<th>Region 2</th>
<th>Coef</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1.PERNUM</td>
<td>0.0416155 [0.0566236]</td>
<td>L1.PERCAP</td>
<td>2.347929 [0.8533764]</td>
</tr>
<tr>
<td>ENT</td>
<td>0.0137247 [0.0567305]</td>
<td>ENT</td>
<td>2.631785*** [0.4544781]</td>
</tr>
<tr>
<td>NB</td>
<td>0.0189777 [0.0574766]</td>
<td>NB</td>
<td>0.1086512 [0.2463264]</td>
</tr>
<tr>
<td>D1.ENTVN</td>
<td>0.0199506 [0.1165031]</td>
<td>D1.ENTVN</td>
<td>0.4319265 [0.6552301]</td>
</tr>
<tr>
<td>SU</td>
<td>-0.0207872 [0.0629641]</td>
<td>SU</td>
<td>-2.532224*** [0.3597332]</td>
</tr>
<tr>
<td>Cons</td>
<td>0.0602966 [0.0596238]</td>
<td>Cons</td>
<td>2.675673*** [0.317829]</td>
</tr>
<tr>
<td>Order 1 – Threshold</td>
<td>1,602</td>
<td>Order 1 – Threshold</td>
<td>35,010</td>
</tr>
<tr>
<td>Sum of Squared Residuals</td>
<td>52,992</td>
<td>Sum of Squared Residuals</td>
<td>114,841</td>
</tr>
</tbody>
</table>

Note: *, ** and *** significant at 10%, 5% and 1% levels, respectively
whereas “start-up” cause a negative impact on new firms established. Our explanation for this case is to rely on the stage of establishing a new business. When users find information with keyword “start-up”, this means the beginning stage of market research or a collection of relevant concerns. However, if users use keyword “new business”, this is over the final stage of registration or the firms’ operations. Therefore, the information for “new business” encourages the users to run the new firms, which supports a rising percentage in new enterprises. However, users find difficulties when initially searching for “start-up”; therefore, they might be risk-averse behaved regarding new firms establishment. These findings are workable for the lower region.

Surprisingly, the higher region experience no keywords, which significantly influence a number of new companies, registered in Vietnam at any significance level. Finally, our threshold estimation for interpretation is 1,602 companies. According to Appendix 2, our estimated threshold witnessed an increase after declining between 1,000 and 2,000 companies in the researched period. Then, these searched keywords might suggest some implications for those who wish to commence their business in terms of information searching. Turning to the amount of capital used for registering new companies, there are also two regions with a threshold defined as 35,010m VND. In the context of the lower region, only the lag of variable “PERCAP” has a negative impact on an amount of chartered capital invested in new business at significance level 1 per cent. When it comes to keywords, the keyword “entrepreneur” in English demonstrates a rise for “PERCAP” whereas “START-UP” causes a decline at significance level 1 per cent. The explanation for this phenomenon is about the users who get used to with English and show strong motivation to do business in Vietnam when searching in English. However, the keyword “start-up” is quite popular for those who just want to initially penetrate in the market.

5. Implications and conclusion
There are various studies, which investigate the relationship between the Google keywords and the other elements such as stock returns, unemployment rates. This paper contributes a piece of new empirical evidence regarding Google keywords and the number of firms and an amount of registered capital in the context of Vietnam by threshold regression.

Therefore, the study presents some meaningful findings. Firstly, the Vietnamese government and executives need to be careful to search the information raising from keywords “entrepreneur” (in Vietnamese) and ‘start-up’, which leads to some information resulting in a decline the number of firms and an amount of capital. Instead, the keywords “new business” and “entrepreneur’ have a strong motivation to create more firms and to foster money for the whole economy. Secondly, there is a threshold as 1,602 companies and 35,010 VND, which presents the differences in keywords” influence. In the lower regime of the number of companies, most keywords contribute to a quantity change of firms.

However, it does not persist in the higher region. In contrast, the higher region for an amount of money is influenced by keywords. Finally, this study suggests that the process of company establishment is not caused by any long-term shocks. In the short run, there is a small change among these keywords by shifting from one to another one. Significantly, the threshold is an important element, which results in any changes in the number of new businesses or an amount of capital.

References


**Further reading**


Appendix

Figure A1. The impulse-response function analysis

Graphs by irfname, impulse variable, and response variable

95% CI  orthogonalized irf

step

Graphs by irfname, impulse variable, and response variable

229
Figure A2.
The number of new firms in Vietnam illustrated by weekly

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Factors affecting the performance of Indonesian special food SMEs in entrepreneurial orientation in East Java

Benny Hutahayan
Brawijaya University, Malang, Indonesia

Abstract

Purpose – This study aims to examine comprehensively the factors determining the performance of small and medium enterprises (SMEs) producing Indonesian special food in East Java.

Design/methodology/approach – This study is quantitative and qualitative. Primary data was collected from entrepreneurs in East Java, those producing Indonesian special food. Secondary data was obtained from the literature, literature study, journals, Central Bureau of Statistics and the office of industry, trade, cooperatives and SMEs in East Java. Areas selected for this study were Surabaya, Madiun, Malang, Pasuruan, Lamongan and Banyuwangi. The population was small and medium entrepreneurs producing Indonesian special food in the selected cities. Based on the PLS sampling rule, the number of samples in each research area was 50, with total of 300 respondents (50 × 6). The methods of collecting primary data were interviews and questionnaire. Data analysis was done using GSCA.

Findings – The study firstly found the significant influence of entrepreneurial orientation on business strategies of SMEs producing Indonesian special food in East Java. SME managers have a high entrepreneurial orientation. Secondly, it found a significant influence of entrepreneurial orientation on business performance of SMEs producing Indonesian special food in East Java. Thirdly, the study found that government policy is not a moderating variable. Additionally, business strategies have a significant influence on the performance of SMEs producing Indonesian special food in East Java. Finally, dynamics of the environment and business strategy have a significant influence on the performance of manufacturing industry in South Sulawesi.

Originality/value – To know the effect of entrepreneurial orientation, environmental dynamism, consisting of uncertainty of environment and intensity of competition, and business strategies toward business performance. Considering the findings of the previous studies, the authors would like to re-examine the effect of entrepreneurial orientation on business performance, which also compares the findings of previous studies, especially, the one by Lee and Tsang (2003) on SMEs in Singapore.

Keywords Entrepreneurial orientation, Business strategies, Government policies, Performance of SMEs

Paper type Research paper
Introduction

Small and medium enterprises (SMEs) develop quite rapidly in Indonesia, especially those producing Indonesian special food. Traditional foods and beverages are typically consumed by certain groups of people with a special flavor distinctive of others. The traditional food contains a variety of basic foods, such as rice, sweet potatoes, sago and so forth; it also contains adequate nutrition, rich herbs and natural ingredients. The development of SMEs also requires the development of reliable human resources, as human resources will affect the productivity level and management quality. The external problems faced by small businesses in general are as follows. First, it is related with the unresolved issues handling the legality aspects of business entities and licensing procedures, the implementation of fair business competition and regional autonomy, particularly the willingness of the regions to implement the empowerment of small-scale enterprises. Second, the speedy recovery of macroeconomic conditions due to the increase in fuel price that is very influential in small-scale business operations. Third, it is the limited provision of financial institution services, especially investment credit. Fourth, it deals with the limited availability and quality of business development services for small businesses. Then, last but not least is the limited financial resources for micro-enterprises. There have been significant developments over the past five years for Indonesian food product business, as evidenced by the increasing number of business units that continue to grow each year significantly despite the slight increase; this indicates that a typical food business has a pretty good business opportunity.

SMEs are closely related to entrepreneurship. Various theories and studies in the field of entrepreneurship explain the importance of entrepreneurial orientation and its impact on business performance (Riyanti, 2003; Vitale et al., 2003; Nurhayati, 2004) by examining the impact of entrepreneurial orientation (consisting of elements innovative, proactive and risk), marketing orientation, culture and performance (consisting of sales growth, profit growth and asset growth). Lee and Tsang (2001) have investigated the impact of entrepreneurial orientation on venture growth as measured by the growth of sales and growth of profit. Their entrepreneurial orientation consists of the need for achievement, internal locus of control, self-reliance and extroversion. The results show positive in which internal locus of control, variable needs for achievement, self-reliance is not significant. Steward et al. (2003) show a negative effect of entrepreneurial orientation on goals. We need to know the effect of entrepreneurial orientation, environmental dynamism, consisting of the uncertainty of environment and intensity of competition, and business strategies toward business performance. Considering the findings of the previous studies, we would like to re-examine the effect of entrepreneurial orientation on business performance, which also compares the findings of previous studies, especially the one by Lee and Tsang (2003) on SMEs in Singapore.

