

Influence of Entrepreneurial Opportunities and the Growth Sustainability of Motorcycle (Boda-Boda) Industry for Economic Development in Murang'a County, Kenya

Dr. Robert Maina Mwangi¹

Murang'a University of Technology

Corresponding email: bobmuthua@gmail.com

How to Cite: Mwangi, R. M. (2024). Influence of Entrepreneurial Opportunities and the Growth Sustainability of Motorcycle (Boda-Boda) Industry for Economic Development in Murang'a County, Kenya. *Journal Entrepreneurship and Project Management*, 4(4), 1-13.

Abstract

Motorcycle businesses play a key role in poverty alleviation when run based on entrepreneurial opportunities. This research study was carried out in rural population of Murang'a County, Kenya. The study aimed to provide relevant insights into how the boda-boda service business has influenced growth sustainability towards the economic development of Murang'a County. The research investigates the entrepreneurial opportunities and the growth sustainability of motorcycle industry for economic development in Murang'a County. The study aims to examine the influence of an entrepreneurial mindset and the growth of motorcycle industry on economic development in Murang'a County. The study is supported by dynamic capabilities theory. A cross-sectional survey methodology was utilized which incorporated qualitative and quantitative research methods. During the selection of the sample, particular attention was paid to age, gender, education, income, household, and community. A stratified sampling technique was employed to obtain 359 motorcycle riders from 3500 licensed riders by the seven selected sub-counties in Murang'a county namely; Mathioya, Kangema, Kiharu, Kandara, Maragua, Gatanga, and Kigumo sub-counties. The study concluded that an entrepreneurial mindset helps motorcycle industry to sustain growth for economic development in Murang'a, Kenya. The study suggested that motorcycle riders should focus more on creativity, entrepreneurial alertness, and propensity for risk-taking respectively.

Keywords: *Entrepreneurial Mindsets, Motorcycle Industry, Economic Development*

Received: 20th September 2024

Revised: 25th September 2024

Published: 30th September 2024

1.0 Introduction

Entrepreneurial opportunities are expected to exist when people have an exceptional understanding of the value of remarkable opportunities and acting upon this understanding, results in entrepreneurial income. If the entrepreneur does not use the opportunity correctly and efficiently it will result in entrepreneurial loss (Alvarez & Barney (2000). As per different definitions of opportunity identification given by Lumpkin and Lichtenstein (2005), it is "the ability to identify a good idea and transform it into business concepts that add value and generate revenue". This definition emphasizes that opportunity identification is an indistinguishable part of entrepreneurship. According to researchers like Shane and Venkataraman (2000), Krueger (2003), Sarason (2006), and Mitchell (2004), opportunity identification is an essential part of the entrepreneurship procedure. People with this ability

have a higher tendency to become an entrepreneur than those who do not possess them (Shane, Locke, & Collins. 2003). There are various elements and factors that impact opportunity identification of entrepreneurs, which include traits and networking capabilities of individuals (Nicolaou, Shane, Cherkas, & Spector. 2009). Entrepreneurial activities cannot exist without an opportunity even if the person has all the necessary attributes that impact the success of the venture creation procedure (Short, Ketchen, Shook, & Ireland, 2010).

Motorcycles are becoming increasingly popular for both personal and public transportation. As the world becomes more motorized, especially in countries that are ranked as low- and middle-income earners, and as many developing countries' transportation systems become more disorganized and inefficient, motorbikes are becoming an increasingly popular method of transportation (Kumar, 2017). About 33 motorcycles per 1,000 people is the current estimate for the number of motorcycles in use in the world. (Kenya National Bureau of Statistics [KNBS], 2018). It is expected that the need for commercial motorbike services will continue to expand as the majority of people throughout the world need a flexible method of transportation. There are several advantages to owning a motorcycle, including low cost, wide availability, versatility, and even the ability to cross poorly maintained highways with ease (Nyachio, 2020). According to Obura (2021), motorcycle taxis have a slew of advantages, but they also come with several substantial disadvantages. These negatives include poor road safety, environmental deterioration, and, most disturbingly, the concomitant crimes committed on motorcycles. In many African villages, communities, and cities, motorcycle transportation has become a common transportation means.

