Influence of Technology Adoption on Entrepreneurial Orientation amongst SMEs Operators in Kenya

Njogu Kimando
Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya
School of Human Resource Development, Entrepreneurship and Procurement Department

Dr. Kenneth Lawrence Wanjau
Karatina University, Kenya

Dr. Maurice Sakwa
Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya

John M. Kihoro
Professor, Cooperative University College, Kenya

Abstract:
Small and Medium Enterprises are important for economic development and jobs creation in Kenya. They face a common challenge and as a result there is need to improve on their technological advancement and innovation. The Alcohol Act 2010 was introduced in Kenya and it seeks to regulate the alcohol production and sales. The aim of this study was to assess the influences of technology adoption on entrepreneurial orientation amongst SMEs operators in Kenya. The target population was 115 owners/managers of alcohol retailing SMEs who have been in business for the last five years and are members of Pub, Entertainment and Restaurant Association of Kenya (PERAK). Qualitative and quantitative techniques were used to analyze both descriptive and inferential statistics.

Keywords: Entrepreneurial training, orientation, small and medium enterprise, technology adoption

CHAPTER ONE

1. Introduction

1.1 Background of the study
Small and Medium Enterprises in Kenya are faced with a common problem which include the lack of financial capital, weak business network and market penetration ability, less-supporting business atmosphere, and limited market access. Government of Kenya takes pivotal role to guarantee and protect the MSMEs to be able to compete (Chowdhury, 2007) by creating favorable business atmosphere which is able to improve micro, small, medium and medium enterprises (MSME).

1.2 Statement of the Problem
Research on entrepreneur’s orientation is ad hoc (Bird & Schjoedt, 2009). Since the alcohol regulation was effected in 2010, there are very few SMEs dealing with alcohol retailing that have started business or a few have grown or expanded in Kenya. The restrictions are opined in the Alcohol Drinks Control Act 2010. In Kenya, SMEs dealing with alcohol retailing and are registered members of Pub, Entertainment and Restaurant Association of Kenya (PERAK) have declined, that is, from 287 in 2010 to 162 (43.6%) in 2012 (RoK, 2012) thus reducing the entrepreneurial orientation of the entrepreneurs dealing in this sector of SMEs. The Alcohol Act 2010 strictly regulated the operating time in hours by reducing them to six and nine hours during weekdays and weekend respectively from the usual 24 hours. These in turn affect entrepreneur’s income and Government revenue (RoK, 2011).
Government will lack funds to build capacity in institutes that assist in the development of SMEs in Kenya like Ministry of Industrialization. Studies focusing on technology adoption have been carried out but none addressed on the analysis on how technology adoption influences entrepreneurial orientation amongst SMEs operators in Kenya. The purpose of this study was therefore to explore how technology adoption influences entrepreneurial orientation amongst SME operators in Kenya.

1.3. Specific Objective
The study was guided by the following specific objective
To assess the influence of technology adoption on entrepreneurial orientation amongst SME operators in Kenya

CHAPTER TWO

2. Literature Review

2.1. Alcohol Act
The Alcoholic Drinks Control Act (ADCA) 2009 came into effect on 22nd November 2010, after the gazettement by the Minister for Internal Security. The object and purpose of this Act is to provide for the control of the production, sale and consumption of alcoholic drinks in order to protect the health of the individuals, protect consumers from misleading inducement, inform and educate the public on the harmful health, economic and social consequences of the consumption of alcoholic drinks, adopts and implement measures to eliminate illicit trade and promote research and dissemination of information on the effects of alcoholic drinks consumption in particular health risks that may arise there from. Section 24 prohibit access of alcohol by persons under age of 18. No person holding a license to manufacture, store or consume alcoholic drinks under this Act shall allow a person under the age of eighteen years to enter or gain access to the area in which the alcoholic drink is manufactured, stored or consumed (RoK, 2010).

