

An Analysis of The Factors That Affect Adoption of Growth Strategies by SMEs

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Abstract: The nature and scope of Zimbabwean enterprises has significantly changed in the last two decades. Small and Medium Enterprises now drive the economy hence the widespread interventions and emphasis on them by government and other stakeholders. However, these SMEs still struggle to grow. A major cause could lie in the growth strategies that they employ. This study sought to analyse the factors that affect adoption of growth strategies by SMEs. A descriptive survey was used. The study divulges that owners or managers who have attained tertiary education are more likely to adopt market penetration strategy, product development and human resource strategy rather than marketing strategy. Research results also showed that technology significantly influences their adoption of growth strategies. Those SMEs with formal organisational structure are likely to adopt marketing strategy. The SMEs are recommended to be proactive when choosing growth strategies. Environmental scanning is essential before they embark on a particular growth strategy in order to be informed of the circumstances that may hinder the successful implementation of the growth strategies.

I. INTRODUCTION

The growth of SMEs is becoming a crucial component of the economy of Zimbabwe because of its contribution to creation of employment, lessening poverty and viable development (Majoni et al, 2016; Memba et al, 2012; Mangudya, 2017, Beynon 2020). Despite concerted efforts by the Reserve Bank of Zimbabwe, Zimbabwe National Chamber of Commerce, Small to Medium Enterprise Development Cooperative, Small to Medium Enterprise association of Zimbabwe, Ministry of SMEs and other organisations SMEs still struggle with growing (Munjeyi ,2017);Tinarwo, 2016; Karedza, 2014;). Policy intervention single-handedly will not meaningfully influence economic activities in Zimbabwe. A deeper look at the SMEs themselves is essential. There is a gap in as far as factors affecting adoption of growth strategies by SMEs is concerned.Perhaps an understanding of what drives their growth strategy could help understand why they keep struggling with the aim of finding durable solutions to this problem.

Primary objective

The major aim of this study was to analyse the factors that affect adoption of growth strategies by SMEs.

II. LITERATURE REVIEW

According to Greenberg (2011) organisational structure explains the way in which individuals and groups within a company are formally interrelated regarding the allocation of responsibilities, jobs and power. Strakova; Vachal; Jaroslav;

Kollmann and Talir (2021) emphasised that the organisational structure is a pivotal element in terms of achieving business aims. This is hinged on the fact that a good organisational structure make a firm more versatile in adapting to an unpredictable environment (Schwer and Hitz,2018). Furthermore, the effectiveness of the organisational structure according to Al Taweel (2019) is subject to company strategy, values, headship and high productivity. Innovation and teamwork is enhanced by an applicable organisational structure (Wedl 2019).

Greiners growth models (1972) suggest that the ability of an organisation to grow is determined by its ability to adapt to changes in the environment as it moves to the next stage. These changes include the structure of the organisation, the leadership and management style.

Small organisations have to revisit their organisational structure and assess if it supports the growth strategy being adopted. In many occasions organisations may have to customize their organisational structure to fit their growth strategy in consideration (Ochiki, 2014). The nature of organisational structure influences the effectiveness and efficiency of growth strategy implementation.

The structure of the organisation will affect the type and success of growth strategy chosen as it depicts the flow of authority and power. It improves operational efficiency by providing clarity on responsibility and accountability to employees at each level to achieve intended objectives (Max,2020). Organisational structure will also determine the speed at which decisions are made and the extent of delegated authority in response to the changes in the environment. The organisational flexibility is a catalyst to achieve organisational growth objectives (Setyanto et al ,2019)

Level of education and Managerial Skills

A study done in Pakistan revealed that SME owners with higher academic qualifications experienced higher growth in their business visavi those of owners with just vocational training (Gimmon, Farja and Greenberg,2020; Wainana and Oloko ,2016). Highly educated business owners found it easy to adapt to a dynamic environment. Small businesses with highly educated owners had better results in terms of profitability (Njanike (2019). Educated owners with secondary education and higher qualifications according to Njanike (2019) have a clear understanding of business concepts.

