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# ENTREPRENEURIAL RISK TAKING AND GROWTH OF DEPOSIT TAKING SAVINGS AND CREDIT CO-OPERATIVES IN KENYA: MODERATING ROLE OF TECHNOLOGICAL CAPABILITY

#### Dr. Susan Naikuru

SIMON WANJOHI KARIMI

Lecturer: Department of Entrepreneurship, Technology, Leadership and Management, School of Business and Entrepreneurship.Jomo Kenyatta University of Agriculture and Technology

# Dr. Anaya Senelwa

Lecturer: Department of Entrepreneurship, Technology, Leadership and Management, School of Business and Entrepreneurship. Jomo Kenyatta University of Agriculture and Technology

### **ABSTRACT**

Firm growth remains the ultimate goal of financial organizations in banking sector. Banking Savings and Credit Co-operative societies (SACCOs) adopt Entrepreneurial risk taking in an effort to achieve expected growth objectives. Further, banking SACCOs embrace information technology to enhance entrepreneurial risk taking with a main focus of achieving expected growth .The study aimed to establish the moderating role of IT capability in the relationship entrepreneurial risk taking and growth of banking SACCOs in Kenya. The study was anchored on entrepreneurial orientation theory, resource-based view (RBV) and Information Systems Success Model. The study used a cross sectional research design. The population of the study was 175 DTSACCOs. The study used both primary and secondary data. Pimary data was collected using structured questionnaire. Collected data was processed through checking for completeness, editing, and coding and data entry. The study adopted descriptive and inferential statistics techniques to analyze data. From the results, there exists a strong, significant and positive correlation (r=0.830, PV=0.0000<0.01) between entrepreneurial risk taking and growth of Deposit Taking SACCOs Regression results established that risk taking had a significant, positive relationship with growth of SACCOs as  $\beta_1 = 0.335$ , PV=0.0000, t= 18.014. This clearly indicated that an increase in SACCOs' entrepreneurial risk taking as entrepreneurial orientation would lead to increase in growth of DTSACCOs by 0. 335. Upon introduction IT capability, entrepreneurial risk taking had a significant and positive correlation with growth of DTSACCOs in Kenya as R1=0.652 <R2=0.953. The results reveal IT capability enhance entrepreneurial risk taking contributing to significant growth in growth of DTSACCOs. The study concluded that entrepreneurial risk taking as entrepreneurial orientation contribute to proactively dealing with the risks promoting growth of firms. The study recommends that banking SACCOs should embrace entrepreneurial orientation through risk taking to achieve significant growth. The study also recommend leveraging on application of IT capability in banking operations of credit cooperatives institutions to foster entrepreneurial risk taking to increased financial accessibility, efficiency and foster growth.

Key Words: Entrepreneurial Risk Taking, IT Capability, Growth of Banking SACCOs

#### INTRODUCTION

Firm growth remains the ultimate goal of financial organizational in banking sector (Magali & Negara, 2019). While there many entrepreneurial action taken to foster growth of banking institutions, entrepreneurial risk taking has been executed in an effort to achieve growth of the firm. Lumpkin, et al (2019) argued that entrepreneurial firm characterized by risk taking contributed to firm growth. The firms need to be proactive in risk mindedness, thus welcoming new processes, comparison to opponents and providing services and commodities (Fadda, 2018). Researchers such as Al-Mamary and Alshallaqi (2022) posited that EO has enormous contribution towards progress of a company and economy of a country. The success and growth of a company depends entirely on EO as suggested by Kasumawardhani, et al (2019). Diverse research works have related EO with the growth of firms (Shajrawi & Aburub, 2022). The companies and firms having elevated EO, shows better outcomes such as growth in terms of introducing new processes, services and products, increased market share and profitability level.

Taking into account the positive relationship achieved by the risk taking factors and firm growth it is likewise achieved. Ključnikov ,Belás and Smrčka (2016) likewise found reality of a tremendous impact of hazard accepting variable on company's compensations as well as improvement. As indicated by Neneh and Van Zyl (2017) asserted that organizations or associations can oblige huge resources. It occurs towards projects with high risks since they are the ones with advantage of achieving significant returns . By and large, concentrates on across the World underwrite the presence of a positive and significant impact of the entrepreneurial risk taking on firm execution as well as firm turn of events (Ngunjiri, 2017). Entrepreneurial risk-taking behavior contribute to growth of Taiwanese Banking Industry. The sector experience development into 39 SACCOs and of the 39 surveys mailed. Adoption of Risk Base Internal Audit (RBIA) contributed to 61%-80% growth in asset based, while 6 (25%) of the domestic banks report that about 21%-40% of their internal audit work are risk-based improving banking growth in market share (Serai, Johl, & Marimuthu, 2017).