Part III focuses on licensing, the law in section 12 states that premises should not be located less than 300 meters from a learning institution. Tourism industry is concerned that there lies very little difference between bar that is situated 290 meters away and one that is situated 320 meters from an educational institution (RoK, 2010).

Part IV section 43(1) ban on the promotion of alcoholic drinks. While many factors may influence an underage person’s drinking decisions, including among other things parents, peers and the media, there is reason to believe that advertising also plays a role (Gentile & Walsh, 2002). On Malaysian television, alcohol advertising is not shown before 10:00 pm and during Malay-language programs.

2.2. Schumpeter Theory of Innovation
Schumpeter (1934) used the concept of equilibrium as a theoretical construct. He coined a phrase to describe this equilibrium state: “the circular flow of economic life.” Its chief characteristic is that economic life proceeds routinely on the basis of past experience; there are no forces evident for any change of the status quo (Schumpeter, 1934). In Schumpeter’s theory, the dynamic entrepreneur is the person who innovates, who makes “new combinations” in production. Schumpeter described innovation in several ways. He first spelled out the kinds of new combinations that underlie economic development. They encompass the creation of a new good or new quality of good; creation of a new method of production; the opening of a new market; the capture of a new source of supply, and; a new organization of industry (e.g., creation or destruction of a monopoly).

Schumpeter observes that people act as entrepreneurs only when they actually carry out new combinations, and lose the character of entrepreneurs as soon as they have built up their business, after which they settle down to running it as other people run their businesses (Schumpeter, 1939). For Schumpeter (1939), an entrepreneur is not only an innovator but also a leader. Since the main characteristic of an entrepreneur is innovation and leadership, Schumpeter’s entrepreneur does not necessarily start his own business and does not have risk taking as one of his functions Tarabishy, Lloyd & George (2005).

2.3. Technology Adoption
The use of technology by small and medium sized enterprises (SMEs) is a challenge in both developed and developing countries (Schreiner & Woller, 2003). Selective use of technology can benefit micro-enterprises in several ways. It can help businesses gain better access to information and expertise, reach new markets and customers (or more generally, stakeholders), administer the business more efficiently and effectively, and gaining the knowledge and skills needed to run the businesses better (Qureshi, 2005).

To realize the potential of technology, small businesses must view them from economic, management, and marketing perspectives (Brady et al., 2002). A holistic view of technology can stimulate small businesses to adopt new technologies, create innovative products, and be competitive (Barba-Sanchez et al., 2007). Nevertheless, micro-enterprises face certain challenges in adopting and using technology including incomplete government regulations. Government officials and elected leaders have increasingly come to realize that SMEs must utilize technology in order to enhance the processes in the SMEs sector. Faced with tight budgets and a retiring workforce, today’s government agencies and SMEs are operating in an environment defined by the need to ‘do more with less’. SMEs are expected to provide excellent service to their clientele in an effective and efficient manner, all the while working under constant resource constraints by adopting technology (Chin & Fairlie, 2004).

Small and Medium Enterprises (SMEs) are implementing scalable communication infrastructures to promote economic development, attract new businesses and residents, and above all, provide excellent service to their customers (Oyelaran-Oyeyika
& Adeya, 2003). From a business perspective, implementing scalable communication infrastructures such as wide area networks (WANs) accommodates the various types of services SMEs require on a day to day basis, including provision of broadband internet access for online services and internal collaboration and handling administrative data.

As rightly pointed out by Richard, (2002) African countries need to accept technology as a priority area for development and hence invest adequately in it which is to say Africa has to promote its economic development through the use of technology. As pointed out by Toussea-Oulai & Ura (1991), there are many possible national-level factors determining the adoption of technology in developing countries: infrastructure, myths associated with computer installations, lack of national policy on technology development, technology supply problems, scarcity of human resources, education problems, and economic factor.