Bodziany et al (2021) asserts that managerial skills are crucial in building a firm’s capacity to withstand crisis. Bouazza et al (2015) point out that, well-educated and trained personnel have more learning and innovative capabilities. Management competences of the senior management team are crucial factors for the growth of small businesses. These management competences include sets of knowledge, skills, and aptitude that can make the small firm more efficient (Bodziany et al 2021, Olawale and Garwe, 2010). The shortage of necessary proficiency and a skilled senior management team is a major barrier of growth faced by SMEs. Furthermore poor managerial training is an obstruction in the attainment of growth that can lead to SME failure. Thus an improvement of SME management capabilities and leadership is a must for small firms (Mwepu, Bounds and Goldman, 2016).

Legal and regulatory framework

Maglakelidze and Erkomaishvili (2021) and Munjeyi (2017) cite government policies as being an important factor affecting small business failures. Hostile regulatory environment are some of the factors hindering the development of SMEs in Zimbabwe which discourage investments and growth in the sector (Karedza et al., 2014). Kwamena and Oduro (2017) found that punishing tax regime, tight credit policies, trade regulations, bureaucratic rules and regulations affected the growth of SMEs in Ghana negatively. Bouazza (2015) and Karedza et al. (2014) attest that sprouting of informal traders in developing countries creates unfair competition that impedes SME growth. Informal traders make savings due to non-compliance with relevant authorities, tax evasion and short-termism, informal traders enjoy a substantial cost advantage that affords them to charge below market price. Furthermore, Amin et al (2021) cited corruption as a main cause of the increase in unjust competition while Ezebilo et al (2019) reiterated that corruption hinders innovation and efficiency.

Access to external funding

Bankowska et al (2020), Karedza et al. (2014), Bouazza (2015) highlighted that one of the pressing problems facing SMEs is access to finance. The high interest rates and level of collateral required by financial institutions for SMEs to obtain funding due to high risk associated with them makes it almost impossible for an SME to obtain the funding (Mergersa ,2020; Amin et al (2021) emphasised that corruption hindered access to finance leading to lack of capital for expansion. Generally, corruption considerably has an effect on the decisions of financing sources. Inevitably corruption increases the use of informal debt and reduces the levels of formal debt (Phan and Archer, 2020;)

Technological capacities

Tinarwo (2016) and Bouazza (2015) cited lack of knowledge on the latest technology as a challenge faced by SMEs to experience growth. As noted by Kundu & Bhattacharya ,2020 and Morse et al. (2007) technological capabilities profit SMEs by enhancing SME efficiency, reduce costs, and widen market

share, locally and internationally. Yusuf et al. (2003) and Romijn (2001) highlighted that low technological aptitude holds back and dampen SMEs from fully attaining their potential. Feng-Jyh Lin & Chihufeng Lai (2021) asserted that technological capability enables firms to build the worth of the firm which enables it to be more strategic in its undertakings. The technological environment, and more specifically digitisation initiatives support the advancement and absorption of new technologies, which plays a pivotal role in making SMEs competitive as well as sustainable (Kundu & Bhattacharya ,2020).

Random Utility Theory

We use the random utility approach as the analytical framework of the study. This model is underpinned by the theory of discrete choice which assumes that utility is derived from attributes of alternatives rather than alternatives per se (Hannemann 1984) .The random utility approach posits that people generally choose what they prefer, and where they do not, this can be explained by random factors. An individual chooses an alternative which maximizes utility. Suppose we have an SME owner or manager and he/she is asked if he adopted any growth strategies, the dependent variable is defined such that: $Y_i = \begin{cases} 1 & \text{if yes} \\ 0 & \text{if no} \end{cases} \dots \dots \dots i)$

for person *i*. We can also define X_i as the factor influencing adoption. We will need to also define e_i as a random, independent error. We could use the linear model to fit this model. In that case we would have:

$$Y_i = \beta_0 + \beta_1 X_i + e_i \dots \dots \dots (ii)$$

$$Y_i \equiv E(y_i) = \beta_0 + \beta_1 X_i \dots \dots \dots (iii)$$

Now we are going to define the probability that individual *i* chooses to participate and the complement of this probability. For the former, we will use the notation p_{i1} and for the later p_{i2} . Given this notation, we can say that the predicted choice probabilities are:

$$p_{i1} = \Pr[y_i = 1] = \Pr [Yes] \text{ and } \dots \dots \dots (iv)$$

$$p_{i2} = \Pr[y_i = 0] = \Pr [No] \dots \dots \dots (v)$$

It should be clear that $p_{i2} = 1 - p_{i1}$. It must also be the case, given the definition of what we mean by expectation that:

$$E(y_i) = (1)p_{i1} + (0)p_{i2} = p_{i1} \dots \dots \dots (vi)$$

Combining this result with Equation (v), we conclude that

$$P_{i1} = \beta_0 + \beta_1 X_i \dots \dots \dots (vii)$$

The multinomial logit model.

The adoption of SME’s growth strategies was analyzed using the multinomial logit model. The use of categorical data in the scope of this research and the importance of qualitative interpretation are the basic determinants for selecting this methodology. The logistic regression model can be applied when the response variable assumes only two values, generically, 1 for success and 0 for failure, nevertheless, as cited by Chatterjee and Hadi (2006), it is possible to extend logistic regression model to situations where the response variable assumes more than two values and where there is no natural ordering of the categories. The resulting model can be analyzed by using slightly modified methods that were used in analysing the dichotomous outcomes. This method is called the multinomial (polytomous) logistic regression.

We can assume that we have n independent observation and p explanatory variables. The qualitative response variable or dependent variable has k categories. In order to construct the logits in the multinomial case one of the categories is considered as the base level and all the logits are constructed relative to it. It is possible to choose any category as the base level. It is assumed here as an example that category k is the base level in the method. Due to that fact, that there is no ordering, it is apparent that any category may be labelled k. On the other hand, we can assume that π_j indicates the multinomial probability of an observation falling in the jth category. Our aim is to find the relationship between this probability and the p explanatory variables, X1, X2,...,Xp. The multiple logistic regression model ultimately appears as follows:

$$\log \left(\frac{\pi_j(x_i)}{\pi_k(x_i)} \right) = \beta_0_j + \beta_1_j x_{1_i} + \beta_2_j x_{2_i} + \dots + \beta_p_j x_{p_i} \dots(viii)$$

Where: $j = 1, 2, \dots, (k - 1)$ and $i = 1, 2, \dots, n$.

Since all the π' s add to unity, this reduces to:

$$\log \left(\pi_j(x_i) \right) = \frac{\exp(\beta_0_j + \beta_1_j x_{1_i} + \beta_2_j x_{2_i} + \dots + \beta_p_j x_{p_i})}{1 + \sum_{j=1}^{k-1} \exp(\beta_0_j + \beta_1_j x_{1_i} + \beta_2_j x_{2_i} + \dots + \beta_p_j x_{p_i})} \dots(ix)$$

Source: Köprülü (2011)

The multinomial logit model have the response variable with 6 categories is chosen to be the most appropriate regression model to explain the relationship between response variable and explanatory variables. The 6 different categories of response or dependent variable are the adopted growth strategies as follows:

- Market penetration
- Product development strategy
- Market development strategy
- Diversification strategy
- Human resource strategy
- Marketing strategy

The research is intended to understand the underlying factors that influence the choice of growth strategies.

Because we have 6 different categories of the dependent or response variable Y, the general view of the multinomial logit model used in this research is as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \mu_i \dots(x)$$

Y is the dependent or response variable (individual SME’s growth strategies adopted) as expressed above and X_i is the explanatory or independent variables (factors influencing the choice of the growth strategy) used in the model are mentioned below.