Information technology (IT) is perceived as a necessity to pursue the rationalization and cost management due to intensified competition in the financial sector (Okangi, 2019). IT capability entail the new applications, processes, products or business models that have disrupted the SACCOS finance system by providing faster, secure and reliable and low risk operations (Schaus, 2016). Branchless distribution, payment systems, big data credit scoring and predictive analytics as operations powered by fintech deployment have greatly reduced operational costs, reduced credit risks and increase financial returns in banking institutions (Olaniran, Namusonge, & Muturi, 2016). The fintech payment technique include peer-to-peer payment model, digital currency supported through block chain technology and mobile wallet (PWC, 2019).

#### 1.2 Statement of the Problem

Firm growth remains the ultimate goal of financial organizational in banking sector (Wang, 2018). While there many entrepreneurial action taken to foster growth of banking institutions, entrepreneurial orientation has been executed in an effort to achieve growth of the firm. Al-

Harthi et al (2023) argued that entrepreneurial orientation contributed to firm growth. In credit union industry, most SACCOs adopt entrepreneurial risk taking in an effort to achieve competitive advantage, improve performance and eventually gain expected growth. The ideal way to cope with risk is to perceive risk at its inception, and taking risk under control right from its inception in SACCOs. Entrepreneurial SACCOs, in actuality, tend to proactively deal with the risks in as efforts to achieve better performance and promote growth of firms.

Coming immediately against the backdrop of the impacts of the entrepreneurial riks, these economic shocks slowed down the growth trajectory of Regulated SACCOs despite their overall resilience with their total assets to the nominal GDP remaining the same at about to 6.66% in 2022 as it was in 2021. In an effort to improve growth, SACCOs deploy entrepreneurial risk taking (Wallace & Kilika, 2021). However, the extent to which entrepreneurial risk taking contribute to growth of DTSACCOs remain unstudied motivating the undertaking of the current study. There has been too, increased application of IT through automation of financial services and other electronic channels that involves application of mobile technologies applications, ATMs financial services, for members to transaction, transfers and make payments in an effort to boost growth level. What remain unclear whether IT capability has or has no significant moderating role in entrepreneurial risk taking so as to achieve significant growth in DTSACCOs in Kenya?

## 1.3 Research Objectives

- i. To determine influence of risk taking on growth of deposit taking SACCOs in Kenya
- ii. To assess moderating role of information technology capability in the relationship between entrepreneurial risk taking and growth of deposit taking SACCOs in Kenya

#### 2.0 LITERATURE REVIEW

Banking credit union organizations recognize entrepreneurial risk taking as an important feature and element for a firm's growth as supported by theory of entrepreneurial orientation, resource base view and information system theory.

#### 2.1 Theoretical Review

The assumption of theory that entrepreneurial positioning provisions entrepreneurial evolution and opportunities. The theory supports the planning process in identifying systematic information collected to be used for situational analysis. There is also the inclusion of generation of alternative methods and selected strategies. The theory tends to also assume that the adaptive mode is focused risk mitigation. This is not compared to the proactive search for new chances and opportunities (Misati, Ighodaro, Were and Omiti (2015). This theory is supported by the taking risk in banking investments It tends to consist of bold, risky and aggressive approaches that are used for decision-making to mitigate and accept risk in anticipation of better firm growth outcome. Information systems absorption model was developed by DeLone and McLean (1992). The model has been widely used to gauge success of a new system (Ambad & Wahab, 2016). Over time the model has been modified to meet the requirements set by several kinds of information systems, and from different points of view. DeLone and McLean (1992) had argued that Information-Quality, System-Quality, and Service-Quality could stimulate Intention-to-Use and User-Satisfaction.

The stimulation would further positively influence net-benefits as noted by Magali and Negara (2019).