Motorcycle sales are a primary source of income for many people in Africa (Obura, 2021)). Those who own motorcycles in Nigeria rely on the money they earn from these trades to sustain their families (Arosanyin, 2011). As the number of individuals riding motorbikes has increased, so has the number of work opportunities for those who do so. Employment prospects for motorcycle mechanics and motorcycle spare parts sellers have been generated, as well as an increase in the local government's ability to raise income through the sale of licenses, the registration of motorcycles, and the imposition of taxes (Obura, 2021).

Globally the number of youths engaging in motorcycle transport business is ever-increasing (Turner, 2014). The potential available opportunities in motorcycle taxi business are fast growing to meet transport demand (Maulaga, Machimu, and Mgema, 2019). Motorcycle transport has been a more effective means of transport that provides door-to-door capability, unmatched navigability in congested road conditions, ease of parking, and capacity for passengers and luggage at low cost. Ease of entry, little capital requirement, employment potential, and ability to navigate congested and poor-quality roads with relative ease, are some of the factors contributing to the growth of motorcycle transport business (Kumar, 2011). The motorcycle business in many parts of East Africa is commonly known as boda-boda, the popular term which originally referred exclusively to bicycle transporters but in recent years it has been expanded to cover motorcycle taxis as well (Mutiso, 2010). With the unemployment and under-employment situation in the developing countries the boda-boda transport business has become a livelihood opportunity and an alternative employment opportunity for youths in Tanzania (Bishop, 2015)). According to Mutiso and Behrens (2010), boda-boda employs a majority of youths in Kenya whereby the income earnings from the business are also used to support the social, human, physical, personal, and financial needs of the bodaboda owners, operators, and their dependents. According to Mbugua (2011), the bodaboda is an attractive mode of transport as it influences the incomes of the families, providing an affordable mobility option that is not otherwise available.

Kenya and Uganda were the first East African countries to implement bicycle taxis in the 1960s. In the 1960s, the town of Busia in Kenya began offering motorcycle taxi services, which subsequently spread to other rural and urban areas of the country. Motorcycles have increased in number from 3,757 in 2005 to 91,151 in 2009 since the zero-tax rate was gazetted. After 2005, there was a significant rise in this number (KNBS, 2018). The development of Kenya's motorcycle industry is critical to the country's economic well-being. Economic growth and poverty reduction can only be achieved if both resources and markets are easily accessible. As said, many developing countries may have difficulty accessing the aforementioned resources, which contributes to the transportation industry's lagging economic health (Runyan, Droge, & Swinney, 2018).

Entrepreneurs who have invested in the motorcycle taxi company may better manage their companies, be more strategic in their operations, and achieve their desired levels of profitability thanks to their education (Nandwoli, 2014)). People with a college degree are more likely to have an internal center of control and excellent analytical skills. These skills allow them to effectively assess business situations and give solutions for problems that arise when a company is in operation. Entrepreneurship in underdeveloped countries is the world's most important economic and social issue that has received the smallest amount of scholarly attention currently (Lumpkin, & Dess 2016). However, in emerging countries, enterprise development is almost always encouraged. Promoting entrepreneurship as an economic development strategy is often justified on this basis although there is some debate over the validity of this occurrence (Kodithuwakku & Rosa, 2018). Entrepreneurship as a modern idea emphasizes the importance of a fresh start for the growth of commercial innovation, specifically referencing the process of creative destruction.

Entrepreneurial mindset is the inclination to discover, evaluate, and exploit opportunities. According to Kraus and Meier (2016), an entrepreneurial mindset is about creativity, innovation, and taking opportunities that lead to organizational wealth creation and success, and this type of mindset enables entrepreneurs to make realistic decisions when faced with uncertainties. Successful entrepreneurs contribute to the development of society and advancement of economic growth (Wu, 2009). An entrepreneurial mindset can be seen as a growth-oriented perspective through which individuals promote flexibility, creativity, continuous innovation, and renewal in organizations (Ireland, 2003; Ireland & Webb, 2007; Ireland et al. 2009; Kuratko, 2009). Uncertainty can be used to your benefit if you create and employ an entrepreneurial mindset. Thus, an entrepreneurial mindset is required for the founding of new businesses as well as the rejuvenation of existing ones (Draghici, Albulescu, & Tamasila, 2014). Characteristics of entrepreneurial mindset include Creativity, Persuasion, Self-motivation, Tenacity, Curiosity, Flexibility, and Ownership.