This study also examines the influence of environmental dynamics and strategies as Hashim et al. (2001) have examined in Malaysian SMEs. Muryati (2004) shows that external factors have a significant positive effect on the intensity of competitive strategy, while the internal factors have a significant negative effect on the intensity of competitive strategy. Maupa (2004) reveals that external environmental factors do not significantly affect business strategies. From the results of the previous studies, this study aims to re-examine the effect of the environmental dynamics against business strategies and business performance. Nurhayati (2004) shows entrepreneurial skills are not significant to performance. Muryati (2004) confirms that internal factors, consisting of production, marketing, finance, human resources and corporate information systems, negatively affect competitive strategy.

The factorization of pull is the possibility of obtaining higher (financial) benefits, the desire to obtain higher responsibility and control over the decision-making process and the desire to improve individual abilities. Meanwhile, push factors to put more emphasis on
employee motivation to leave their place of work and start a new business or something that is “pressing” someone to start entrepreneurship. The thing that must be considered is how to anticipate weaknesses and constraints faced by SME business people. The thing that should be noted is the entrepreneurial orientation in facing the dynamics of the environment to choose and implement management and strategies in an integrated manner so that improved performance and competitive advantage of SMEs can be achieved. Some characteristics of entrepreneurs as mentioned by Idrus (1999) include: self-confidence (self-confidence), task-oriented (task result-oriented), dare to take risks (risk-taker in the form of time, money and health and soul), have leadership attitude (leadership), original, future-oriented, greatly influences the success or performance of the business being carried out. The entrepreneurial orientation of an entrepreneur can lead to increase in business performance. Based on the previous studies, especially on SMEs producing Indonesian special food in East Java, we know that SMEs in Batu show superior performance. Therefore, it is necessary to examine comprehensively the factors determining the performance of SMEs producing Indonesian special food in East Java.

**Literature review and hypotheses**

*The relationship of entrepreneurial orientation and business strategies*

A strategy can be defined as directives based on organizational scale and decisions on products, market scale and improvement on competitive elements (McCarthy, 2003). Neshamba (2003) suggest that successful business owners have a greater emphasis on market orientation where they sell goods or services. Olson (2000) confirms that there is no proven significant positive relationship between risk tolerance, locus of control and ambition with the decision to enter the market.

In fact, it is undeniable that the survival of a company depends on the ability of entrepreneurs to survive and excel in the competition. Thus, a strategy to achieve competitive advantage is indispensable. Porter (1980) argues that companies must create special competitiveness to have strong bargaining power in competition. With regard to determining, which business strategies can be superior in competition, it is necessary to know the concept of the marketing strategy known as 4 P (Price, Product, Place and Promotion).

Research and development in entrepreneurship is the main strategy because it is related to creativity and innovation. It includes product research and development, price research and development, and promotion research and development. A business develops successfully because it has adequate research and development capability so as to create valuable and superior goods in the market.

**H1.** The better the entrepreneurial orientation, the more precise the business strategy applied to the small and medium business.

*The relationship of entrepreneurial orientation and business performance*

Glancey *et al.* (1998) affirm that one’s motivation in entrepreneurship is the “pull and push” factor. The “pull” factor is the possibility of obtaining a higher (financial) profit, a desire for greater responsibility and control over the decision-making process and the desire to improve the ability of the individual. Meanwhile, the “push” factor is more on self-motivation of employees to leave the place of work and start a new business; in other words, the “push” factor refers to things that are forcing a person to start becoming an entrepreneur.

Entrepreneurs, who have more push motivation, intend to sell or even close their business. Thus, the success of the business depends on the level of motivation of
entrepreneurs. In other words, entrepreneurial orientation determines business performance. Some innovations to motivate individuals are focused on entrepreneurship, help to reach their full potential, give awards, encouraging to see from a broad perspective and educate about entrepreneurship (Tseng and Tseng, 2019).

Entrepreneurial orientation can lead to an increase in business performance (Brown, 1996; Covin and Slevin, 1991). Thus, according to Lumpkin and Dess (1996), market leaders often use innovation and breakthroughs in doing business.

$H2$. The better entrepreneurial orientation, the higher performance of SMEs producing Indonesian special food in East Java.

The relationship of entrepreneurial orientation and business performance moderated by government policies

Thurik and Wennekers (2004) in their research conclude that government policies control the economy by involving technology participation and consumer stability will drive business performance. Some empirical studies confirm the role of government policies on SMEs. Rasiah (2002) reveals a proactive autonomous, the government supports the development of SMEs in the form of public training and market information. According to Makhdoom et al. (2019) entrepreneurial orientation and collective entrepreneurship have a direct positive impact on innovation in SMEs.

Albaladejo and Romijn (2000) reveal that a company's innovation capability comes from two sources, internal and external sources. Internal sources consist of professional background of founders or managers, employment skills and technology efforts. The external source deal with the frequency of interaction with customers, suppliers, government agencies and industry associations. It has been found that geographical proximity to external parties and support from institutions especially from the government through the provision of financial assistance or knowledge transfer has a positive impact on innovation ability.

The government holds such an important role in promoting small business success, as through its policies, the government can encourage business performance improvement for small businesses. Government policies can include improving the quality of small business human resources through training, strengthening capital by facilitating access to capital, encouraging partnerships and providing protection for small businesses.

$H3$. The better the entrepreneurial orientation coupled with effective government policies, the higher performance of SMEs producing Indonesian special food in East Java.

The relationship of business strategies and business performance

Contingency theory states that the success of the company depends on how the company can relate to situational factors such as environment (Hashim et al., 2001). Their study shows that the three generic strategies of Porter are not only relevant to large companies but also SMEs. It is also been confirmed the relationship of business strategies and performance of SMEs moderated by the environment.

According to Covin and Slovin (1989), small enterprises with high-style strategy indexes or entrepreneurial firms, generally perform better in tight competition, whereas small enterprises with low-conscious strategy or conservative firms, generally perform well in a soft competition environment. The generic strategy of Covin and Slovin (1989) has a weak influence on performance (Pelham, 1999). Menguec et al. (2007) also saw that MO is positively associated with marketing differentiation and innovation strategies, but not in
low-cost strategies. Rust et al. (2002) state the emphasis of costs relates to standardization and operational efficiency. Marketing performance is a factor that is often used to measure the strategy implemented by the company. A company strategy is always directed to produce good marketing performance and good financial performance.

Companies that are able to create a competitive advantage will have the power to compete with other companies because their products will remain in the interest of customers. Thus, design superiority has a positive effect on improving marketing performance. Some of the indicators used in assessing business performance are the profitability, productivity and market (Camision, in Sanchez and Marin, 2005).

H4. The more appropriate the business strategy, the higher the performance of SMEs producing Indonesian special food in East Java.

The relationship of environmental dynamics, business strategies, and business performance
Environmental dynamics (environmental uncertainty and competitive level) and competitive strategies (differentiation strategy, low cost, focus and delivery performance) are closely related to performance (sales growth, profit, assets and market share). According to Hashim et al. (2001), the effectiveness of a strategy can be seen by understanding and knowing the corporate environment, so a business strategy must be in line with the organization’s environment if it aims at the good organizational performance. In their research, the environment is measured through two dimensions, namely, the environmental uncertainty and competitive level, and business strategy are measured by three general strategies by Porter (1993). The dynamic environment has a more organic organizational structure in small companies. According to Marhaeni et al. (2019) human resources mediate part of the influence of social capital on empowerment; and transaction costs do not act as variables, mediating the effect of social capital on the empowerment of the small wooden handicraft industry in Bangli Regency. It is necessary for companies to adapt to the environment. The existence of information development requires companies to be responsive to the market. Anand and Ward (2004) have found that the dynamics of the environment and mobility have a positive and significant impact on market share and sales growth. Pelham (1999) in Suci (2009) states there is a relatively weak direct and indirect influence of the competitive environment on performance.

H5. The more appropriate the business strategy implemented with the environment dynamics, the higher the performance of SMEs producing Indonesian special food in East Java.