The information systems model is applicable to the study as it predicts the intention of the DT-SACCO sought to leverage on IT capabilities in risk mitigation to enhance growth of banking cooperative societies. This theory was developed on the basis of Edith Penrose's work in the 1950s (Williamson, 1975). In reference to the RBV of an institution, the tenets of the theory focused on relationship's performance and firm-particular resources (Lumpkin & Dess, 2011). Magali, (2013) contends that a company's competitive advantage is due to their endowment of strategic resources that are valuable, rare, costly to imitate, and costly to substitute. It assumes that organizations must be successful in obtaining and managing valued resources in order to be effective.

Theory of resource based model has been successful in enlightening the link between firms and SACCOs competitive advantage based on SACCOs features such as size and company resources endowment (Magali, 2013). Creation of value in production and processing in banking operations firms foster understanding, firm growth and how return on asset emerge. Institute level, sharing of knowledge, administrative innovations, value uncertainty and source individuality form of entrepreneurial bearings for progression in structured SACCOs in Kenya

## 2.2 Conceptual Framework

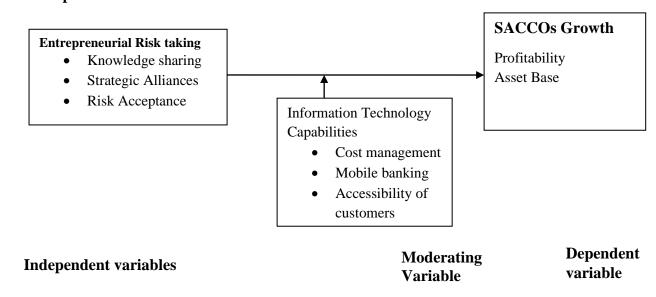


Figure 2.1: Conceptual Framework

# 2.3 Risk taking, Information Technology Capability and Firm Growth

Risk-taking is operationalized as a propensity to take confidence activities such as inflowing into unsettled markets and compelling extensive assets to venture with undefined outcomes (Shajrawi & Aburub, 2022). Risk mitigation is the process in which potential threats and risks to a SACCO are identified, analyzed, mitigated and prevented, along with the process of balancing the cost of protecting the SACCO against a risk versus the cost of exposure to that risk (Wasike, 2022). Risk taking as entrepreneurial orientations, Olaniran, Namusonge and

Muturi (2016) conducted an empirical study to determine influence of risk-taking on organization performance in the Nigerian Stock Exchange among 60 firms of the listed 176 firms" financial statements. The indicators for risk taking included in the research model were monetary risk, social risk and psychological risk. The study revealed that risk-taking had an inverse relationship with ROE and ROA. The research study indicated that there is a threat of risk analysis. It is tends to be viewed from the same perspective as risk assessment.

IT capability as the firm's ability to assemble, integrate and deploy IT based resources. Bharadwaj (2000) defined IT capability as the ability of a firm to mobilize and deploy IT based resources in combination with other resources and capabilities. Those IT-based resources are IT enabled resources, which consist of technical and managerial IT skills; intangible IT- enabled resources; such as knowledge, assets, customer orientation and synergy- the sharing of resources and capabilities across organizational division. Therefore capabilities reflect the ability of these firms to combine resources to promote superior performance (Amit and Shoemaker, 1993).

Financial institutions that overhaul the whole of their payment and delivery systems and apply ICT to their operations are likely to survive and prosper in the new millennium (Rauch, Wiklund, Lumpkin & Frese, 2019). Information technology (IT) is perceived as a necessity to pursue the rationalization, cost management in the face of stiff competition in the financial sector (DeBandt and Davis, 2020). Information technology helps banking firms to streamline the back office operations by improving both efficiency and cost reduction. Advances in technology also influence the way banks services are delivered with the aim of making it more convenient for customers. For example, many bank's branches were connected online real time (24/7). For instance, SACCOs re-examine their service and delivery systems in order to properly position themselves within the framework of the dictates of the dynamism of Information and Communication Technology (Serai, Johl & Marimuthu, 2017). The growth of SACCO generally refers to the increase in its asset base, increase in profitability and improve market share (Wang, Hermens, Huang & Chelliah 2015). For growth to be measurable it is operationalized and measured in different ways, the most common being a measure that is highly inter-correlated like turnover.