The advancement in technology has had major influences on globalization, rapid revolutions in information and knowledge (Kaynak et al., 2005; Pavic et al., 2007); business structural change and the way small and medium-sized enterprises (SMEs) conduct their business activities (including their marketing strategies, service provision, working practices and management).

Technology has become a strategic asset which can help improve business processes and change the function of markets. Thus, it is necessary for organizations to continue their efforts in developing and implementing the up-to-date technology. Nevertheless, many organizations still hesitate to adopt new technology and some even believe IT does not matter as a strategic resource because of its commoditization Carr & Sequeira, 2007).

Prior studies have identified many benefits to be attained by SMEs as producers or users of technology which include closer working relationship among value chain partners, increased productivity, enhanced efficiency, greater access to market information and knowledge, acquiring information system capabilities to support business transformation, and reaching new clients from either locally, regionally, or globally (Kotelnikov, 2007; Balocco, 2009). While SMEs are flocking towards the adoption of technology due to many potential benefits (OECD, 2004), Kotelnikov (2007) reveals that, many SMEs within the Asia-Pacific region have yet to reap these benefits evenly. They face major constraints such as poor telecommunications infrastructure, limited technology literacy, inability to integrate technology into business processes, high costs of technology equipment, incomplete government regulations for e-commerce, and poor understanding of the dynamics of the knowledge-economy. Based on these and other supporting arguments it is hypothesized that:

- There is no significant relationship between technology adoptions and Entrepreneurial Orientation (EO) amongst SME operators in Kenya
- Entrepreneurial Training

2.4. Entrepreneurial Training

Training of an ongoing nature is needed to assist the SME owner to manage the constant changing environment (Ladzani, 2002), and being able to respond to it with initiative and innovation. The entrepreneur’s level of education increases the probability of established firms and more jobs per firm. The higher the entrepreneur’s level of education, the greater the involvement with the firm and therefore the greater the ability to grow the firm.

Training of entrepreneurs will moderate the relationship between government regulations and entrepreneurial orientation because it is about preparing them or business person for entrepreneurship and it is about enhancing the abilities of the individual (Nieman, 2000), in order that the business can be more successful. Entrepreneurship training is a suitable way for individuals who suffer from lack of efficiency and skills, to deal with unemployment and changes of global economy and at the same time understand who the government policies are and need to be implemented (Amri, 2005).

Entrepreneurial and business skills can be acquired through learning on the job or training (Perrin & Grant, 2000). Training of entrepreneurs, involves equipping them with both entrepreneurial as well as business skills to secure competitive businesses. Business and entrepreneurial skills are vital to the sustainability of the business and should, therefore, be taught to the aspiring entrepreneurs (Botha, 2006).

2.5. Conceptual Framework

A conceptual framework is a graphical or diagrammatic representation of the relationship between variables in a study. This study has adopted a conceptual frame work with independent variable as technology adoption and entrepreneurial orientation will be the dependent variable for the study. Entrepreneurial training was considered as a moderating factor (Figure 2.1).
CHAPTER THREE

3. Research Methodology

3.1. Introduction
This chapter presents a description of research design that was used to conduct the study. It describes both the target and study population, sample size, research instruments, data collection procedures, pilot test, data analysis measurement of variables and the model estimation.

3.2. Research Design
The study adopted exploratory approach and used a descriptive survey design. Exploratory studies and descriptive survey designs were used to allow for the gathering of information, summarize, present and interpret it for the purpose of clarification (Creswell, (2003). It also involves large numbers and describes population characteristics by the selection of unbiased sample Kothari, (2007).

3.3. Population
The target population comprised of all Small and Medium Enterprises (SMEs) in Kenya dealing with retailing of alcohol drinks and registered members of Pub, Entertainment and Restaurant Association of Kenya (PERAK). The study found that there are a total of 162 registered members of Pub, Entertainment and Restaurant Association of Kenya (PERAK) dealing with alcohol retailing. The accessible population was the owner/ managers of these SMEs. The study only considered those registered SMEs that have been operating for the last five years. This target population is in order because they have been in alcohol business long enough before and after the Alcohol Act hence they can clearly state the difference how the business was before and after the passing of the Act.