Methodology
This study is quantitative and qualitative. Primary data were collected from entrepreneurs in East Java, those producing Indonesian special food. Secondary data were obtained from the literature, literature study, journals, Central Bureau of Statistics, and the Office of Industry, Trade, Cooperatives, and SMEs in East Java. Areas selected for this study were for Surabaya, Madiun, Malang, Pasuruan, Lamongan and Banyuwangi. The population was small and medium entrepreneurs producing Indonesian special food in the selected cities. Based on the PLS sampling rule, the number of samples in each research area was 50, with total of 300 respondents (50 × 6). The method of collecting primary data were interviews and questionnaire. Data analysis were done using GSCA.
The following describes the operational definitions of each variable in this study. Entrepreneurial orientation is the behavior of the entrepreneur in managing the business. To measure its quality, we used an indicator listed in entrepreneurship characteristics. Meredith (1996) (in Suryana, 2006) brings out entrepreneurial traits as follows: confidence and optimism, work-oriented and result-oriented, risk-taking, leadership, originality and future-oriented. Environmental dynamics are seen as a change of environment both from within and outside the company that can bring new opportunities and threats for the company. Environmental dynamics in this study are viewed from two perspectives; the first is uncertainty, while the second is intensity. To measure this variable in the perspective of uncertainty, indicators developed from the concept of the major forces affecting industrial competition developed by Porter (1993) are used. Business strategies refer to the ability of the entrepreneur or company related to the analysis of the external and internal environment of the company, the formulation of the strategy, the implementation of plans designed to achieve goals, and the evaluation to get feedback in formulating the future strategy, with indicators of differentiation strategy, cost strategy and focus strategy. Government policies refer to the policies in the developing industry, especially small and medium industries. These are measured using three indicators, namely, training frequency, easy access to capital, and partnerships, taken from three previous researchers (Antonio et al., 2003; Dimitris and Dimitris, 2004; Stuart, 2009). Business performance refers to the level of achievement of a company within a certain period. The variable is based on the adaptation of Camison in Sanchez and Marin (2005) using three indicators to measure business performance, namely, profitability, productivity and market.

Results

Validity testing

Validity testing can be done by correlating each item score with the total score for each variable using correlation (r) product moment. Item or indicator is said to be valid if the value is \( r > 0.30 \). The reliability testing technique is to use the Cronbach’s alpha reliability coefficient value. Validity and reliability testing carried out through the SPSS program is based on the results of trial data on 50 respondents taken from outside the disktrik Dili, Baucau and Maliana. The correlation coefficient of each statement item is the total score of the overall question item. The following are the results of the validity test in Table I and reliability tests in Table II.

Table I shows that all indicator produces \( r \) values above 0.30, and thus, it can be said that the research instruments are valid.

Reliability testing

The following are the results of reliability testing using the Cronbach’s alpha reliability coefficient value. The criteria decision is that if the value of the alpha reliability coefficient is greater than 0.6 then the variable is reliable.

Table II shows that all variable produce alpha values above 0.60, and thus, it can be said that the research instruments are reliable. Thus, the research instrument is worthy of being used as a variable measurement tool.

Goodness of fit

Goodness of fit model in GSCA is presented as follows. The result of the analysis shows that model is good, as the GFI value > 0.90. From the FIT value of 0.499, we can see that the total variant of all variables used in this study and the model can explain all existing variable up to 0.499. The diversity of entrepreneurial orientation, business strategies, environmental
<table>
<thead>
<tr>
<th>Item</th>
<th>$r$-value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entrepreneurship orientation ($X_1$)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confidence</td>
<td>0.723</td>
<td>Valid</td>
</tr>
<tr>
<td>Dependence on other people</td>
<td>0.547</td>
<td>Valid</td>
</tr>
<tr>
<td>Optimism</td>
<td>0.49</td>
<td>Valid</td>
</tr>
<tr>
<td>Need or thirst for achievement</td>
<td>0.629</td>
<td>Valid</td>
</tr>
<tr>
<td>Profit-oriented or results</td>
<td>0.303</td>
<td>Valid</td>
</tr>
<tr>
<td>Diligent and steadfast</td>
<td>0.52</td>
<td>Valid</td>
</tr>
<tr>
<td>Determination of hard work, motivation</td>
<td>0.652</td>
<td>Valid</td>
</tr>
<tr>
<td>Energetic</td>
<td>0.411</td>
<td>Valid</td>
</tr>
<tr>
<td>Full of initiative</td>
<td>0.51</td>
<td>Valid</td>
</tr>
<tr>
<td>Able to take risks</td>
<td>0.366</td>
<td>Valid</td>
</tr>
<tr>
<td>Love the challenge</td>
<td>0.506</td>
<td>Valid</td>
</tr>
<tr>
<td>Being able to lead can get along with other people</td>
<td>0.537</td>
<td>Valid</td>
</tr>
<tr>
<td>Respond to suggestions and criticism</td>
<td>0.538</td>
<td>Valid</td>
</tr>
<tr>
<td>Innovative</td>
<td>0.511</td>
<td>Valid</td>
</tr>
<tr>
<td>Creative</td>
<td>0.386</td>
<td>Valid</td>
</tr>
<tr>
<td>Flexible</td>
<td>0.342</td>
<td>Valid</td>
</tr>
<tr>
<td>Foresight</td>
<td>0.393</td>
<td>Valid</td>
</tr>
<tr>
<td>Perspective</td>
<td>0.655</td>
<td>Valid</td>
</tr>
<tr>
<td><strong>Environmental dynamics ($X_2$)</strong></td>
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<td></td>
</tr>
<tr>
<td>Entrance barriers</td>
<td>0.508</td>
<td>Valid</td>
</tr>
<tr>
<td>Threat of substitute products</td>
<td>0.639</td>
<td>Valid</td>
</tr>
<tr>
<td>Competitive conditions</td>
<td>0.516</td>
<td>Valid</td>
</tr>
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<td>Supplier strength</td>
<td>0.583</td>
<td>Valid</td>
</tr>
<tr>
<td>Buyer strength</td>
<td>0.618</td>
<td>Valid</td>
</tr>
<tr>
<td>Product delivery</td>
<td>0.737</td>
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</tr>
<tr>
<td>Promotion competition</td>
<td>0.729</td>
<td>Valid</td>
</tr>
<tr>
<td>Price competition</td>
<td>0.761</td>
<td>Valid</td>
</tr>
<tr>
<td>Competition of distribution channels</td>
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<td>Valid</td>
</tr>
<tr>
<td>Raw material competition</td>
<td>0.59</td>
<td>Valid</td>
</tr>
<tr>
<td><strong>Government policy ($X_3$)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UKM Management training</td>
<td>0.849</td>
<td>Valid</td>
</tr>
<tr>
<td>Ease of obtaining capital</td>
<td>0.807</td>
<td>Valid</td>
</tr>
<tr>
<td>Ease in increasing cooperation</td>
<td>0.747</td>
<td>Valid</td>
</tr>
<tr>
<td><strong>Business strategy ($Y_1$)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raw material prices</td>
<td>0.618</td>
<td>Valid</td>
</tr>
<tr>
<td>Production process costs</td>
<td>0.56</td>
<td>Valid</td>
</tr>
<tr>
<td>Product distribution costs</td>
<td>0.551</td>
<td>Valid</td>
</tr>
<tr>
<td>Price of product</td>
<td>0.657</td>
<td>Valid</td>
</tr>
<tr>
<td>Quality products</td>
<td>0.777</td>
<td>Valid</td>
</tr>
<tr>
<td>More useful products</td>
<td>0.563</td>
<td>Valid</td>
</tr>
<tr>
<td>Special services</td>
<td>0.602</td>
<td>Valid</td>
</tr>
<tr>
<td>Products vary</td>
<td>0.609</td>
<td>Valid</td>
</tr>
<tr>
<td>Certain service segments</td>
<td>0.561</td>
<td>Valid</td>
</tr>
<tr>
<td>Market selection</td>
<td>0.528</td>
<td>Valid</td>
</tr>
<tr>
<td>Product conformity</td>
<td>0.534</td>
<td>Valid</td>
</tr>
<tr>
<td>Matching selling prices</td>
<td>0.616</td>
<td>Valid</td>
</tr>
</tbody>
</table>

Table I. Test results for validity (continued)
The results of the hypothesis testing on GSCA using t-test are presented in the following table. Based on the results in Table I, the relationship among variables is now known. The first hypothesis is that the better entrepreneurial orientation, then the more appropriate business strategy applied to the SMEs. The GSCA results show a path coefficient of 0.298 and p-value of 0.000 (significant), so the hypothesis is accepted. The second hypothesis is that the better entrepreneurial orientation, the higher performance of SMEs producing Indonesian special food in East Java. The GSCA results show a path coefficient of 0.261 and p-value of 0.0246 (significant), so the hypothesis is accepted. The third hypothesis is that the better entrepreneurial orientation coupled with effective government policies, the higher performance of SMEs producing Indonesian special food in East Java. The results of GSCA show a path coefficient of the effect of policies on performance of 0.080 and p-value of 0.849 (not significant) and interaction effect of X1*X3 on performance of 0.126 and p-value of 0.772 (not significant), so the hypothesis is rejected. This shows that policies do not act as moderation. The fourth hypothesis is that the more appropriate in applying the business strategy, the higher performance of SMEs producing Indonesian special food in East Java. The results of GSCA show a path coefficient of 0.169 and p-value of 0.0271 (significant), so the hypothesis is accepted. The fifth hypothesis is that the more appropriate business strategy implemented with the environment dynamics, the higher performance of SMEs producing Indonesian special food in East Java. The results of GSCA show a path coefficient of the effect of business strategies on performance of −0.215 and p-value of 0.016 (significant), and interaction effect of Y1*X2 on performance of 0.217 and p-value of p-value = 0.036 (significant), so the hypothesis is accepted. This shows that environmental dynamics act as a quasi-moderation variable.
## Discussion

The effect of entrepreneurial orientation on business strategies

The results of hypothesis testing in Table III show a significant influence of entrepreneurial orientation on business strategies of SMEs producing Indonesian special food in East Java. SME managers have a high entrepreneurial orientation, especially in terms of confidence and optimism. This means that in running the business, they always believe in the ability they have, they do not depend much on others, and their sense of optimism is good.