# 3.0 RESEARCH METHODOLOGY

The study adopted descriptive research design. The research design also allows for a multifaceted approach to data analysis. The target population was 177 DT-SACCOs regulated by SASRA (SASRA, 2020). The study considered a census study where all the SACCOs was considered for the study. The study envisages using census which is a study of all items in the target population. In this study, availability of secondary data from SASRA for all licensed DTSACCOs thus validates the use of a census. The study used primary data which was collected using a questionnaire. The study also used secondary data derived from financial statement submitted to SASRA by each DTSACCO. Kothari (2014) posit that secondary data is data collected by someone else and which have already been passed through the statistical process. The researcher gathered information obtained from all 175 registered DTSACCOs over duration of seven years (2014-2020).

Quantitative and qualitative data were generated from the closed-ended and open-ended questions, respectively. Qualitative data was analyses on a thematic basis and the findings

were provided in a narrative form. Before the data could be analysed, the researcher ensured the data was checked for completeness, followed by data editing, data coding, data entry, and data cleaning. Inferential and descriptive statistics were employed for the analysis of quantitative data with the assistance of Statistical Package for Social Sciences (SPSS Version 2028). The study also used inferential statistical techniques, regression and correlation. Based on this background, the following multiple linear regression model was used to test the moderating role of IT capability in the relationships between entrepreneurial risk taking and Growth of banking Savings and Credit Organizations

Linear regression analysis to test H<sub>1</sub>

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon...$$
 (i)

Where; Y = Growth of Savings and Credit Organizations,  $X_1 = Growth$  Organizational Pro-active Entrepreneurial risk taking, Z = Growth Information Technology Capability, Growth Growth Organizational Pro-active Constant, Growth Organizations, Growth Organiz

Moderation effect of Information Technology Capability was tested using three regression models as follows;

$$Y = \beta_0 + \beta_1 X_1 + \beta Z + \varepsilon \qquad (ii)$$

Where; M= Technology Capability

#### 4.0 RESEARCH FINDINGS AND DISCUSSIONS

#### 4.1 Introduction

From 177 DTSACCOs, 175 fully participated in the study. The overall response rate therefore stood at 99% (percent). On number of employees in the DT SACCOs, 85 (48.6%) of the SACCOs had 41-50 employees, 48(27.4%) of the DT SACCOs had 51and above employees, 31(17.7%) of the DT SACCOs had 21-30 employees, 10 (5.7%) had 31-40 employees while 1(0.6%) of the SACCO had employed 10-20 employees.

## 4.2 Descriptive Analysis of Entrepreneurial Risk Taking and Firm Growth

Descriptive statistics technique was deployed in analyzing extent entrepreneurial risk taking is adopted as an instrument to achieve growth in DTSACCO.

**Table 1: Risk Taking and Firm Growth** 

Entrepreneurial Risk taking at the SACCO	Mean	St Dev
The SACCO utilize market intelligence sharing to take calculated Risk	4.5029	.74952
The SACCO is always willing to accept a certain level of risk	4.2686	.69637
The management of SACCO support employees to take risks without	4.1314	.82343
fear of reprimand		
The management of SACCO do not shy from taking up new	3.8943	.67549
opportunities due to the risk investment		
The SACCO management use automation in management of credit risks	4.5886	.84682
There is increase in risk acceptance	.1486	.73554
There is increase in SACCO in venture in new products	.3429	.90156
There is increase in new lending channels to attract more customers	.2229	.67086
segments		

The findings in Table 1 on risk taking as entrepreneurial orientation practices in banking SACCOs. Results indicated that respondents strongly agreed that the SACCOs were utilize

market intelligence sharing to take calculated Risks as indicated by a mean of 4.5029 with a standard deviation of 0.74952. SACCOs were always willing to accept a certain level of risk in terms of losses as supported by a mean of 4.2686 and standard deviation of 0.69637. The results indicated that management of SACCOs supported employees to take risks without fear of reprimand as evidenced by a mean of 4.1314 and standard deviation of 0.82343. Respondents agreed that the management of SACCOs do not shy from taking up new opportunities due to the risk investment as supported by a mean of 3.8943 and standard deviation of 0.67549. This clearly implied that management of banking SACCOs were bold in undertaking new ventures and opportunities in an effort to foster returns in long-term and that the SACCOs' management were use information technology in management of credit risks as indicated by a mean of 4.5886 supported by a standard deviation of 0.84682.