3.4. Data Collection Instruments
The study used semi structured interview guide for the collection of primary data where semi structured interview guide and personal interviews were conducted. Questions were generally in a face-to-face contact to the other person. The study adopted the direct personal investigation interview guide rather than the indirect oral interview guide. The method is suitable for intensive investigations as more information and in greater depth can be obtained (Kothari, 2007).

3.5. Pilot Test
To ascertain the validity and reliability of questionnaire, interview and observation schedules, a pre-test and pilot survey was conducted .Pilot test assists in determining if there are flaws, limitations, or other weaknesses within the interview design and allows for necessary revisions prior to the implementation of the study Kvale, (2008).

3.6. Validity of Data Collection Instruments
Validity refers to the extent to which the measures used in the questionnaire are truthfully measuring the intended concept and not something else (Sekaran & Bougie, 2009). There are two ways of establishing the validity of a research instrument, that is, logic and statistical evidence. Logic evidence implies justification of each question in relation to the objectives of the study, whereas statistical procedures provide hard evidence by way of calculating the coefficient of correlations between the questions and the outcome variables (Kumar, 2005).This study adopted content validity.

3.7. Data Analysis and Processing
The study employed descriptive statistics in the form of percentages, means and measures of dispersion which allows for presentation of data in a more meaningful way and thus simpler interpretation of data. Chi-square test of independence was done to establish existence of relationship Factor analysis was conducted on all constructs to determine the ones to be regressed against the dependent variable, with the principle axis factoring with varimax rotation being employed. Two statistical measures were generated by IBM Statistical Package for Social Sciences (SPSS) and the Kaiser-Meyer Olkin (KMO) measure of sampling adequacy (Kaiser 1970, 1974).

CHAPTER FOUR

4. Research Findings and Discussions

4.1. Introduction
This chapter presents the data analysis results and discusses the key research findings. The purpose of the study was to analyze the influence of technology adoption on the entrepreneurial orientation of small and medium enterprises (SMEs) amongst SMEs operators in Kenya. Descriptive statistics used was percentages while regression analysis and structural equation models were employed for inferential statistics.
4.2. Sampling Adequacy
Two tests namely Kaiser-Meyer-Olkin (KMO) measures of sampling adequacy and Bartlett test of sphericity were performed to assess the appropriateness of using factor analysis and to test whether the relationship among the variables has been significant or not as shown in the table 4.1 below.

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</th>
<th>.808</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartlett's Test of Sphericity</td>
<td></td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
<td>1.693E3E3</td>
</tr>
<tr>
<td>Df</td>
<td>190</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

*Table 4.1 KMO and Bartlett’s Test*

4.3. Descriptive analysis for Construct Innovation
Six survey statements on a likert scale were used to evaluate Innovation in Entrepreneurial Orientation. Respondents were observed to agree with the statements that “Our firm encourages development of employees ideas for the purpose of business improvement”, “Often our firm is the first to introduce new products, services, administrative techniques, etc” and “Our firm actively introduce improvements and innovations in our business”. On the other hand respondents disagreed with the statement that “Innovation strategies are aligned with our firm's core mission and values” at 42% mention.

4.3.1. Factor Analysis for Construct Innovation
The results show that the factor loading was more than 0.5 for all the items measuring the construct innovation in the first component. The factor loadings of the items ranged from 0.684to 0.888 suggesting high convergent validity. Hence, the study combined all the six items for innovation as one construct.