β_i – are the coefficients to be estimated

X₁ =Level of education

X₂ = Access to funding

X₃ =Technologies capacities

X₄ =Legal and regulatory framework

X₅ = Organizational structure

μ_i =The error term

Justification of the variables

Educational level of SME owners or managers, appears noteworthy for evaluating whether having higher education or having less education are more open to adoption of growth strategies when compared to others. We can convey the widespread opinion relevant to this situation as “the higher education brings about higher risk endurance”. However, cultural and social disparities in developing countries evoke unexpected consequences conversely to general beliefs. Therefore, this research has concentrated on different tendencies and the underlying factors for the outcomes of these tendencies for adopting growth strategies. Educational levels of SME owners or managers are labelled as follows:

- 1= Non
- 2= Primary
- 3= Secondary
- 4= Tertiary

Access to funding is also taken into account for testing the statistical significance as an explanatory variable in the model. The main reason for including this variable into the model is to understand the need of SME owners or managers to finance and the difficulties to reach those finances to be used to adopt a growth strategy. Furthermore, it is also aimed to observe the dependency of SME owners or managers against finances. Thus, enterprises with higher accessibility and with less accessibility are compared for openness to adopting growth strategies in decision-making process and risk analysis. The labelling of this variable is shown beneath:

- 1 = does not influence
- 2 = influence

Technological capacities, is another variable, that is believed to play an important role on influencing SME owners or managers for the openness for adopting and implementing growth strategies. Therefore, this explanatory variable is included into Multinomial Logit model with below described labels in order to understand whether technology capacity is accepted by enterprises as useful or not on the adoption of growth strategies.

- 1 = does not influence
- 2 = middle
- 3 = significant influence

Legal framework in which the enterprise is operating is one of the important variables of this research in order to expose the reactions of different levels of influence of SME owners or managers in the adoption of growth strategies. In other words, it is aimed to stress the diversification of opinions of individuals for adopting growth strategies. SME owners or managers were asked whether the current legal and regulatory framework affect their decision in choosing a growth strategy to adopt or not. The value labels of legal framework for three different categories are shown below:

- 1 = does not influence
- 2 = middle
- 3 = significant influence

Organisational structure explains the way in which individuals and groups within an enterprise are formally interrelated regarding the allocation of roles, responsibilities and authority. The main purpose for taking this variable into account in the model occurs for revealing the difference in the adoption of a growth strategies between informal and formal organisational structures. In this way, it is intended to emphasize if there is a significant statistical relationship or not. This variable is labelled into 2 as follows:

- 1 = informal organisational structure
- 2 = formal organisational structure

III. FINDINGS

The Multinomial logit model was used to analyse adoption of growth strategies. Table 1 below shows the findings.

| sme growth strategies adopted ^a | | B | Std. Error | Wald | df | Sig. |
|---|-----------------------------|--------|------------|--------|----|-------|
| market penetration strategy | Intercept | 2.571 | 3.528 | .531 | 1 | .466 |
| | [Educationlevel=4] | .356 | .192 | 3.442 | 1 | .064 |
| | [AccesstoCapital=2] | .723 | .336 | 4.622 | 1 | .032 |
| | [legalframewrk=3] | -.619 | .208 | 8.833 | 1 | .003 |
| product development strategy | Intercept | 1.349 | 3.194 | .179 | 1 | .673 |
| | [Educationlevel=4] | 2.534 | 1.100 | 5.303 | 1 | .021 |
| | [technologycapability=3] | -.838 | .202 | 17.161 | 1 | 0.000 |
| market development strategy | Intercept | 2.930 | 3.294 | .791 | 1 | .374 |
| | [Educationlevel=4] | -.807 | .230 | 12.298 | 1 | .000 |
| | [technologycapability=3] | -.268 | .129 | 4.297 | 1 | .038 |
| | [legalframewrk=1] | -.487 | .192 | 6.448 | 1 | .011 |
| diversification strategy | Intercept | 1.666 | 5.300 | .099 | 1 | .753 |
| | [AccesstoCapital=2] | -.027 | .004 | 50.533 | 1 | .000 |
| | [organizationalstructure=2] | -0.067 | 0.38 | 3.146 | 1 | 0.076 |
| Human resources strategy | Intercept | -2.336 | 6.096 | .147 | 1 | .702 |
| | [Educationlevel=4] | 3.568 | 1.200 | 2.97 | 1 | .003 |
| | [legalframewrk=3] | -2.892 | 1.694 | 2.914 | 1 | .088 |
| a. The reference category is: marketing strategy. | | | | | | |