Growth is evidence of an entrepreneur's sense of fulfillment and of a profitable venture for them. Young and small businesses must grow to survive, as growing companies are less likely to fail than non-growers. The new stream of growth refers to the motivations for and methods for implementing growth through proactive entrepreneurial actions and decision-making procedures (Gancarczyk, & Zabala-Iturriagoitia, 2015). According to the analysis of Stam and van Stel (2011), entrepreneurship does not influence the growth of middle-income economies but contributes to the growth of high-income economies. Lerner and Schoar (2010) note that it is imperative to understand the dynamic interaction between environmental factors such as market regulation and entrepreneurship to better assess the impact of entrepreneurs on growth in developing nations.

1.1 Problem Statement

The need to address various influences in the motorcycle transport sector to ensure industry growth, as well as competitiveness, is very significant. Failure to identify the factors has made it difficult for motorcycle taxi entrepreneurs to know the strengths of their business hence being unable to match their resources to their strengths to achieve the desired level of business sustainability. When making decisions, entrepreneurs make balanced choices among alternatives. The understanding of the key business success factors is of importance in driving strategy for the motorcycle taxi business. The motorcycle taxi business is generally a small-scale business that is growing exponentially in Kenya (Mutiso, & Behrens, 2017). Gay (2017) notes that buses and matatus have dominated the goods and passenger service providers in Kenya's transport sector in the major routes, this leaves a transportation gap in the minor routes that join residential areas as well as the major stages. In the past, these are routes that have been ignored or regarded as less profitable as a result of poor road infrastructure or a lower number of individuals who require transport services.

Efforts by the government to ensure that the regulation of the sector has also not been very effective due to the nature of the business. Additionally, no single government agency is specifically mandated to regulate the highly lucrative yet dangerous industry in the country. The regulatory framework that has been put in place by the government through the National Transport and Safety Authority (NTSA) has not been very effective in streamlining the motorcycle industry since most operators have failed to abide by it. Entrepreneurial opportunities are major challenges for the industry as motorcycle operators lack the entrepreneurial mindsets, environmental scanning strategies, and industry-prior knowledge needed to sustain growth of motorcycle business. Further, little research has also examined the factors that contribute to success in the industry. Locally, Mutiso and Behrens, (2017) for example assessed the suitability of a regulatory framework for the operations of businesses in Kenya. Further, little research has also examined the factors that contribute to success and growth in the industry. The motorcycle taxi sector is counteracted by the fact that they have brought various externalities including insecurity, lack of adherence to traffic rules, an increase in road accidents and fatalities, and negative effects on the health of the riders and the environment which have greatly affected the sustainability of operations in the sector (Uno, Supratikno, Ugut, Bernarto, Antonio, & Hasbullah, 2021). This study, therefore, aims to examine the entrepreneurial opportunities and the growth sustainability of motorcycle businesses as an industry for economic development.

1.2 Research Hypothesis

H₀₁: There is no significant relationship between entrepreneurial mindsets and the growth sustainability of motorcycle industry for economic development in Kenya

2.0 Literature Review

2.1 Theoretical Review

Dynamic capability (DC) theory appeared as an alternative approach to solve some of the weaknesses of resource-based view (RBV) theory (Galvin, Rice & Liao, 2014). Dynamic capability (DC) theory presents path-dependent processes that allow firms to adapt to rapidly changing environments by building, integrating, and reconfiguring their resource and capabilities portfolio (Teece, Pisano & Shuen, 1997). However, until the 1980s there had been little interest in the subject of strategic management. Particularly in the 1980s, Porter's industry-based theory (Porter, 1979, 1980 & 1985) attracted the greatest attention (Barney & Ouchi, 1986). During that period, the resource - based view (RBV) theory was the major subject of