4.4. Descriptive Analysis for Construct Proactiveness
Eleven survey statements on a Likert scale were used to evaluate proactiveness in Entrepreneurial Orientation. Most of the respondents were observed to agree with most of the survey statements. Respondents unanimously agreed that their firms harnesses the strong research and development capabilities in making future decisions with 81% mention (Strongly agree + Agree) and that their firms adopts creative methods of running business ahead of their competitors at 75% mention. On the contrary, identifying needs of current and potential customers posed a challenge to most of the firms as reported by 47% of the respondents.

4.4.1. Factor Analysis for the Construct Proactiveness
Component matrix for Proactiveness as shown in Table 4.2 displays factor loading of all the items measuring proactiveness. Principal Component Analysis extraction method was conducted to determine whether the entire factors item had significant factor loadings. Factor loading in the first component are above 0.5 except for the first 4 items. These results show that 7 out of 11 items used to measure the construct proactiveness in Entrepreneurial Orientation converged on one common construct. The factor loadings of the 7 items ranged from 0.833 to 0.941 suggesting high convergent validity. Hence, for further analysis the study employed only the 7 items for proactiveness and expunged 4 items.

<table>
<thead>
<tr>
<th>Components</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our firm is involved in new opportunity identification and evaluation</td>
<td>0.873</td>
</tr>
<tr>
<td>Our firm identifies and monitor market trends to predict future trends</td>
<td>0.941</td>
</tr>
<tr>
<td>Our firm harnesses the strong research and development capabilities in making future decisions</td>
<td>0.874</td>
</tr>
<tr>
<td>The firm adopts creative methods of running business ahead of its competitors</td>
<td>0.905</td>
</tr>
<tr>
<td>Our firm initiate improvement projects designed to capitalize on new opportunities</td>
<td>0.892</td>
</tr>
<tr>
<td>Our firm is able to anticipate and respond to the latent and emerging needs of customers</td>
<td>0.833</td>
</tr>
<tr>
<td>The firm continually seeks opportunities, new market and new customers, related to the present operations</td>
<td>0.850</td>
</tr>
</tbody>
</table>

*Table 4.2 Component Matrix for Proactiveness*

4.4.2. Reliability Test for construct Proactiveness
shows Cronbach’s Alpha value of 0.950 for the 7 survey items measuring proactiveness indicating reliability of the measure used after 4 items were expunged. Table 4.3 shows the reliability statistics for Proactiveness.
4.5. Construct Risk Taking
This is the degree to which managers are willing to take bold actions by venturing into unknown, borrowing heavily and or committing significant resources to ventures in uncertain environments (Frese & Rauch, 2009). It is the extent to which a firm is willing to make large and risky resource commitments (Lumpkin and Dess, 1996). Six survey statements on a Likert scale were used to evaluate risk taking in Entrepreneurial Orientation. Respondents were observed to agree with the statements that their firms typically adopts a bold, aggressive posture in order to maximize exploiting of potential opportunities with 72% mention and that staff in these firms are encouraged to take calculated risks with new ideas at 65% mention. However, most of the respondents (50%) disagreed with the statement that they greatly sell alcohol any time of the day.

4.5.1. Factor Analysis for Risk Taking
Factor Analysis using Principal Component Analysis was conducted to determine if all the questionnaire factors items had significant factor loadings. Component matrix for risk taking, as indicated by Table 4.4 shows the factor loadings for the 3 survey items measuring risk taking. Majority of the items had factor loadings values less than 0.5 hence were expunged retaining 3 items that had factor loading above 0.5 and were thus used for further analysis as shown in the table 4.4 below.