Source: Researchers findings

The Multinomial Logit regression model was used to analyse the adoption of growth strategies in relation to the level of education, access to capital, legal and regulatory framework, technology capacity and organisational structure.

The dependent variable has six categories; Parameter Estimates Table, (summarised in the table above) indicates five parts, labelled with the categories of the outcome variable adoption of growth strategies of enterprise with the sixth

growth strategy as a reference category. These five parts correspond to five equations as below:

$$\log \left(\frac{p(\text{growth strategy}=\text{market penetration})}{p(\text{growth strategy}=\text{marketing strategy})} \right) = \beta_0 + \beta_1 \text{education} + \beta_2 \text{capital} + \beta_3 \text{technology} + \beta_4 \text{legal framework} + \beta_5 \text{organisational structure}$$

$$\log \left(\frac{p(\text{growth strategy}=\text{product development})}{p(\text{growth strategy}=\text{marketing strategy})} \right) = \beta_0 + \beta_1 \text{education} + \beta_2 \text{capital} + \beta_3 \text{technology} + \beta_4 \text{legal framework} + \beta_5 \text{organisational structure}$$

$$\log \left(\frac{p(\text{growth strategy}=\text{market development})}{p(\text{growth strategy}=\text{marketing strategy})} \right) = \beta_0 + \beta_1 \text{education} + \beta_2 \text{capital} + \beta_3 \text{technology} + \beta_4 \text{legal framework} + \beta_5 \text{organisational structure}$$

$$\log \left(\frac{p(\text{growth strategy}=\text{market development})}{p(\text{growth strategy}=\text{marketing strategy})} \right) = \beta_0 + \beta_1 \text{education} + \beta_2 \text{capital} + \beta_3 \text{technology} + \beta_4 \text{legal framework} + \beta_5 \text{organisational structure}$$

$$\log \left(\frac{p(\text{growth strategy}=\text{diversification strategy})}{p(\text{growth strategy}=\text{marketing strategy})} \right) = \beta_0 + \beta_1 \text{education} + \beta_2 \text{capital} + \beta_3 \text{technology} + \beta_4 \text{legal framework} + \beta_5 \text{organisational structure}$$

$$\log \left(\frac{p(\text{growth strategy}=\text{human resource strategy})}{p(\text{growth strategy}=\text{marketing strategy})} \right) = \beta_0 + \beta_1 \text{education} + \beta_2 \text{capital} + \beta_3 \text{technology} + \beta_4 \text{legal framework} + \beta_5 \text{organisational structure}$$

Interpretation of multinomial logit model

“Marketing strategy” has been chosen as the base group or comparison group, which is the reference category. In this model, the variable is accepted as statistically significant if the significance level of Wald statistics of independent variable is less than 0,05(P<0,05).

Column B of table 1 is the coefficient showing the direction in which the regression is going, either positive or negative. Where a positive regression coefficient expresses that the explanatory variable increases the probability of the outcome. Conversely, a negative coefficient indicates that the variable decreases the probability of that outcome. Coefficients with positive directions explains the possibility of adopting the aforesaid growth strategies (thus either “Market penetration”; “Product development”; Market development”; “Diversification” or “Human resource strategy” because they are compared to reference category specified as “Marketing

strategy”) are more likely rather than adopting the reference category (“Marketing strategy”).

On the contrary, coefficients having negative directions represent that, the possibility of adopting the aforesaid growth strategies are less likely rather than adopting the reference category. The larger coefficient values signify stronger deterministic power for the aforesaid independent explanatory in the model while smaller coefficient values signify weaker deterministic power.