Further, respondents agreed that there was increased in risk acceptance among the banking SACCOs as evidenced by a mean of 4.1486 and 0.73554 and that there was increase in SACCOs venturing in new products as indicated by a mean of 4.3429 and with a standard deviation of 0.90156. Also, there is increase in new lending channels adopted by the SACCOS to attract more customers segments supported by a mean of 4.2229 with a standard deviation of 0.67086. This implied that SACCOs were taking risks in using different new distribution channels for Sacco's products and services in an effort to increase Sacco's financial returns and attract more customers. The results were supported by Wikluad & Shepherd, (2013) that risk mitigation is the process in which potential threats and risks to a SACCO are identified, analyzed, mitigated and prevented, along with the process of balancing the cost of protecting the SACCO against a risk versus the cost of exposure to that risk. Entrepreneurial SACCOs, in actuality, tend to proactively deal with the risks in as efforts to achieve better performance and promote growth of firms.

# 4.3 Information Technology Capability

Extent information technology capability id Deployed in SACCOs as presented in Table 4.8

**Table 2: Financial Technology Capability** 

Financial technology capability Statements	Mean	St Dev
The SACCO is able to provide integration IT functional needs and IT	4.3257	.55932
application so that the SACCO continue to operation effectively and efficiently		
in our business		
There is IT strategy along with general business strategies in the SACCO	4.440	.58290
Staff of the SACCO are regularly training in the use if IT new tool, equipment	4.537	.58481
and handwares		
IT streaming in marketing intelligence is more efficient and effective to foster	4.377	.58284
risk mitigation		
The chief information officers is the key factor in driving change innovation and	4.383	.57410
service enhancement, cost control and reduction in the SACCO		
Internet services in the SACCO are fast and easy to use	4.531	.58515
Through adoption of information technology systems increase financial	4.4686	.51515
accessibility by customers		

		== -0.1
Information Technology integration in out SACCO assist in communicate more	4.486	.72601
often with customers		
Customer are utilizing mobile apps to access credit facilities	4.406	.57832
The SACCO technology integration support the decision making process and	4.703	.5496
enhance the promotion of banking services		
The SACCO utilize IT customer relationship systems to foster its relationships	4.5086	.58593
with customers		
Use of ATM increase SACCO operation hours	4.6057	.71837
	4.6020	E 4055
The SACCO merger and analysis data collected from various sources for each	4.6029	.54955
customers		

Descriptive results in Table 2 respondents agreed that the SACCOs are able to provide integration IT functional needs and IT application so that the SACCo continue to operation effectively and efficiently in their business as indicated by a mean of 4.3257 with a standard deviation of 0.55932. and that IT strategy was aligned with general business strategies in the SACCO as indicated by a mean of 4.4400 with a standard deviation of 0.58290. The findings revealed respondents strongly agreed that staff of the SACCO were regularly training in the use of IT new tool, equipment and handwares as indicated by a mean of 4.5371 with a standard deviation of 0.58481.

Also, respondents agreed that IT streaming in marketing intelligence is more efficient and effective to foster risk mitigation communication as indicated by a mean of 4.3771 with a standard deviation of .58284., strongly agreed that internet services in the SACCO are fast and easy to use as indicated by a mean of 4.5314 with a standard deviation of 0.58515 and that through adoption of information technology systems increase financial accessibility by customers as indicated by a mean of 4.4686 with a standard deviation of 0.51515.

Further, respondents agreed that Information Technology integration in SACCO assist in communicate more often with customers as indicated by a mean of 4.4857 with a standard deviation of 0.72601, that DTSACCO technology integration support the decision making process and enhance the promotion of banking services as indicated by a mean of 4.7029 with a standard deviation of 0.54955 and SACCO utilizes customer relationship systems to foster its relationships with customers as indicated by a mean of 4.5086 with a standard deviation of .58593. The results indicated respondents strongly agreed that use of ATM increase SACCO operation hours as evidenced by a mean of 4.6057 with a standard deviation of .71837and that SACCO merger and analysis data collected from various sources for each customers as indicated by a mean of 4.6029 with a standard deviation of 0.54955.

## **4.4 Descriptive Statistics of Growth of SACCOs**

The descriptive statistics for the growth indicator for the DT SACCOs as presented in table 3.