<table>
<thead>
<tr>
<th>Component</th>
<th>Component Matrix for Risk Taking</th>
</tr>
</thead>
<tbody>
<tr>
<td>The firm ventures into unknown, first mover, new markets</td>
<td>0.81</td>
</tr>
<tr>
<td>I readily sell alcohol to any person who visits my premises without considering the age brackets</td>
<td>0.894</td>
</tr>
<tr>
<td>Our firm has a strong tendency for risk-taking in technology adoption</td>
<td>0.867</td>
</tr>
</tbody>
</table>

4.5.2. Error! Reference source not found. Taking
Reliability statistics of reduced factors for risk taking shows Cronbach's Alpha value of 0.818 for the 3 survey items measuring risk taking indicating reliability of the measure used as depicted by Table 4.5

<table>
<thead>
<tr>
<th>Cronbach’s Alpha</th>
<th>No of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.818</td>
<td>3</td>
</tr>
</tbody>
</table>

4.6. The Relationship between Technology Adoption and Entrepreneurial Orientation amongst SMEs Operators in Kenya

4.6.1. Correlation
Pearson Correlation coefficient was used to test for the linear association of technology adoption and entrepreneurial orientation. A significant linear relationship between technology adoption and entrepreneurial orientation was observed with a coefficient value of 0.886.  

<table>
<thead>
<tr>
<th>Entrepreneurial Orientation</th>
<th>Technology Adoption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>0.886</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>113</td>
</tr>
</tbody>
</table>

A scatter plot was developed to ascertain the linear relationship between Technology Adoption and entrepreneurial orientation as displayed in Figure 4.1 scatter plot of entrepreneurial orientation against technology adoption. From the scatter plot a linear relationship is observed.
4.6.2. Testing Assumptions of Regression Model

Normal Probability Plot was used to investigate whether the data exhibit the standard normal "bell curve" or Gaussian distribution. From Figure 4.2 normal P-P plot for entrepreneurial orientation against adoption the plotted points fits the normal line well hence we can safely assume that our process data is normally distributed.

The study findings showed that there was uniform variance in the study under investigation since the p value was 0.362 which is greater than 0.05 thus there was enough evidence to warrant rejection of the hypothesized that there was uniform variance in the variables under investigation.

<table>
<thead>
<tr>
<th>Levene Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.096</td>
<td>5</td>
<td>108</td>
<td>.362</td>
</tr>
</tbody>
</table>

*Table 4.7 Test of Homogeneity of Variances for Technology Adoption*

Results in Table 4.7 shows the collinearity diagnostics tests for autocorrelation and multicollinearity. Results for autocorrelation had a Durbin Watson coefficient of 1.172, since it was within the range of 1 and 3 autocorrelation was not a problem. In addition, the test for multicollinearity had VIF of 1.00 which is less than 10; therefore there was no multicollinearity problem.

<table>
<thead>
<tr>
<th>Durbin-Watson</th>
<th>Condition Index</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology Adoption</td>
<td>1.172</td>
<td>8.649</td>
<td>1.000</td>
</tr>
</tbody>
</table>

*Table 4.7 Collinearity Diagnostics*
4.6.3. Regression Analysis of Entrepreneurial Orientation on Technology Adoption

From Table 4.8, the coefficient of determination had an R² value = 0.785. This indicates that 78.5% of the variation in Entrepreneurial Orientation can be explained by technology adoption:-

\[ Y = b_0 + b_1X_1 + e \]

Where \( Y \) is the Entrepreneurial Orientation, \( b_0 \) is the Y intercept, \( b_1 \) is the gradient of the regression line, \( X_1 \) is Technology Adoption and \( e \) is the error term.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.866a</td>
<td>0.785</td>
<td>0.783</td>
<td>0.25312</td>
<td>1.171</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Technology Adoption
b. Dependent Variable: Entrepreneurial Orientation

Table 4.8 Model Summary for Technology Adoption

To determine how best the regression model fits the data, Analysis of Variance on the coefficient of determination (R²) was calculated yielding an F value of 404.335 (df=1, 111 and P=000) meaning that the model is suitable at 95% confidence level as depicted on table 4.9 ANOVA for technology adoption on Significance of Regression model.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>25.905</td>
<td>1</td>
<td>25.905</td>
<td>404.335</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>7.111</td>
<td>111</td>
<td>.064</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>33.016</td>
<td>112</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Technology Adoption
b. Dependent Variable: Entrepreneurial Orientation