Market penetration strategy

The variables that have a statistically significant relationship to distinguishing SMEs’ adoption of growth strategy for “Market penetration” from “Marketing strategy” in the first Multinomial Logit equation were education=4 (tertiary), accesstocapital=2 (influence), and legalframewrk=3 (significant influence). SMEs who expressed that legal and regulatory framework have significance influence in choosing a growth strategy, are less likely to adopt “Market penetration” rather than “Marketing strategy” due to the negative regression coefficient of legalframewrk=3. Legalframewrk=3 has a negative coefficient of -0.619 and it is statistically significant at 5% level. Therefore for a unit increase in the legalframewrk=3, the adoption of market penetration strategy decrease by 0.619. It is possible to say that legal and regulatory framework influence the adoption of Market penetration growth strategy in a significant and negative way in favour of reference group (“Marketing strategy”). The results are line with the claims made by Karedza et al., (2014) and that hostile regulatory environment hinders the development of SMEs in Zimbabwe which discourage investments and growth in the sector.

The possibility of SMEs, who attained tertiary education, is more likely to adopt the “Market penetration” rather than “Marketing strategy” strategy due to the positive regression coefficient of education=4. Education=4 has a positive coefficient of 0.356 and it is statistically significant at 5% level. Therefore for a unit increase in the education=4, the adoption of market penetration strategy increase by 0.356. It is possible to say that tertiary level education influence the adoption of Market penetration growth strategy in a significant and positive way against reference group (“Marketing strategy”). The results are in line with the claim made by Wainaina and Oloko (2016), that it requires a highly skilled personnel to implement market penetration strategy.

Similarly, Access to capital=2 come out statistically significant (P=0,032<0,05) according to parameter estimates table. Therefore, we can say that, the possibility of SMEs who expressed that access to capital influence their adoption of growth strategies, are more likely to adopt the “Market penetration” growth strategy rather than “Marketing strategy” due to the positive regression coefficient. Accesstocapital=2 has a positive coefficient of 0.723 and it is statistically significant at 5% level. Therefore, for a unit increase in the accesstocapital=2, the adoption of market penetration strategy

increases by 0.723. It is possible to say that access to capital influence the adoption of Market penetration growth strategy in a significant and positive way against reference group (“Marketing strategy”). The results are consistence with the discoveries made by Banskowska (2020); Amin et al (2021) and Bouazza (2015) that access to financing was a major impediment for SME growth

Among above mentioned independent variables, which are statistically significant due to their Wald statistics value, the deterministic power of variables in turn, is Capital=2, Education=4, and Legal framework=3. In other words, Capital=2 has the largest deterministic power when compared to others. While legal framework=3 has the least deterministic power in the first equation of “Market penetration” over “Marketing strategy” as the reference group.

Product development strategy

The variables that have a statistically significant relationship to distinguishing SMEs’ adoption of growth strategies at 5% level for “Product development” from “Marketing strategy” in the second equation were education=4 (tertiary), and technologycapability=3 (significant influence).

The SMEs, who attained tertiary education, is more likely to adopt the “product development” growth strategy group rather than “Marketing strategy” due to the positive regression coefficient of education=4. Education=4 has a positive coefficient of 2.534 and it is statistically significant at 5% level. Therefore for a unit increase in the education=4, the adoption of product development strategy increase by 2.534. It is possible to say that tertiary level education influence the adoption of product development growth strategy in a significant and positive way against reference group (“Marketing strategy”). The results are consistent with the claim made by Gimmon, Farja and Greenberg (2020) that successful entrepreneurs have attained education and training beyond primary education.