**Table 3: Descriptive Statistics for growth of SACCOs** 

Variable	Obs(n)	Total	Mean	Std .Dev.
Interest Income	880	2.219	0.739667	0.8209
Assets	880	14.009	2.7818	1.517169
Return on Asset	880	0.2013	0.1105	0.1058
<b>Customers Deposits</b>	880	13.163	2.6326	0.219339
Memberships	880	1158844	231769	901.955
		6.0640	(5.365)	(2.955)

Table 3 shows that expense income had 880 observations with a mean of 2.219. This implied that on average expense income of 2.219 Billion during the period of 2013-2022. On total assets, table 2 presented that 880 observations were made. A mean of Ksh 14.009 Billion was recorded indicating that on average total assets increased by 14.009 with a standard deviation of 1.517169. The results on customer deposit, there was 880 observations with a mean of 13.163 indicating that on average, market share based on customer deposit had increased with Ksh 2.6326 Billion. The findings on membership, the DT SACCOs were found to have an average of 5.365% increase over a period of 2013 to 2022 which is equivalent to 231,769 members with a standard deviation of 2.955% or 901.955 members for the period under the study. This clearly indicated that DT experience increase in membership for the period under the study. Ngugi and Karina (2014) revealed that product innovation impact on the performance of Kenyan SACCOs. On return on assets (ROA) with 880 observations had a mean of 0.2013. This implied that the DT SACCOs had ksh 20.13 % on average increase in as the return on asset. Further, return on assets had a standard deviation of 0.1105. This is supported by Zarrouk, Sherif, Galloway and Ghak(2020) that EO's impact on the SMEs' performance.

**Table 4: Firm growth For SACCO in the last 10 years** 

Financial growth	Mean	Std. Deviation
Return on sales (profit/total sales).	4.4057	.57832
Membership in the DT-SACCO	4.5314	.72547
Asset base of DT- SACCO	4.4171	.72138
Return on assets (profit/total assets).	4.6514	.56598
Management efficiency	4.1657	.48063

From the results in Table 4, the respondents agreed that entrepreneurial risk taking contributed to increase in return on sales (profit/total sales) for the last 10 years as indicated by a mean of 4.4057 with a standard deviation of 0.57832and that membership in the DT-SACCOs increase for the last 10 years as indicated by a mean of 4.5314 with a standard deviation of 0.72547. Also, respondents agreed that Asset base of DT-SACCO increased in

the last 10 years as evidenced by the a mean of 4,471 with a standard deviation of 0.72138.and strongly agreed that return on assets (profit/total assets) increased in the last 10 years as indicated by a mean of 4.6514 supported by a standard deviation of 0.56598. Further results revealed that respondents agreed that management efficiency increased in the last 10 years as evidenced by a mean of 4.1657 with a standard deviation of 0.48063.

## 4.5 Combined Correlation Analysis for Variables

The study used correlation analysis results to detect the strength and the direction of the relationship between risk taking and growth of DTSACCOs .Pearson Product moment correlation coefficients (rs) and P-values were used in criterion decision in making inferences. The significant value was tested at 0.01 or 0.05.

**Table 5: Correlation Analysis-INCOMPLETE** 

		SACCO Growth
Risk Taking	Pearson Correlation	. 830**
	Sig (2-tailed)	.000
	N	175

<sup>\*\*-</sup> Correlation is significant at the 0.05 (2 tailed)

The results in Table 5 indicated that there exists a strong , significant and positive correlation between risk taking and growth of Deposit Taking SACCOs in Kenya as indicated by correlation factor, r=0.830, PV=0.0000<0.01). The result predicts a strong, significant and positive relationship between risk taking and growth of DTSACCOs.

## 4.6 Relationship between Risk Taking and Growth of DTSACCOs

The study sought to establish the influence of risk taking on growth of DTSACCOs in Kenya. In seeking to achieve the objective, the study tested the fourth hypothesis which was: There is no significant relationship between risk taking and growth of deposit taking SACCOs in Kenya. This was tested using a partial regression model  $Y = \beta_0 + \beta_1 X_1 + \epsilon$ . From the results in Table 6, R-Squared is 0.652 indicated that there existed variation or correlation between risk taking and growth of DTSACCOs in Kenya. These results in Table 6 indicate that the model had an F-ratio of 324.501, P=0.000<0.05. This result ascertain the regression model,  $Y = \beta_0 + \beta_1 X_1 + \epsilon$  adopted by the study had a significant goodness of fit as F=324.501 and far exceeds the F-critical=statistic 0.5331 and PV=0.000<0.05. From the regression results, a unit increase in risk taking led to an increase in growth of DTSACCOs as supported by  $\beta_1$  =0.335 and PV=0.000. Therefore the condition H  $_0$ :  $\beta_1$ =0, H<sub>1</sub>:  $\beta_1$ ≠0 where the coefficient of risk taking in DTSACCOs is not zero,  $\beta_1$  0.335≠0, P= 0.000<0.05 therefore the study reject the null hypothesis and accepted the alternative hypothesis accepted that;  $\beta_1$ ≠0, which implies that DTSACCOs' risk taking has a significant and positive relationship with growth of DTSACCOs in Kenya.