Table 4.9 ANOVA for Technology Adoption on Significance of Regression Model

Table 4.10 displays the coefficient of the regression model of entrepreneurial orientation on technology adoption. From the table both the coefficients of the model (Constant and beta) were significant at 5% level of significance. Therefore, Entrepreneurial Orientation can be predicted using technology adoption in the following equation:

\[ Y = 0.205 + 0.526X_1 \]

Where;

\( Y = \) Entrepreneurial Orientation

\( X_1 = \) Technology Adoption

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.205</td>
</tr>
<tr>
<td></td>
<td>Technology Adoption</td>
<td>.526</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Entrepreneurial Orientation

Table 4.10 Regression Coefficients for Technology Adoption

4.6.4. Hypothesis Testing

From the results of regression analysis between Entrepreneurial Orientation on Technology Adoptions, there is enough evidence to reject the null hypothesis \( H_0 \) that:-

- \( H_0: \) There is no significant relationship between Technology Adoptions and entrepreneurial orientation amongst SMEs operators in Kenya.
- \( H_a: \) There is a significant relationship between Technology Adoptions and entrepreneurial orientation amongst SMEs operators in Kenya.

The study hypothesized that there is no significant relationship between Technology Adoptions and entrepreneurial orientation (EO) amongst SME operators in Kenya. This is because the p value was 0.00 which was less than 0.05. There is a positive significant relationship between Technology Adoptions (\( \beta = 0.526 t=20.108 \) P value = 0.000) and EO. A unit change in EO is associated with 0.526 increases in Technology Adoptions.
CHAPTER FIVE

5. Summary, Conclusions and Recommendations

5.1. Introduction
The main purpose of the study was to assess the influences of technology adoption on entrepreneurial orientation amongst SME operators in Kenya.

5.2. Conclusion and Recommendation
The findings of the study depicted that there is a strong positive relationship between technology adoption and entrepreneurial orientation. Therefore, SMEs in Kenya should ensure that engage in technology adoption in their operations to make sure that they use technology in the production of goods and services to reduce the cost of production and rendering of services.

5.3. Recommendations
Kenya Government policies do not support small businesses and several bureaucratic hurdles have to be overcome to get permission to start a business (Davidsson, 1991). Countries that keep rules and regulations at a minimum, offer tax and other incentive, and provide training and counseling services to SMEs entrepreneur to increase the likelihood of new venture development (Dana, 2001). The government should ease the issuing of operating licenses to SMEs to attract and motivate them to engage in income generation. SMEs owners/managers should as a matter of priority think of acquiring business skills and knowledge on how to run business and government regulations regarding business operations and practice. Majority seems ignorant to the government regulations giving excuses that they were not aware. Ignorance should be noted that it is no defense. Financial institution should consider giving monetary services to these SMEs at a reasonable rate of interest. The interest rates in Kenya are very high chasing away investors in alcohol retailing businesses. The owners/managers of these SMEs are willing to get financial aids from financial institutions but fear the high interest rates. The study recommends for a favourable charges in interest rates.

6. List of Abbreviations and Acronyms

- ACA Alcohol control Act
- AIDS Acquired Immunodeficiency Syndrome
- BAT British American Tobacco
- EO Entrepreneur Orientation
- GDP Gross Domestic Product
- HIV Human Immunodeficiency Virus
- JKUAT Jomo Kenyatta university of Agriculture and Technology
- KIPPRA Kenya Institutes for Public Policy Research and Analysis
- R&D Research and Development
- ROK Republic of Kenya
- RTA Traffic road accident
- NACADA National Agency for the Campaign against Drug Abuse
- PERAK Pub, Entertainment and Restaurant Association of Kenya
- SMEs Small and Medium Enterprises
- SPSS Statistical Package for Social Science
- U.S.A United States of America
- UNDP United Nations Development Programs

7. References