Whilst the SMEs, who expressed that technology capacity have significance influence in choosing a growth strategy, are less likely to adopt “Product development” as a growth strategy rather than “Marketing strategy” due to the negative regression coefficient of technologycapability=3. Technologycapability=3 has a negative coefficient of -0.838 and it is statistically significant at 5% level. Therefore for a unit increase in the technologycapability=3, the adoption of product development strategy decrease by 0.838. It is possible to say that technology capacities influence the adoption of product development growth strategy in a significant and negative way in favour of reference group (“Marketing strategy”). The findings were in line with the claim made by Feng-JyhLin and ChihuFeng (2021); Tinarwo (2016) and Bouazza (2015) that lack of knowledge on the latest technology is a challenge faced by SMEs to experience growth.

The independent variable Educationlevel=4 has the larger deterministic power when compared to

Technologycapability=3 variable due their Wald statistics value under equation of “Product development” over “Marketing strategy” as the reference group.

Market development strategy

The variable that has a statistically significant relationship to distinguishing SMEs’ choice of adopting a growth strategy “Market development strategy” from “Marketing strategy” in the third Multinomial Logit equation are Educationlevel=4 (tertiary), Technologycapability=3 (significant influence) and Legalframewrk=1 (does not influence). In other words, we can say that, the possibility of SMEs who attained tertiary education, who expressed that technology capacity has significant influence and those who mentioned that legal and regulatory framework does not influence their choice of growth strategy, are less likely to adopt the “Market development strategy” rather than “Marketing strategy” as a growth strategy due to the negative regression coefficient. Educationlevel=4, technologycapability=3 and legalframewrk=1 has negative coefficients of -0.807, -0.268 and -0.487 respectively and they are statistically significant at 5% level. Therefore for a unit increase in the educationlevel=4, technologycapability=3 and legalframewrk=1, the adoption of market development strategy decrease by 0.807, 0.268 and 0.487 respectively. It is possible to say that tertiary education, technology capacities and legal and regulatory framework influence the adoption of market development strategy growth strategy in a significant and negative way in favour of reference group (“Marketing strategy”). The results are consistent with the a priori.

The deterministic power of variables in turn is Technologycapability=3, Legalframewrk=1, and lastly Educationlevel=4 in the third equation of “Market development strategy” over “Marketing strategy” as the reference group.

Diversification strategy

The variables that have a statistically significant relationship to distinguishing SMEs’ adoption of growth strategy of “Diversification” growth strategy from “Marketing strategy” at 5% level in the fourth equation were Capital=2 (influence), and Organisational structure=2 (formal).

The SMEs, who expressed that access to capital has influence in choosing a growth strategy and those with formal organisational structures, are less likely to adopt “Diversification” growth strategy rather than “Marketing strategy” due to the negative regression coefficients of accesstocapital=2, and organisationalstructure=2. Accesstocapital=2 and organisationalstructure=2 have negative coefficients of -0.027 and -0.067 respectively and they are statistically significant at 5% level. Therefore for a unit increase in the accesstocapital=2 and organisationalstructure=2, the adoption of diversification strategy decrease by 0.027 and 0.067 respectively. It is possible to say that access to capital and formal organisational

structure influence the adoption of diversification growth strategy in a significant and negative way in favour of reference group ("Marketing strategy"). The results were in line with the ones obtained by Schwer and Hitz (2018) & Max (2020) that organisational structure has effect on the success of the organisation.

The accesstocapital=2 independent variable has a larger the deterministic power than organisationalstructure=2 under equation of "Diversification" growth strategy over "Marketing strategy" as the reference group.

Human resources strategy

The variable that has a statistically significant relationship to distinguishing SMEs adoption of growth strategy "Human resources strategy" from "Marketing strategy" at 5% level in the fifth Multinomial Logit equation are Educationlevel=4 (tertiary) and Legalframewrk=3 (significant influence). The SMEs, who attained tertiary education, are more likely to choose the "Human resource strategy" rather than "Marketing strategy" due to the positive regression coefficient. Education=4 has a positive coefficient of 3.568 and it is statistically significant at 5% level. Therefore for a unit increase in the education=4, the adoption of market penetration strategy increase by 3.568. It is possible to say that tertiary level education influence the adoption of Human resources growth strategy in a significant and positive way against reference group ("Marketing strategy"). The results are in line with the claim made by Gimmon, Farja and Greenberg (2020) & Njanike (2019) that successful entrepreneurs have attained education and training beyond primary education.