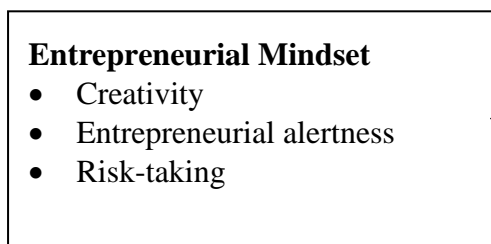
discussion. It viewed a firm as a portfolio of tangible and intangible resources and human resources and capabilities: the ability to combine resources innovatively and efficiently constituted “the firm's capabilities” (Wernerfelt, 1984, Grant, 1991; Helfat et al., 2007; Barney, 1991). In this view, competitive advantage is: “when a firm is implementing a value-creating strategy not simultaneously being implemented by any current or potential competitors” (Barney, 1991), and sustainable competitive advantage is: “when a firm is implementing a value-creating strategy not simultaneously being implemented by any current or potential competitors and when these other firms are unable to duplicate the benefits of this strategy” (Barney, 1991). Dynamic capabilities (DC) theory was derived from the resource-based view (RBV) theory and compensated for that theory’s shortcomings when it came to explaining sustainable competitive advantage and superior performance in a dynamic environment. Teece, Pisano & Shuen (1997) defined Dynamic capabilities (DCs) as “the firm’s ability to integrate, build and reconfigure internal and external competencies to address rapidly changing environments”. Dynamic capabilities are thus “the organizational and strategic routines by which firms achieve new resource configurations as markets emerge, collide, split, evolve and die” (Eisenhardt & Martin, 2000). Teece (2007) made a major contribution to Dynamic capability theory by writing about the micro-foundations for each of the three following dimensions: sensing (identification and assessment of an opportunity), seizing (mobilization of resources to address an opportunity and to capture value) and transforming (continued renewal “reconfiguring the business firm’s intangible and tangible assets”).

2.2 Empirical Review

A study by Karimi (2023) tried to examine entrepreneurial mindset, lean-green practices, and firm performance among medium hotels in Kenyan cities. The study found that lean-green techniques boost performance. The study further proposes studying other industries besides hospitality to see whether comparable findings are found. Kimathi (2020) also conducted a research study to investigate on entrepreneurial mindset and the performance of small and medium enterprises in Kenya. The study concluded that entrepreneurial mindset influenced performance of small and medium enterprises in Kenya and entrepreneurs possessing elements of creativity, innovation, risk-taking, awareness, and self-efficacy outperform their competitors and steer their enterprises to profitability. The results of this study were resolved to contribute to the theoretical and empirical body of knowledge especially in the area of entrepreneurship and entrepreneurial mindset. Additionally, the study recommended that SME owners or managers should adopt an entrepreneurial mindset to help them build resilient and high-performing sustainable small and medium enterprises. Similarly, a study by Ndururi (2015) sought to investigate the role of entrepreneurial mindset in the success of enterprises operated by entrepreneurship university graduates in Kenya. The objective of the study was to determine effect of the metacognitive resources and influence of metacognitive monitoring and feedback mechanisms on entrepreneurship graduates. The study recommended that entrepreneurial mindset should be made compulsory subject in the curriculum of tertiary institutions.

2.3 Conceptual Framework

Independent variable



Dependent variable

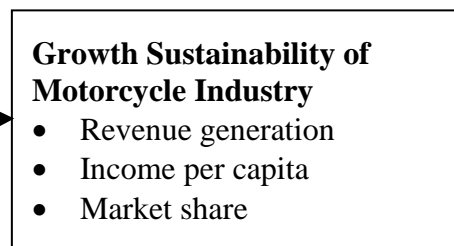


Figure 1: Conceptual Framework

3.0 Methodology

The research design used a cross-sectional survey approach combining both qualitative and quantitative research methods. The target population included 3500 motorcycle operators in Murang’a County. A sample size of 359 licensed motorcycle riders was used from the seven sub-counties. Quantitative data was collected using questionnaires consisting of open and closed questions. Research assistants delivered the questionnaires to the respondents. Data was analyzed using descriptive and inferential statistics.

4.0 Results and Discussion

4.1 Descriptive Statistics

4.1.1 Entrepreneurial Mindset

The respondents were requested to express their opinions in regard to statements on entrepreneurial mindset. The Likert Scale applied was as follows: (1- strongly disagree, 2- disagree, 3- neutral, 4- agree, and 5- strongly agree). The findings indicate that 88.6% of the respondents agreed with the assertion that they consider themselves to be creative people, they have engaged in creative types of work on regular basis, 77.8%, regularly creative ideas occurring to themselves without thinking about them, 80.2%, have always forgotten about their worries while at work to maintain alertness, 93.1% and being alert make new ideas occur to me more readily, 72.3%.

The respondents also agreed that alertness help them make fewer careless mistakes, 76.8%, that the proportion of the day that they feel a high level of alertness is during morning hours, 90%, having trained as a motorcycle rider has reduced risk of accidents, 74.7%, have always complied with government regulations to avoid police arrest, 57.1% and always take time to talk to uncooperative customers, 55.1%.

The aggregate mean of 4.0 indicated that most of the respondents agreed with the statements on entrepreneurial mindset. The overall standard deviation of 1.2 denoted that the responses were close to each other. This implies that there was a general agreement among most respondents on statements relating to entrepreneurial mindset. The descriptive results are illustrated in Table 1.