The high entrepreneurial orientation gives a positive and significant influence on the ability to determine the right business strategy, especially the differentiation strategy. This means that SME managers have the ability to set appropriate strategies for producing quality products, producing products offering better benefits than similar ones, formulating a variety of products, and providing the best service to their customers.

The results of this study extend the research conducted by Mahmud and Anomsari (2011), which shows that entrepreneurial orientation has a positive and significant impact on the business strategy set by owners and managers of SMEs on Jalan Barito Semarang. According to Porter (1980) argues that change must create competitiveness especially to have a strong bargaining position in competition; that needs a strategy, so the company can excel than its competitors. The well-known marketing strategy concept is 4P (Product, Price, Place and Promotion). Furthermore, Suci (2009) adds that entrepreneurship research and development can be the main strategy because it is related to creativity and innovation, as a part of entrepreneurial orientation.

The study by Lee and Tsang (2001) observes the influence of entrepreneurial personality traits and network activities on business growth of about 168 Chinese entrepreneurs in small as well medium businesses in Singapore. The results indicate that:

### Table III. Results of hypothesis testing

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Relationship between variables</th>
<th>Path coeff</th>
<th>CR</th>
<th>p</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>X1 = entrepreneurial orientation</td>
<td>Y1 = business strategies</td>
<td>0.298</td>
<td>9.67*</td>
<td>0.0000</td>
</tr>
<tr>
<td>2</td>
<td>X1 = entrepreneurial orientation</td>
<td>Y2 = business performance</td>
<td>0.261</td>
<td>2.27*</td>
<td>0.0246</td>
</tr>
<tr>
<td>Test on X3 as a Mediating Variable of X1 to Y2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>X3 = government policies</td>
<td>Y2 = business performance</td>
<td>−0.080</td>
<td>0.19ts</td>
<td>0.8496</td>
</tr>
<tr>
<td></td>
<td>X1*X3 = X1 interaction with X3</td>
<td>Y2 = business performance</td>
<td>0.126</td>
<td>0.29ts</td>
<td>0.7722</td>
</tr>
<tr>
<td>Test on X2 as a mediating variable of Y1 to Y2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>X2 = environmental dynamics</td>
<td>Y2 = business performance</td>
<td>−0.215</td>
<td>2.42*</td>
<td>0.0167</td>
</tr>
<tr>
<td></td>
<td>Y1*X2 = Y1 interaction with X2</td>
<td>Y2 = business performance</td>
<td>0.217</td>
<td>2.11*</td>
<td>0.0365</td>
</tr>
<tr>
<td>5</td>
<td>Y1 = business strategies</td>
<td>Y2 = business performance</td>
<td>0.169</td>
<td>2.23*</td>
<td>0.0272</td>
</tr>
</tbody>
</table>

**Notes:** Decision: ts = not significant; * = significant at $\alpha$ 5%
• Experience, network activities, number of partners, locus of control and need for achievement has a positive effect on business growth.

• Two other personality traits, namely, self-reliance and extroversion, have negative effect on the number of partners.

• Education on business growth, moderated by firm size, positively affects large companies and negatively affects small companies.

• The entrepreneurial industry and managerial experience are the dominant factors affecting business growth.

The difference of our finding with the ones by Lee and Tsang (2001) are in the operational description of the entrepreneur personality into two variables, namely, the entrepreneurial orientation and the business strategy. Another difference lies in the use of measures of business growth, in which Lee and Tsang use business growth and development, while our study uses business performance. This means that entrepreneurial orientation influences business strategies especially in analyzing environment and formulating strategies.

**The effect of entrepreneurial orientation on business performance**

The results of hypothesis testing in Table I show a significant influence of entrepreneurial orientation on business performance of SMEs producing Indonesian special food in East Java. The results of this study are in line with research conducted by Moeljadi (1999), which shows that the internal factors of the company, especially the high entrepreneurial orientation, will certainly affect business performance. Suci (2009) shows entrepreneurship orientation has a positive and significant impact on business performance in small and medium embroidery industries in East Java.

The results of this hypothesis testing are in line with the ones by Li et al. (2008), which suggests that there is a positive relationship between entrepreneurial orientation and company performance. To improve performance, entrepreneurial orientation is indispensable in an uncertain competitive environment. Likewise, for SMEs, entrepreneurial orientation is needed in the face of global competition, to improve its performance.

*Figure 1. Research conceptual framework*
This study strengthens research from Idrus (1999) that entrepreneurial orientation (such as self-confidence, task-result oriented, risk-taker, leadership attitude, originality and future-oriented) greatly affects the success or performance. From the findings, it is known that the average value for entrepreneurial orientation is 4.07; this shows that the entrepreneurial orientation in the SMEs producing Indonesian special food in East Java is quite high. Likewise, the performance variable is known to have an average score of a high value of 4.00. The variable having the highest average score is the productivity of 4.11. This means that SMEs have a good performance in terms of maintaining product quality, meeting production targets and time and being able to create new products.

The effect of entrepreneurial orientation on business performance moderated by government policies

GSCA results show a path coefficient value of $-0.080$ on the effect of government policies on performance and $p$-value of 0.849 (not significant) and a path coefficient value on the effect of $X_1 \times X_3$ on performance of 0.126 and $p$-value of 0.772 (not significant), so the hypothesis is rejected. This shows that the government policy is not a moderating variable.

Thurik and Wennekers (2004) concluded that government policies in controlling the economy, by involving technology participation and consumer stability, would drive business performance. Some empirical studies show that countries having fewer regulations and provisions, offering taxes and other incentives, promoting training and counseling services to those who start entrepreneurship will experience improvement and development of business (Dana, 2001).

The government policy variable is not moderation of entrepreneurial orientation and performance of SMEs producing Indonesian special food in East Java. This is presumably because there are other factors more influential in terms of performance of SMEs such as internal factors consisting of human resources, financial aspects, technical aspects of production or operations, and market and marketing aspects, and external factors consisting of socio-cultural and economic, and aspects of the role of related institutions.

Government policies can include improvement in the quality of human resources through training, strengthening capital by facilitating access to capital, and encouraging partnerships and providing protection for small businesses to increase business performance. The optimal role of government is manifested by becoming facilitators,
regulators and catalysts. As a facilitator, the government has a role in facilitating SMEs to achieve the development goals. If SMEs have weaknesses in production, the government’s job is to provide training. Development of SMEs is essentially a joint responsibility between the government and society. The government has sought to create a good climate among others, by maintaining the security of business and simplification of business licensing procedures, tax relief, and so forth. The development of mutually beneficial partnerships between SMEs and large entrepreneurs both within countries and abroad should be enhanced by the government to avoid monopoly in business and to expand market share and more efficient business management.

The government has enhanced training for SME actors related to entrepreneurship, management, administration, and other skills in developing their business. In addition, the government has provided an opportunity to practice the theory through the development of partnerships. The existing associations must be strengthened, to enhance their role, among others, in the development of business information networks indispensable for the development of business performance. To accelerate the process of partnership between SMEs with big business both from within the country and from abroad, special media are needed in an effort to promote the products produced. The government also promotes the local products of SME in other countries through the embassies in the country concerned.

This study shows that the government has not been able to play its role in maximizing the success of SMEs in Batu. One of the problems is the fact that SMEs find it difficult to get access to capital from the government-appointed banks. Most SMEs have no collateral to receive loan assistance from the bank. Therefore, the government must improve its involvement in assisting SMEs so entrepreneurs can improve business performance as well.

The effect of business strategies on performance

From the result of hypothesis testing, it is known that business strategies have a significant influence on the performance of SMEs producing Indonesian special food in East Java. The result of GSCA shows a path coefficient on the effect of competitive strategy on performance of \(-0.215\) and \(p\)-value of \(0.016\) (significant) and the interaction effect of \(Y_1 \times X_2\) on performance of \(0.217\) and \(p\)-value of \(0.036\) (significant), so the hypothesis is accepted.

The results of this study strengthen the results of research conducted by Asmarani (2006) that business strategies positively affect the performance of SME tenun ikat in Troso, Jepara – the better business strategy, the better performance of the company. The existence of a good business strategy can enable companies to achieve organizational goals established. This result is in accordance with research conducted by Rue and Ibrahim (1998) that SME shaving business strategies generally produce above-average performance than those with no business strategies. Muryati (2004) in her research examines the effect of external environmental factors and internal environmental factors either directly or indirectly to export performance. The study also tests the influence of the external environment and internal environment on competitive strategy intensity and tests the influence competitive strategy intensity toward export performance. Negative indirect relationships occur on internal factors to competitive strategy intensity and export performance because entrepreneurs do not improve their competence on internal function, as some functions have been taken by foreign buyers, such as pricing, promotion and distribution channels. To improve the intensity of competitive strategies, we must improve the quality and durability of the products, after-sales service, and the provision of payment terms and cost advantages.