Whereas the SMEs who declared that, legal and regulatory framework has significant influence in their adoption of growth strategy, are less likely to prefer the "Human resources strategy" rather than "Marketing strategy" due to the negative regression coefficient. Legalframewrk=3 has a negative coefficient of -2.892 and it is statistically significant at 5% level. Therefore, for a unit increase in the legalframewrk=3, the adoption of human resources strategy decrease by 2.892. It is possible to say that legal and regulatory framework influence the adoption of human resources growth strategy in a significant and negative way in favour of reference group ("Marketing strategy"). The results are consistent with the claim made by Kwamena and Oduro (2017); Munjeyi (2017) as well as Maglakelidze and Erkomaishvili (2021) that government policies have significant influence on the growth of small business.

These independent variables, are statistically accepted as significant due their Wald statistics value, Educationlevel=4 has the larger deterministic power than Legalframewrk=3 under equation of "Human resources strategy" over "Marketing strategy" as the reference group.

IV. CONCLUSIONS AND RECOMMENDATIONS

The study concludes that capital, legal and regulatory framework, technology capacity, education and organisational

structure are all statistically significant at 5% level in affecting the adoption of growth strategies. It has also been seen that educational level is a prominent factor that affect the adoption of growth strategies including market penetration, product development and human resource strategy. It has also been concluded that access to capital has the highest deterministic power when compared to legal and regulatory framework and educational level under market penetration strategy. SMEs should train their employees and motivate them well for successful growth strategy. SMEs should have clearly articulated organisational structures and try to position themselves in such a way that they become attractive to financiers through proper functioning business system in their organisations. The SMEs are also recommended to be proactive when choosing growth strategies and also do environmental scanning before they embark on a particular growth strategy in order to be informed of the circumstances that may hinder the successful implementation of the growth strategies.

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APPENDIX

Goodness-of-fit Tests

The Multinomial Logistic Regression procedure reports Pearson and Deviance goodness-of-fit statistics. Model Fitting Information: A likelihood ratio test shows whether the model fits the data better than a null model. The results are shown below:

Table 1 Goodness-of-Fit

| | Chi-Square | df | Sig. |
|----------|------------|-----|------|
| Pearson | 96.270 | 120 | .945 |
| Deviance | 87.413 | 120 | .989 |

Source: Researcher's findings

The Goodness-of-Fit table above presents two tests of the null hypothesis that the model adequately fits the data. If the null is true, the Pearson and deviance statistics have chi-square distributions with the displayed degrees of freedom. If the significance value is small (less than 0.05), then the model does not adequately fit the data. In this case, both Pearson and Deviance values are greater than 0.10. Therefore, we can say that the data are consistent with the model assumptions.

Pseudo R-Square

The linear regression model, the coefficient of determination, R^2 , summarizes the proportion of variance in the dependent variable associated with the predictor (independent) variables, with larger R^2 values indicating that more of the variation is explained by the model, to a maximum of 1.

Table 2. Pseudo R-Square

| | |
|---------------|------|
| Cox and Snell | .291 |
| Nagelkerke | .304 |
| McFadden | .109 |

Source: Researcher's findings

The model with the largest R^2 statistic is called as the "best" or most available according to this measure. Following these information, Table 2 explains the validity of the model throughout a perfect model. Cox and Snell with 0,291 value (which is smaller than 1) satisfies the expectations about the model. In addition, Nagelkerke value appeared as 0,304 which is between 0 and 1. Finally, McFadden value with 0,109 also satisfies the expectations which are between 0 and 1. It is possible to say that the model used in this research is accepted as an appropriate model as a whole. Moreover, the results of the above shown statistics and tests indicate that the selection and use of Multinomial model fit the selected dependent and independent variables as a whole.