Table 1: Descriptive Statistics of Entrepreneurial Mindset

Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev
I consider myself to be a creative person.	0.3%	3.5%	7.6%	37.4%	51.2%	4.4	0.8
I am engaged in a creative type of work regularly.	3.1%	2.8%	16.3%	27.3%	50.5%	4.2	1.0
Creative ideas simply occur to me without even thinking about them.	3.8%	1.4%	14.5%	27.3%	52.9%	4.2	1.0
I forget about my worries while at work to maintain alertness.	2.1%	1.4%	3.5%	30.8%	62.3%	4.5	0.8
Being alert makes new ideas occur to me more readily.	16.6%	6.9%	4.2%	25.6%	46.7%	3.8	1.5
I make fewer careless mistakes.	5.2%	6.9%	11.1%	29.4%	47.4%	4.1	1.2
The proportion of the day that I feel a high level of alertness is morning hours.	2.1%	2.8%	5.2%	23.2%	66.8%	4.5	0.9
Training as a motorcycle rider has reduced risk of accidents.	7.3%	6.2%	11.8%	18.3%	56.4%	4.1	1.3
I always comply with government regulations to avoid police arrest.	25.6%	5.9%	11.4%	20.8%	36.3%	3.4	1.6
I always take time to talk to uncooperative customers.	24.2%	9.7%	11.1%	21.5%	33.6%	3.3	1.6
Aggregate mean						4.0	1.2

4.2 Descriptive Analysis of Growth Sustainability of Motorcycle Industry

The respondents were requested to give their opinions on statements relating to growth of youth SMEs. The Likert Scale applied was as follows: (1- strongly disagree, 2-disagree, 3-neutral, 4-agree, and 5- strongly agree). The findings reveal that most of the respondents agreed that they always feel disappointed their transport services fail to attract potential customers, 89.3%, always ensure they have segmented their markets depending on their customers' lifestyle, 83%, always offer transport services with regards to the needs and comfort of their customers, 78.2%, that they have no income from other sources other than motorcycle businesses, 79.9% and the income per individual motorcycle rider can sustain his/her household, 89.3%.

The respondents further agreed that the income per individual rider is guided by the pricing of the services offered, 86.9% continued acceptance of their transport services has increased the size of the market, 86.5%, new service routes development has led to the increase of market and sales, 86.9%, favorable and affordable prices for their transport services have enabled the business to penetrate the market with ease, 87.9% and using their creative ideas have increased the market segment of their own businesses, 79.2%.

The aggregate mean of 4.3 indicated that most of the respondents agreed with the statements on growth sustainability. The overall standard deviation of 1.1 revealed that the responses were close to each other. This implies that there was a general agreement by most respondents on statements relating to growth sustainability. The descriptive results are illustrated in Table 2.

Table 2: Descriptive Statistics of Growth Sustainability of Motorcycle Industry

Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev
I always feel disappointed when my transport services fail to attract potential customers.	2.8%	6.9%	1.0%	29.1%	60.2%	4.4	1.0
I have segmented my market depending on customers lifestyle.	3.5%	6.6%	6.9%	26.6%	56.4%	4.3	1.1
I offer transport services with regard to the needs and comfort of my customers.	5.9%	6.6%	9.3%	29.4%	48.8%	4.1	1.2
I have no income from other sources other than motorcycle business.	8.3%	6.9%	4.8%	29.4%	50.5%	4.1	1.3
The income per individual motorcycle rider can sustain his/her household.	2.4%	4.8%	3.5%	26.3%	63.0%	4.4	0.9
The income per individual rider is guided by the pricing of the services offered.	3.5%	7.6%	2.1%	23.2%	63.7%	4.4	1.1
The continued acceptance of my transport services has increased the size of the market.	1.4%	7.3%	4.8%	29.4%	57.1%	4.3	1.0
New service route development has led to an increase of market and sales.	3.8%	8.0%	1.4%	32.9%	54.0%	4.3	1.1
Favorable and affordable prices for my transport services have enabled the business to penetrate the market with ease.	3.1%	6.6%	2.4%	29.1%	58.8%	4.3	1.0
Using my creative ideas has increased the market segment of my business.	3.5%	9.7%	7.6%	29.4%	49.8%	4.1	1.1
Aggregate mean						4.3	1.1

4.3 Motorcycle Industry Growth Sustainability in the Past Five Years

The respondents were asked to rate the extent to which their motorcycle business growth has improved over the past 5 years. The scale used was as follows: 0-20% (1), 21-40% (2), 41-60% (3), 61-80% (4), and 81-100% (5). The findings in Table 3 indicate that majority of the respondents noted average, revenue, income per capita, and market share had improved by 0-20%. This was supported by overall means of 2. This suggested that the growth of motorcycle industry was relatively low throughout the measurement period. Further, on average the annual expenses had increased by 0-20%.