Associated with the existing phenomenon, there are indicators used to measure business strategies showing good results, seen from the high average value of the indicator ranging from 3.61 to 4.03. The highest average indicator value is for the differentiation strategy
(4.03), while the lowest value is for the focus strategy (3.61). Performance also has a high average score that ranges from 3.82 to 4.11. The highest average score is for the productivity indicator (4.11), while the lowest average is for the market indicator (3.82). Thus, it can be said that SMEs producing Indonesian special food in East Java has a good ability in determining the right business strategy to improve business performance on SMEs.

The effect of business strategies on performance mediating by environmental dynamics

The result of GSCA shows a path coefficient of the effect of business strategies to performance is $-0.215$ and $p$-value of 0.016 (significant) and the interaction effect of $Y1*Y2$ on performance is $0.217$ and $p$-value of 0.036 (significant), so the hypothesis is accepted. This shows that environmental dynamics act as a quasi-moderating variable. The results of this study extend the research conducted by Pono (2009), which shows that the dynamics of the environment and business strategy have a significant influence on the performance of manufacturing industry in East Java.

The results of this study indicate that the majority of SME producing Indonesian special food in East Java selects the differentiation strategy. This means that SMEs have the ability to set appropriate strategies for creating quality products, producing products that have more benefits than similar products on the market, formulating a variety of products, and providing exceptional service to their customers. The environmental dynamics often experienced by SME producing Indonesian special food in East Java is the intensity of competition (average score of 3.51). They experience many environmental dynamics in the form of product competition, promotion competition, price competition, distribution channel competition, and raw material competition. Thus, it can be said that SME producing Indonesian special food in East Java have the ability to define the right business strategy in accordance with the dynamics of the environment faced to increase their performance.

This study extends the study by Hashim, Wafa, and Sulaiman, the study examines the environment as a moderator of the relationship between business strategy and performance of 100 SMEs in Malaysia's manufacturing sector. Using ANOVA (Analysis of Variance), this study indicates that the three generic strategies by Porter are relevant not only to large companies but also to SMEs. In addition, the relationship between business strategy and SME performance is moderated by the environment. These findings require companies to implement business strategies based on the environment. The difference of the present study with the one by Hashim, Wafa and Sulaiman lies in the analysis technique, as the present study uses GSCA and the differentiation strategy is the focus of the study.

Concluding remarks

Further studies are suggested to continue examining the concept of environmental dynamics in different situations and to take samples on other types of businesses, as there are still many developing SMEs. It is also suggested to use government policies as a dependent and independent variable, and a mediating variable, to know the effect on SME performance. Future researchers are advised to distinguish between SMEs and focus on the regional business group, and also to analyze the internal environment such as the capital structure, human resources, and technology that affect the performance of SMEs.

It is recommended that the government establish good cooperation with SMEs in Indonesia to assist in the development of SMEs. SMEs must stop their dependence on other parties so training on management and managerial skills are needed, so they can choose the right business strategy in accordance with the dynamics of the environment. Therefore, it is necessary to provide guidance for SMEs. The government must always provide continuous assistance and monitoring on the sustainability of SMEs so the business can continue to evolve.
Theoretical implications are the contribution of the development of science so that it can become a reference for reading and information in further research and in developing science, especially those related to strategy management and entrepreneurship. This study can prove and broaden the theory of the role of environmental dynamics as a moderating variable, where the determination of business strategies that are in line with the dynamics of the environment will be stronger in encouraging the performance of SMEs. While the practical implications of this research are for SMEs in Timor Leste, with agreed knowledge about entrepreneurship. SMEs are expected to be prepared about the development of entrepreneurs, both for entrepreneurship training, so that SMEs can be improved, in addition to knowing. For the Government, the results of this study can be used as input for the government specifically for the Ministry of Trade, industry and environment in developing and fostering SMEs in East Timor. For researchers, the results of this study will add the knowledge and key research insights in problems related to SMEs in the quality of entrepreneurship, environmental dynamics, government policies, business strategies and performance.

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**Further reading**


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Dynamics in rural entrepreneurship – the role of knowledge acquisition, entrepreneurial orientation, and emotional intelligence in network reliance and performance relationship

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Abstract

Purpose – Social network and being a part of an established business network helps in the acquisition of resources. The purpose of this study specifically looked at the mechanisms through which network reliance (NR) influences the entrepreneurial performance (PERF) among rural farmer entrepreneurs in China.

Design/methodology/approach – The paper looks at the economic sociology perspective of social networks. A total of 450 rural farmer entrepreneurs were interviewed for the study. The study introduces emotional intelligence (EI) and entrepreneurial orientation (EO) into the relationship between NR, knowledge acquisition (KA) and entrepreneurial PERF.

Findings – The result shows that KA partially and positively mediates the relationship between NR and entrepreneurial PERF. EO is shown to moderate the relationship between KA and entrepreneurial PERF apart from its direct effect on entrepreneurial PERF. The EI of rural farmer entrepreneurs has a direct and significant effect on KA but does not moderate the relationship between NR and KA.

Originality/value – This study provides a new direction for extension education to rural farmer entrepreneurs. Knowledge building capacity programmes for rural farmer entrepreneurs should be an area of priority for extension education. Building the social capital and entrepreneurial capacities of rural farmer should be a new area of focus for policymakers. These measures will go a long to improving the capabilities of rural farmer entrepreneurs, which will, in turn, impact positively on their PERF.

Keywords Emotional intelligence, Knowledge acquisition, Entrepreneurial orientation, Entrepreneurial performance, Network reliance

Paper type Research paper

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Introduction

This study through the concept of network theory explores the intervening mechanisms through, which network reliance (NR) influences entrepreneurial performance (PERF). Entrepreneurial orientation (EO), emotional intelligence (EI) and knowledge acquisition (KA) are postulated to be important intervening mechanisms through which entrepreneurs’ networks reliance influence entrepreneurial PERF.

Being part of a common platform affords rural farmer-entrepreneurs the opportunity to continuously improve upon their innovative skills (Ferreira et al., 2017). Rural farmer-entrepreneurs are at a great disadvantage when it comes to access to resources and domestic/regional markets (Niu et al., 2008). Strong entrepreneurial social networks help in compensating for the resources limitations and discovering of markets (Farinha et al., 2016). In the rural setting, NR will play a complementary role in information dissemination and knowledge sharing (Gretzinger et al., 2016). It is not also the trust that is built through the social network but frequent exchanges of information and knowledge create opportunities for individuals to grow their respective enterprises (Matiaske, 2013).

In this article, we looked at the relationship that exists between rural farmer-entrepreneurs’ NR and entrepreneurial PERF.

Rural farmer-entrepreneurs access to tangible resources such as property, equipment and capital are challenging (Thornhill and Amit, 2003), they, however, resort to intangible resources, which are valuable, rare, and imitable in the quest to improve upon their PERF (Newbert, 2007). Thus, NR, in conjunction with an intangible (strategic) resource advantage, should facilitate stronger growth among rural farmer-entrepreneurs.

The purpose of the study is to examine the mechanisms through which NR by rural farmer entrepreneurs influences entrepreneurial PERF.

It is proposed that entrepreneurs who depend highly on their networks are more likely to acquire knowledge, which helps them improve upon their PERF. The study also extends the existing literature by looking at the mediation and moderation factors that interacts with NR, and KA to influence PERF. This study is an extension of the Song et al. (2017), which recommended for future researchers to consider the moderation effect of the economic situation, culture and emotions on the relationship between NR and opportunity recognition.

Theoretical background and hypothesis development

Being embedded in a social network is understood as an aggregate of the actual or potential resources and capabilities. As a result, the possession of durable business networks, are assumed preconditions for aspiring entrepreneurs (Gnyawali and Madhavan, 2001). In the process of building a social network, learning takes place and resources are combined for the benefit of actors (Rasmussen et al., 2015). In the absence of financial resources, the possession of adequate knowledge will enable an entrepreneur to attract partners.

Generation of new creative and innovative ideas are viewed as having a constant interaction with the external environment (Axelsson and Easton, 2016). Being imbedded in a social network is an opportunity to tap into resources and capabilities that are closely linked to the network in which one is imbedded (Gnyawali and Madhavan, 2001).

The model is based on the premise that entrepreneurs in their quest to achieve higher PERF, rely heavily on the knowledge and the key to the KA is through a social network (NR) (Kazumi and Kawai, 2017).