Table 3: Improvement in Growth Sustainability of Motorcycle Industry

Indicators	2015	2016	2017	2018	2019	Overall
Revenue generation	2	1.91	2.02	2.08	1.97	2.00
Income per capita	2	1.96	1.95	1.97	2.07	1.99
Market share	2	1.97	1.92	2.04	1.98	1.98
Annual expenses	2.02	1.92	2.06	1.98	1.98	1.99

4.4 Correlation Analysis

This section provides results on the relationship between the independent and dependent variables. The results (Table 4) indicate that entrepreneurial mindset [X] had a positive and significant relationship with growth sustainability, Y ($r = .352$, $p = 0.000 < 0.05$). This implies that both entrepreneurial mindset and growth of motorcycle industry move in the same direction. As such, an increase in entrepreneurial mindset is accompanied by an increase in growth of motorcycle industry. According to Sokolova (2015), creative problem-solving gives that competitive edge that any business is striving to achieve.

Table 4: Correlation Matrix; Entrepreneurial Opportunities and Growth Sustainability

	Y	X
Y	1	
X	.352**	1
	.000	

** Correlation is significant at the 0.01 level (2-tailed).

4.5 Influence of Entrepreneurial Mindset on the Growth Sustainability of Motorcycle Industry in Murang'a

The study sought to determine the influence of an entrepreneurial mindset on growth sustainability of motorcycle industry in Murang'a. The regression results (Table 5) indicate that an entrepreneurial mindset explains 12.4% ($R^2 = .124$) of total changes in growth sustainability of motorcycle industry. An F statistic of 40.646 and reported p-value of $0.000 < 0.05$ imply that entrepreneurial mindset is a significant predictor of growth sustainability of motorcycle industry. The results further indicate that entrepreneurial mindset had a positive and significant effect on growth of motorcycle industry ($\beta = .302$, $P < .000$). This implied that an increase in entrepreneurial mindset by one unit would lead to an increase in growth sustainability of motorcycle industry by 0.302 units.

The study findings concurred with those of Ireland et al. (200); Ireland & Webb, (2007); Ireland et al. (2009); Kuratko (2009). who established that an entrepreneurial mindset can be seen as a growth-oriented perspective through which individuals promote flexibility, creativity, continuous innovation, and renewal in organizations. Likewise, Gilliard (2018) revealed that an entrepreneurial mindset can be used to improve business performance to achieve business success.

The null hypothesis (H_0) entrepreneurial mindset did not have a significant relationship with the growth sustainability of motorcycle industry in Murang'a. A p-value of 0.000 was less than 0.05 implying rejection of the null hypothesis in favor of the alternative. Therefore,

entrepreneurial mindset had a significant relationship with growth sustainability of motorcycle industry in Murang’a.

Estimated model;

$$Y = 3.041 + 0.302X$$

Where; Y- Growth Sustainability of motorcycle Industry; X- Entrepreneurial Mindset

Table 5: Regression Model; Entrepreneurial Mindset and Growth Sustainability of Motorcycle Industry

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	3.041	.193		15.722	.000
	Entrepreneurial Mindset	.302	.047	.352	6.375	.000
	R Squared	.124				
	Adjusted R Squared	.121				
	F statistic	40.646				
	P value	.000				

a Dependent Variable: Growth Sustainability of Motorcycle Industry

5.0 Conclusion

The study established that an entrepreneurial mindset has a positive and significant influence on growth of motorcycle industry. Consequently, the study concluded that an entrepreneurial mindset contributes positively to the growth of motorcycle industry in Murang’a. The study identified key aspects of the entrepreneurial mindset that could be attributed to growth sustainability and improvement. They included creativity, entrepreneurial alertness, and risk-taking.

6.0 Recommendations

The study found that an entrepreneurial mindset has a positive and significant influence on growth sustainability of motorcycle industry. The owners of motorcycle industry should further continue to develop their entrepreneurial mindset to remain relevant in the current competitive market. The study recommends that owners of motorcycle industry should strengthen aspects relating to entrepreneurial mindset including introduction of new creative ideas, flexibility in entrepreneurial alertness, and risk-taking propensity.

References

- Alvarez, SA, & Barney, JB. (2000). *Entrepreneurial capabilities: A resource-based view*. In GD Meyer & KA Heppard (Eds.), *Entrepreneurship as Strategy: Competing on the entrepreneurial edge* (63–82). Thousand Oaks: Sage Publications.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Barney, J.B. & Ouchi, W.G. (1986). *Organizational economics*. San Francisco: Jossey-Bass.

- Bishop, T. (2015). Opportunities to improve road safety through bodaboda associations in Tanzania. Africa community access partnership. Dar es Salaam. *Thrust Publication Ltd*:38- 42pp.
- Charles, R. M., & Charles, R. K. (2018). *Mindset and entrepreneurial activities in Rwanda: A firm-level investigation*. Entrepreneurship and Management, 7(34), 27-39.
- Draghici, A., Albulescu, C. T., & Tamasila, M. (2014). *Entrepreneurial attitude as knowledge asset: Its impact on the entrepreneurial activity in Europe*. Procedia - Social and Behavioral Sciences, 109, 205-209.
- Eisenhardt, K.M. & Martin, J.A. (2000). Dynamic capabilities: what are they? *Strategic Management Journal*, 21(10-11), 1105-1121.
- Gancarczyk, M., & Zabala-Iturriagagoitia, J. M. (2015). The process of the growth of small and medium-sized enterprises (SMEs). *Journal of Entrepreneurship, Management and Innovation*, 11(4), 3-24.
- Gay, L. R. (2017). Educational research. *Maxwell Macmillan International*.
- Galvin, P., Rice, J. & Liao, T.S. (2014). Applying a Darwinian model to the dynamic capabilities view Insights and issues. *Journal of Management & Organization*, 20(2), 250-263.
- Gilliard, T. (2018). *Entrepreneurial opportunities to develop strategies for small business success*. Innovation and Entrepreneurship, 6(5), 11-24.
- Grant, R.M. (1991). The resource-based theory of competitive advantage: Implications for strategy formulation. *California Management Review*, 33(3), 114-135.
- Haynie, J. M., Shepherd, D., Mosakowski, E., & Earley, P. C. (2010). A situated metacognitive model of the entrepreneurial mindset. *Journal of Business Venturing*, 25(2), 217-229.
- Helfat, C.E., Finkelstein, S., Mitchell, W., Peteraf, M., Singh, H., Teece, D. & Winter, S.G. (2007). *Dynamic capabilities: Understanding strategic change in organizations*. Malden, MA: Blackwell Publishing.
- Ireland, R. D., Kuratko, D. F., & Covin, J. G. (2003). *Antecedents, elements, and consequences of corporate entrepreneurship strategy*. In D. H. Nagao (Ed.), Proceedings of the Sixty-third Annual Meeting of the Academy of Management (CD), ISSN 1543-8643.
- Ireland, R. D., & Webb, J. W. (2007). *Strategic entrepreneurship: Creating competitive advantage through streams of innovation*. Business Horizons, 50(1), 49-59.
- Ireland, R., Hitt, M., & Sirmon, D. (2009). A model of strategic entrepreneurship: The construct and its dimensions. *Journal of Management*, 29(10), 10-19.
- Kenya National Bureau and Statistics (2018) National Economic Survey, 2018. *Kenya National Bureau of Statistics*: Nairobi
- Kodithuwakku, S. S., & Rosa, P. (2018). The entrepreneurial process and economic success in a constrained environment. *Journal of Business Venturing*, 17(5), 431-465.
- Krueger, N.F., 2003. The cognitive psychology of entrepreneurship. In: Acs, Z.J., Audretsch, D.B. (Eds.), *Handbook of Entrepreneurship Research*. Springer, USA.
- Kumar, A. (2011) Understanding the emerging role of Motorcycles in African cities; *A political economy perspective*.