The study puts forward a novel model of entrepreneurship, which analyses KA as mediators between NR and entrepreneurial PERF. As an extension of previous studies, the moderation effect of EO and EI were also captured in the model. The study hypothesizes
that EO moderates the relationship between KA and PERF whilst EI moderates the relationship between NR and KA.

The growing interest on (EI) as a key index of emotional self-efficacy motivated us to examine EI in the context of its moderation role in the relationship between NR and KA.

EO is a strategic posture of an entrepreneur through which he/she proactively engages in the environment scanning and resource/opportunity seeking actions from organizations and institutions with which they have or wish to build relationships (Li et al., 2011). These entrepreneurs can be characterized as appreciating an open system mindset that seeks to proactively pursue entrepreneurial initiatives within established and emerging networks (Jiang et al., 2018; Kreiser, 2011). It is, therefore, argued that the relationship between entrepreneurs’ KA and PERF is strengthened through high EO.

Mediation of knowledge acquisition between network reliance and entrepreneurial performance
KA is proposed to play a mediation role between NR and entrepreneurial PERF. It is argued that through NR entrepreneurs are able to improve upon their PERF. NR by an entrepreneur, increases KA, which positively influence critical entrepreneurial activities, thus PERF. To back this assertion, stimulus-organism-reaction model is relied upon MacKinnon (2012). According to this model, an organism’s psychological transition process mediates the relationship between environmental stimuli and reactions, thus the influence of NR (external stimuli) of an entrepreneur’s reaction may be mediated by the KA (internal mechanisms).

The study by Udimal et al. (2017) asserted that accumulated human capital in the form of knowledge plays a critical role in the agribusiness PERF. However, the nature of knowledge relationship with agribusiness PERF is the question left unanswered.

The moderation effect of emotional intelligence on the relationship network reliance and entrepreneurial performance
Personality traits of an individual has a role to play on entrepreneurial activities (Frank et al., 2007). EI reflects the level to which an individual attends to, processes, and act upon information of emotional nature at intra-personally and inter-personally. Petrides and Furnham (2001) brought two main distinctions into the classification EI, thus cognitive-emotional ability and emotional self-efficacy. The ability approach has to do with the ability to recognize the process and use emotion-laden information.

It is argued that entrepreneurship is an emotional process (Cardon et al., 2012). According to Druskat and Wolff (2001), EI leaders are able to build group social identities among their employees, which leads to social cohesion and develops into productive emotional states (Ashkanasy and Humphrey, 2011). High EI leads to the building of collective identities to foster group loyalty, cohesion, interdependence, learning and relatedness.

Little has been done to assess whether trait EI has a specific role to play in the entrepreneurial process. As a result, the study brings in a new dimension by looking at the moderation role of EI in the relationship between NR and KA in the pursuit of entrepreneurial activities. Extant literature has been silent on this relationship.

The moderation effect of entrepreneurial orientation on the relationship between knowledge acquisition and entrepreneurial performance
According to Wales et al. (2013) in respect of motivation argument, high EO entrepreneurs often conceive and identify more opportunities. Therefore, they know the urgent need for
resources, which they work to acquire to pursue these opportunities (Teng, 2007). Identification of the resources will motivate the entrepreneur to act in a proactive and risk-taking manner to acquire the resources (Wilson and Appiah-Kubi, 2002).

Entrepreneurs high in EO are more likely to be granted opportunity by other network operators to access their resources because they are perceived as people of better quality and to have higher potential than low EO (Burt, 2009). Thus, entrepreneurs with higher EO may have access to golden opportunities to access resources within the network (Li et al., 2011).

To respond to the demand for innovativeness, entrepreneurs are more likely to exploit shared perceptions and communication with network actors to acquire needed resources. The risky nature of external resources acquisition call for substantial expenditures and effort (Wiklund and Shepherd, 2003). The risk-taking is likely to play a role in NR because of the entrepreneur’s willingness to collaborate in an uncertain environment. The proactive entrepreneur acts quicker rather than waiting and contemplating. This leads to the proactive entrepreneurs being known for “step-ahead” tactics (Morgan and Strong, 2003) and taking first-mover advantages (Lumpkin and Dess, 1996), helping the firm to be among the first to leverage surrounding resource acquisition opportunities. It is, therefore, hypothesized that EO will moderate the relationship between KA and PERF.

Methodology

Measurement of variables

Knowledge acquisition. According to Storper (1997), learning within an economy is an ensemble of competitive odds, impetuous in nature and is caused by capitalism new mental capacity. This form of learning requires a blend of cosmopolitan and non-cosmopolitan knowledge in other to strive within a competitive business environment. The most important features of cosmopolitan knowledge are accessibility, reproducibility, and standardization as a result entrepreneurs do not have to participate in daily activities in other to acquire it.

Sullivan and Marvel (2011) rationale for measurement of entrepreneur’s KA, was adopted for the study. Farmers were asked to rate the quality of knowledge they gained. The following are some of the questions that were asked: “i gained new knowledge of different technologies important for my business”, “i gained new hands-on experiences with a technology that is important for my business” and “i gained new knowledge about how the market would function in business”. Five-point Likert scale was used ranging from “1-strongly disagree” to “5-strongly agree”.

Emotional intelligence. The personality traits of an entrepreneur are essential in entrepreneurial activities (Frank et al., 2007). EI shows the level at which an individual attends to, processes, and act upon information of emotional nature at intra-personally and inter-personally. According to Petrides and Furnham (2001), there are two main distinctions into the classification of EI, thus cognitive-emotional ability and emotional self-efficacy. The ability of an individual to recognize the process and make use of emotion-laden information is associated with cognitive-emotional ability.

Wong and Law (2002) scale for the measurement of EI was adapted for the study. The scale is in line with the definition of EI by Mayer et al. (1999). EI is further grouped into; self-emotional appraisal, others’ emotional appraisal, regulation of emotions and utilization of emotions. Some of the observed items included in the model for analysis are; “i have a sense of why I have certain feelings most of the time, i am sensitive to the feelings and emotions of others, i am a self-motivated person”. The responses were based on a five-point Likert scale with “1-strongly disagree” and “5-strongly agree”.

Entrepreneurial orientation. According to Wales et al. (2013) innovativeness, proactiveness and risk-taking are the main dimensions of EO. Entrepreneurial incentives help to create and sustain the entrepreneurs’ EO and nurtures entrepreneurial culture in the organization (Mishra, 2017). Proactiveness is taking of initiatives in an attempt to influence ones environment to take advantage of opportunities (Lumpkin and Dess, 1996). Risk-taking is the degree to which an entrepreneur is willing to commit him/her resources to an activity that has a chance of reasonably costly failure (Miller and Friesen, 1978). Innovativeness is the tendency of an entrepreneur to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services or technological processes (Lumpkin and Dess, 1996).

According to Wales et al. (2013) in respect of motivation argument, high EO entrepreneurs often conceive and identify more opportunities. Identification of the resources will motivate the entrepreneur to act in proactive and risk-taking manner to acquire the resources (Wilson and Appiah-Kubi, 2002). Entrepreneurs high in EO are more likely to be granted opportunity by other network operator to access their resources because they are perceived as people of better quality and to have higher potential than low EO entrepreneurs (Burt, 2009).

The ability of an entrepreneur is essential in the acquisition of resources as it is a risky venture and requires complementary skills (Winborg and Landström, 2001). In this regard, an entrepreneur high in EO is likely to act more proactively and eagerly contact potential network partners to make them aware of cooperation benefits and design an attractive cooperation plan.

The risk-taking is likely to play a role in NR because of the entrepreneurs’ willingness to collaborate in an uncertain environment.

Performance. PERF as a construct in marketing is multidimensional (Olson et al., 2005). PERF encompasses both financial and non-financial goals that are crucial to the entrepreneur (Ittner et al., 1997). Different researchers have used varied financial and non-financial goals of a firm to measure PERF. Extant literature has shown that there is a positive correlation between objective and subjective measure of PERF (Morgan et al., 2004). This study has, therefore, resorted to the subjective measure of PERF because of the nature of activities of entrepreneur especially rural farmer-entrepreneurs, which will be extremely difficult to quantify if not impossible. Some of the observed indicators for entrepreneurial PERF are:

- Compared to our competitors, our company’s market share is very high.
- Compared to your competitors, the growth of our company is very high.
- A number of new products have been developed by our company over the past three years.

The responses were based on a five-point Likert scale with “1-strongly disagree” and “5-strongly agree”.

Network reliance. NR is an essential element in the promotion of strong ties. Information asymmetry is the major challenge that many entrepreneurs are confronted within their daily operations (Song et al., 2017). The challenge of information asymmetry can be carefully dealt with if entrepreneurs and their resource suppliers are well connected, as people are more likely to volunteer information with those they trust (Tsai and Ghoshal, 1998). Behaving in a trustworthy manner towards investors will enable entrepreneurs to obtain capital from angel investors (Maxwell and Lévesque, 2014). Time is effectively managed through NR, as an entrepreneur will not invest much time in bargaining and cross-checking because of the trust that is already established through NR (Dyer and Singh, 1998).
This study adapts Ganesan (1994) definition of NR, thus the preparedness of an entrepreneur to rely on and trust other partners’ expertise, purpose and motives. There is an emerging new paradigm in agriculture that is completely different in economic, ethical and social foundations. The old paradigm dealt so much on the concept of rivalry between firms (Porter, 2000) but the new paradigm has its foundation on the strategic alliance, on the ability of firms to network and maintain stable relationships that create a relational advantage. Rural development will largely depend on how the players in the various agricultural sectors will be able to interact. The new era of agricultural paradigm means a new agricultural governance that revolves around dialogue, agreement, inclusion, participation, involvement, cooperation, networking, coordination, multi-sector and responsibility (Gurrieri et al., 2013). Through this agriculture becomes a “system”, which is able to strive in the midst of disagreements and reinforces its stand in the supply chain. Despite partisan disagreements, is able to prevail and to reinforce its status in the supply chain.

Despite the enormous benefits on NR to entrepreneurs, research on mechanisms through which it influences entrepreneurial PERF has not received the needed attention especially at the level of rural economy. This, therefore, calls for more academic deliberation on the effect of NR by rural farmer-entrepreneur on PERF.

Choi et al. (2013) and Ganesan (1994) rationale for measurement of entrepreneur’s NR was adapted for the study. Rural farmer entrepreneurs were asked to rate how much they relied on their business networks on the five-point Likert scale of “1-strongly disagree” to “5-strongly agree”. The questions included “if our relationship was discontinued with these business networks, there would be difficulties, which would impact future growth”, “we are dependent on knowledge gained from our business networks”, and “our business network is trustworthy”.

**Study sample**
The study sample includes rural farmer entrepreneurs in four provinces in China. The provinces were purposively selected because of their rural entrepreneurial activities. They include Jiangsu, Zhejiang, Guangxi and Anhui provinces. The study concentrated mainly on rural farmer-entrepreneurs who have to be in entrepreneurial activities for five years or more. This is because it takes time for one to develop a social network for his/her business. Hence, the inclusion of entrepreneurs who are beginners would have defeated the essence of the study, which is mainly on social networks.

Rural farmer entrepreneurs were purposively selected, as they are the study participants. Simple random technique was used to select the required study participants. In total, 120 rural farmer entrepreneurs were randomly selected for the study using the simple random technique. The z-score value of 1.96 for a 95 per cent confidence interval and ±0.045 margin of error were used in calculating the sample size. There was no prior judgment for the p-value; as a convention, we used a p-value of 0.5. In addition, 480 rural farmer entrepreneurs took part in the survey. Questionnaires were administered from face to face interaction. In total, 30 questionnaires were not completed and were not used in the analysis. In total, 450 questionnaires were used for the analysis.

**Empirical model**
Structural equation model was adopted for the study. This is because the study is based on the measurement of the relationship between variables. All the variables were measured in construct form. PLS-SEM model was adopted for the analysis. The model has found great acceptance among management scholars in operations management, information system...
management, marketing management and organizational behaviour and human resource management (Hair et al., 2012). PLS-SEM has been adopted for the following reasons; it is more appropriate for theory building, ability to handle complex relationships, and it poses little restriction to sample distribution and sample size (Lowry and Gaskin, 2014). SmartPLS 2.0 M3 software was used for the analysis.

**Measurement model result**

Table I below presents the result on the reliability and validity of the constructs used for the study. The internal reliability indicates test tells how strong the measuring items are holding together in measuring the respective construct. All the constructs met the minimum required criteria for their inclusion. For the Cronbach’s alpha, a minimum value of 0.70 is required but for our constructs, they all met the criteria. The composite reliability for constructs is supposed to be > 0.6 to justify their inclusion. In this study, composite reliability for all the constructs are > 0.6 meaning all the measurement items are holding strongly together for their respective constructs. It is required that AVE of a construct should meet a standard of > 0.5 before its measurement items can be described as holding together. According to Bagozzi et al. (1991) AVE value of 0.5 or more is generally the acceptable but some researchers have suggested a minimum AVE value of 0.4 (Diamantopoulos et al., 2000). As shown in Table I above all the AVE values are above 0.5 and are within the acceptable region by Bagozzi et al. (1991). The composite reliability for the constructs was also determined. It ranges from 0.767 to 0.879 exceeding the minimum criteria of 0.6 recommended by Bagozzi and Yi (1988). This requirement was satisfied by all the constructs presented in Table IV below. The VIF values were all > 3 satisfying the condition of no collinearity problem (Diamantopoulos and Siguaw, 2006). The factor loadings are presented in Appendix 1.

Table II below presents the result on discriminant validity indicates the measurement model of a construct is free from redundant items. The redundant items need to be identified and deleted re-run the measurement model. The redundant pairs could be constraint-free parameter estimate. There are no issues of redundancy. The square root values of AVE for all constructs are also greater than their respective correlation values.

**Result of R^2 and Q^2**

Table III below presents the result on R^2 measuring the structural model. The value for R^2 range from 0 to 1 with a higher value indicating a higher level of predictive accuracy (Joe F

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Cronbach’s alpha</th>
<th>rho_A</th>
<th>CR</th>
<th>AVE</th>
</tr>
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<td>0.925</td>
<td>0.878</td>
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<tr>
<td>EIU</td>
<td>0.814</td>
<td>0.816</td>
<td>0.878</td>
<td>0.643</td>
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<td>0.791</td>
<td>0.770</td>
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<td>0.681</td>
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<td>0.847</td>
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</table>

**Notes:** EI = emotional intelligence; EIRE = emotional intelligence regulation, EO = entrepreneurial orientation, EOI = entrepreneurial orientation innovativeness, EOP = entrepreneurial orientation proactiveness, KA = knowledge acquisition, NR = network reliance and PERF = performance

Table I. Construct reliability and validity
The values range from 0.75, 0.50 and 0.25, which can be described as substantial, moderate and weak, respectively. It measures the predictive accuracy of the model. The $R^2$ tells the combined effect of the endogenous latent variables and the proportion of variance in the endogenous latent variable explained by the exogenous variables linked to it (Hair et al., 2013).

The blindfolding was to cross-validate the model’s relevance for individual endogenous constructs. In this study, $Q^2$ values range from 0.012 to 0.619 and indication of small, medium and large effect sizes. All the $Q^2$ values are $>0$ establishing that PLS structural model has a predictive relevance Hair et al. (2013).

**Result on $f^2$**
The effect size for each path model was determined by calculating Cohen’s $f^2$. The $f^2$ effect size tells the changes that occurs in $R^2$ when a specified exogenous variables are omitted from the model (Joseph F Hair et al., 2013). The study shows that the effect size of exogenous constructs on endogenous constructs ranges from small to large (Table IV).

**Structural model result**
The model quality was determined using various quality criteria. Figure 2 below presents the result on the relationship between NR and rural farmers’ entrepreneurial PERF. Before various hypotheses were tested reliability and validity, tests were conducted. This was achieved using SmartPLS 2.0 M3 software. The result shows that the hypothesized model comprising of NR, entrepreneurial PERF, KA, EI and EO has a good fit of the data set.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>EI</th>
<th>EIRE</th>
<th>EIU</th>
<th>EO</th>
<th>EOI</th>
<th>EOP</th>
<th>KA</th>
<th>NR</th>
<th>PERF</th>
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<td>0.816</td>
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<tr>
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<tr>
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<td>0.055</td>
<td>0.948</td>
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<tr>
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<td>0.082</td>
<td>0.371</td>
<td>0.179</td>
<td>0.092</td>
<td>0.369</td>
<td>0.394</td>
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<td>0.118</td>
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<td>0.137</td>
<td>0.244</td>
<td>0.245</td>
<td>0.231</td>
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**Table II.**
Latent variable correlations

<table>
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<tr>
<th>Constructs</th>
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<th>$R^2$ adjusted</th>
<th>$Q^2$</th>
<th>Effect size</th>
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<td>EIU</td>
<td>0.989</td>
<td>0.988</td>
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<td>0.940</td>
<td>0.940</td>
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<tr>
<td>KA</td>
<td>0.944</td>
<td>0.944</td>
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<tr>
<td>PERF</td>
<td>0.095</td>
<td>0.089</td>
<td>0.055</td>
<td>Small</td>
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</table>

**Table III.**
Result of $R^2$ and $Q^2$

Source: Author’s calculation: small: $0.0 < Q^2$ effect size $< 0.15$; medium: $0.15 < Q^2$ effect size $< 0.35$; large: $Q^2$ effect size $> 0.35$
The result shows that reliable NR has a positive effect on entrepreneurial PERF ($t = 2.035, p < 0.05$) and KA ($t = 4.167, p < 0.05$), respectively. The result on the effect of KA on entrepreneurial PERF shows a positive significant relationship ($t = 2.232, p < 0.05$). The results show that there exist a significant positive relationship between NR and entrepreneurial PERF on the one hand and KA and entrepreneurial PERF on the other hand. This supports the hypothesis that there exist a positive significant relationship among the

![Figure 1. Hypothesized model](image1)

![Figure 2. Structural model](image2)

<table>
<thead>
<tr>
<th></th>
<th>EI</th>
<th>EIRE</th>
<th>EIU</th>
<th>EO</th>
<th>EOI</th>
<th>EOP</th>
<th>KA</th>
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<tr>
<td>EIU</td>
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<tr>
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<tr>
<td>EOP</td>
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<td></td>
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</table>

Notes: Small: $0.0 < f^2$ effect size $< 0.15$; medium: $0.15 < f^2$ effect size $< 0.35$; and large: $f^2$ effect size $> 0.35$.