- Kuratko, D. F. (2009). *The entrepreneurial imperative of the 21st century*. Business Horizons, 52(5), 421–428.
- Lerner, A. and J. Schoar, eds. 2010. International Differences in Entrepreneurship. *National Bureau of Economic Research Conference Report*. Chicago, IL: University of Chicago Press.
- Lumpkin, G. T & Lichtenstein, B. B (2005). *The Role of Organizational Learning in the Opportunity–Recognition Process*. Sega Publisher
- Lumpkin, G. T., & Dess, G. G. (2016). Clarifying the entrepreneurial orientation construct and linking it to sustainability. *Academy of Management Review*, 21(1), 135–172.
- Maulaga, C., Machimu G., & Mgema J, M., (2019) Youth perception on motorcycle taxis business investment and its effect on their economic wellbeing: Experience from Moshi Municipality. *Journal of Co-operative and Business Studies (JCBS)*, Vol.4 (2).
- Mbugua, C, (2011). *The effects of the motorcycle transport revolution on the economic growth of Kenya*.
- Mitchell, RK, Busenitz, L, Lant, T, McDougall, PP, Morse, EA, & Smith, J. (2004). *The distinctive and inclusive domain of entrepreneurial cognition research*. *Entrepreneurship: Theory and Practice*, 28(6), 505–518.
- Mutiso W. K. (2010). *Boda Boda bicycle taxis and their role in urban transport systems: Case studies of Nakuru and Kisumu, Kenya*. Msc. Civil Engineering, University of Cape Town.
- Mutiso, W. & Behrens, R. (2017) *Boda boda bicycle taxis and their role in urban transport systems: Case studies of Kisumu and Nakuru, Kenya*. Centre for Transport Studies.
- Nyachieo, G. M. M. (2020). Levels of rider training and its influence on road safety among motorcycle (Boda Boda) riders in Kisumu East Sub-County in Kisumu County, Kenya. *Journal of Research Innovation and Implications in Education* 4(4),119 – 129.
- Nandwoli, F (2014). *Factors Influencing Motorcycle Transport On Creation of Employment Opportunities in Kenya; A Case of Bungoma South Sub-County, Bungoma County*.
- Nicolaou, N, Shane, S, Cherkas, L, & Spector, TD. (2009). *Opportunity recognition and the tendency to be an entrepreneur: A bivariate genetics perspective*”. *Organizational Behavior and Human Decision Processes*, 110, 108–117.
- Obura, F. (2021, June 19). *Boda boda is a growing source of income for many*.
- Porter, M.E. (1979). How competitive forces shape strategy. *Harvard Business Review*, March-April, 137-145.
- Porter, M.E. (1980). *Competitive strategy: Techniques for analyzing industries and competitors*. New York: Free Press.
- Porter, M.E. (1985). *Competitive advantage*. New York: Free Press.
- Runyan, R., Droge, C., & Swinney, J. (2018). Small Business Orientation: A Construct Proposal *Journal of Small Business Management*, 43(3), 567–588.
- Sarason, Y, Dean, T, & Dillard, J. (2006). Entrepreneurship as the nexus of individual and opportunity: a structuration view. *Journal of Business Venturing*, 21, 285–305.

- Shane, S., Venkataraman, S., 2000. The promise of entrepreneurship as a field of research. *Academy of Management Review* 25 (1), 217–226.
- Shane, S, Locke, EA, & Collins, CJ. (2003). Entrepreneurial motivation. *Human Resource Management Review*, 13, 257–279.
- Short, JC, Ketchen, DJ, Shook, CL, & Ireland, RD. (2010). The concept of “opportunity” in entrepreneurship research: Past accomplishments and future challenges. *Journal of Management*, 36(1), 40–65.
- Stam, E., and Stel, A. (2011). Types of Entrepreneurship and Economic Growth. In *Entrepreneurship, Innovation, and Economic Development*. Adam Szirmai, Wim Naudé, and Micheline Goedhuys, eds. Oxford, UK: *Oxford University Press*.
- Teece, D.J. (2007). Explicating dynamic capabilities: The nature and micro-foundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319-1350.
- Teece, D.J., Pisano, G. & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7): 509-533.
- Uno, S., Supratikno, H., Ugut, G., Bernarto, I., Antonio, F & Hasbullah, Y. (2021). The effects of entrepreneurial values and entrepreneurial orientation, with environmental dynamism and resource availability as moderating variables, on the financial performance and its impacts on firms’ future intention. *Management Science Letters*, 11(5), 1537-1548.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171-180.
- Wu, W-W. (2009). *A competency-based model for the success of an entrepreneurial start-up*. *WSEAS Transactions on Business and Economics*, 6 (6), 279-291.