Table IV. Result on $f^2$
above constructs. To account for the how much of the direct path is absorbed, variation accounted for (VAF) was calculated. KA has a VAF value of 0.82, which satisfies the condition for full mediation (if 0.20 < VAF < 0.80) (Hair et al., 2013). This implies that about 82 per cent of the total effect of NR on entrepreneurial PERF is explained by an indirect effect (KA). The result shows that KA fully mediates the relationship between NR and entrepreneurial PERF ($t = 9.301 < 0.001$). The result on indirect effect and mediation effect are shown in Tables AIII and AIV on Appendixes 3 and 4, respectively. The path analysis is shown in Appendix 2.

It is also hypothesized that the effect of KA on entrepreneurial PERF would be positive for entrepreneurs with high EO. The interactions between KA and EO have a positive and significant effect on entrepreneurial PERF ($t = 5.714, p < 0.05$).

The study hypothesized that the effect of NR on KA would be positive for entrepreneurs with high emotional. The result is, however, not significant. The moderation of EI between NR and KA is, however, not significant.

Discussion
The essence of the study is to verify the direct effect of NR and mediation effect of KA between the entrepreneurs’ NR and entrepreneurial PERF and the moderation effect of EI in the relationship between NR and KA. The moderation effect of EO in the relationship between KA and entrepreneurial PERF is also considered.

The result shows that NR has both a direct and indirect effect on PERF. This finding corroborates research by Gretzinger et al. (2018), which indicates a positive relationship between a social network and entrepreneurial creativity in the process of deducing new marketable solutions. The mediation effect of KA suggests that KA is a sensor to explaining how NR influences entrepreneurial PERF.

Concretely, the entrepreneur’s perception of the knowledge obtained through social networks is shown to be very essential in that it mediates the relationship between NR and entrepreneurial PERF. It is, therefore, suggested that agribusiness entrepreneur’s perception of KA turns out to be an important element in the entrepreneurial PERF.

The result on the moderations shows that EO moderates the relationship between the relationship between KA and entrepreneurial PERF. The interaction between KA and EO influences positively on PERF. Knowledge facilitates innovative activities and entrepreneurs approach to issues.

It implies that those with high EO easily rely on knowledge when taking decisions. Rural farmer-entrepreneurs with high EO stick much to values in lieu to knowledge. It is asserts that in uncertain environment entrepreneurs decisions are based on biases rather than rationality (Busenitz and Barney, 1997). As a result, knowledge plays an essential role in the case of entrepreneurs with high EO.

This finding goes to confirming the assertion that human capital is very crucial in the new paradigm of agriculture, it determines the survival and growth of farms, their investment decisions (Huffman, 1980) and their productivity.

The relevance of human capital in agriculture has increasingly become prominent because of the essential role played in the knowledge-intensive activity. Human capital is an essential component of the job, it determines the level of local entrepreneurship and has the potential to generate and absorb innovations. It has a multiplier effect on economic activity, and hence, promotes the growth of rural economy.

Activities such as training, education, and consulting services contribute to the enhancement of human capital, which promotes competitiveness to pursue the objective of competitiveness. The study confirms the assertion that knowledge has the greatest ability of
all other resources (Al Mamun, 2019). Knowledge enables enterprise owners to predict market potentials in the environment and react tactically and strategically in accessing them (Zahra and George, 2002). Knowledge and EO play a complementary role in the PERF of agribusiness. The role played by knowledge in the relationship between NR and entrepreneurial PERF corroborates the findings by De Carolis et al. (2009), which indicates that social network alone is not enough in venture creation and growth and that the knowledge level of personality involved matters.

Conclusion
This study contributes both practically and theoretically to the entrepreneurship literature. NR though critical in the acquisition of strategic resources its application in extant literature has been limited to mega firms to the neglect of small firms especially at the rural farmer level. The study presents a novel model where EI of rural farmer entrepreneur though does not mediate the relationship between NR and KA but directly influences KA. The study brings to light the importance of EO in the relationship between KA and PERF.

The study contributes to the literature in the area of PERF by dealing with it from an interactive perspective. This study attributes PERF to a social process by trumpeting NR as a key to rural entrepreneurial PERF. The findings reveal that NR has an immediate effect on KA and indirect and direct effects on entrepreneurial PERF. PERF is better achieved by acquiring knowledge, which mostly facilitated through ones social network.

PERF is the key indicator of an enterprise survival. The study provides guidelines for policymakers in their quest to boost entrepreneurship in the rural setting. Irrespective of where it is acquired, knowledge is a key factor in the PERF.

For public policymakers, it is very important to encourage social network activities to promote co-creating of knowledge, know-how and valuable resources.

Rural areas and less privilege regions oftentimes lacking an entrepreneurial milieu and with little customer base are threat to the growth of rural enterprises. To support rural entrepreneurs, public intermediaries should bridge rural areas by strengthening regional and rural innovation networks.

Extension education should be broadened to cater for social network building and building entrepreneurial capabilities of rural farmers. The knowledge base of rural farmer entrepreneurs should be a priority for policy. By so doing rural farmer-entrepreneurs would be able to improve upon their PERF, which is not only depended on the conventional inputs but also strategic inputs (non-economic resources).

Professional approaches on how to use social networks to the full benefit should be a priority for policy.

The setting up of rural entrepreneurial incubation centres to cater for the needs of rural farmer entrepreneurs in the areas of KA and building entrepreneurial capabilities should be of priority for policy.

References


Appendix 1

<table>
<thead>
<tr>
<th></th>
<th>EI</th>
<th>EIRE</th>
<th>EIU</th>
<th>EO</th>
<th>EOI</th>
<th>EOP</th>
<th>KA</th>
<th>NR</th>
<th>PERF</th>
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Source: Author’s calculation; EI: emotional intelligence; EO: entrepreneurial orientation are second-order constructs

Table AI. Factor loadings
Appendix 2. Path analysis

| Path analysis          | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | t-statistics (|O/STDEV|) | p-values |
|------------------------|---------------------|-----------------|-----------------------------|-----------------------------|---------|
| EI → EIREE             | 0.160               | 0.179           | 0.115                       | 1.394                       | 0.164   |
| EI → EIU               | 0.004               | 1.099           | 0.009                       | 0.164                       | 0.000   |
| EI → KA                | 0.953               | 0.946           | 0.018                       | 52.639                      | 0.000   |
| EI_X_NR → KA           | 0.115               | 0.115           | 0.015                       | 0.841                       | 0.001   |
| EO → EOI               | 0.970               | 0.969           | 0.032                       | 30.011                      | 0.000   |
| EO → EOP               | 0.277               | 0.286           | 0.108                       | 2.564                       | 0.011   |
| EO → PERF              | 0.122               | 0.124           | 0.052                       | 2.368                       | 0.020   |
| EO_X_KA → PERF         | 0.008               | 0.001           | 0.001                       | 5.714                       | 0.002   |
| KA → PERF              | 0.103               | 0.108           | 0.073                       | 2.232                       | 0.021   |
| NR → KA                | 0.025               | 0.028           | 0.006                       | 4.167                       | 0.031   |
| NR → PERF              | 0.150               | 0.154           | 0.074                       | 2.035                       | 0.037   |

Table AIII. Mean, STDEV, t-values and p-values

| Indirect effect        | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | t-statistics (|O/STDEV|) | p-values |
|------------------------|---------------------|-----------------|-----------------------------|-----------------------------|---------|
| EI → KA → PERF         | 0.156               | 0.102           | 0.001                       | 117.490                     | 0.000   |
| EI_X_NR → KA → PERF    | 0.002               | 0.001           | 0.001                       | 1.877                       | 0.071   |
| NR → KA → PERF         | 0.004               | 0.003           | 0.0004                      | 6.901                       | 0.000   |

Table AIV. Mediation analysis: KA as mediator

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Note: Mediation Variable: KA, Endogenous variable PERF

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Thomas Bilalib Udimal can be contacted at: tbudimal2007@yahoo.com

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