Table 6: Mo	del Summary
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Model R R Square Adjusted R Square Std. Error of the Estimate							
1	1 .808 <sup>a</sup> .652 .650 1.22688						
ANC	OVA						
Mod	el	Sum of	Df	Mean Squa	re F	Sig.	
		Squares					
1	Regression	488.451	1	488.451	324.501	$.000^{b}$	
	Residual	260.406	173	1.505			
	Total	748.857	174				
Regr	ession Coeffi	cients					
Mod	lel		Unstandardiz	zed	Standardized	T	Sig.
			Coefficients		Coefficients		
'			В	Std. Error	Beta		
(Con	istant)		10.797	.638		16.917	.000
Risk	Taking		.335	.019	.808	18.014	.000

Independent Variables: (Constant), Risk Taking Dependent Variable: Growth of DTSACCOs

The resultant univariate regression model took the form:

 $Y=10.797+0.335X_4+e$ .

Upon introduction of IT capability, the R-Square attained was 0.664 an increased from R-Square 0.652 for un moderated regression model. This clearly demonstrated that IT capability has a significant positive effect in the relationship between entrepreneurial risk taking and growth of DTSACCOs in Kenya. The ANOVA finding further revealed that the F-calculated for the model was 362.392 and PV = 0.000<0.05 hence there was a linear relationship between entrepreneurial Risk Taking and Entrepreneurial risk Taking\*Information technology Capability and the growth of DTSACCOs. In addition, the p-value was 0.000, which was less than the significance level (0.05). Therefore, the model attained goodness of fit for the data and hence it was appropriate in predicting the moderating role of Information technology capability on the relationship between entrepreneurial risk taking and growth of DTSACCOs in Kenya. IT capability has a significant and positive moderating effect on the relationship between entrepreneurial orientation and growth of DTSACCOs. The information systems success model is applicable to the study as it predicts the intention of the DT-SACCO to adopt and integrate Fintech in SACCOs' operations (Fadda, 2018). The attentiveness of DT-SACCOs to consent the application of Fintech is intended at augmenting growth in market share, profitability, deposit and loan volumes and quality based. The theory is thus relevant in gauging the moderating role information technology capability. This capability is initiated to be considered in the relationship between an entrepreneurial orientation by the SACCOs and growth found in DT-SACCOs.

Table 71: Moderating Role of IT Capability Model Summary

	odel R	R Se	quare	Adjusted R	S	td. Error of the		
			1	Square		Estimate		
2	.815a	.664	ļ.	.647	.1	101484		
				ANOVA				
Me	odel	Sum of Squ	uares	Df	M	ean Square	F	Sig.
2	Regression	684.970		2	13	6.994	362.392	.000 <sup>b</sup>
	Residual	63.887		172	.3	78		
	Total	748.857		174				
Co	efficients							
Mode	el		Unsta	ndardized		Standardized	t	Sig.
			Coeff	icients		Coefficients		
			В	Std. En	ror	Beta		
2	(Constant)		3.888	1.063			3.659	.000
	Risk Taking		.098	.021		.364	4.692	.000
	Entrepreneurial Orientation*IT		.090	.025		.244	3.666	.894
	Capability							

Predictors: (Constant), Risk Taking., Risk Taking\*Information technology Capability

a. Dependent: Growth of DTSACCOs

b. Growth of DTSACCOs

## **Summary of findings**

The correlation findings discovered that there exists a strong, significant and positive correlation between risk taking and growth of Deposit Taking SACCOs indicated by correlation factor, r=0.652, PV=0.0000<0.01). Regression results also indicated that predictor risk taking had a significant, positive relationship with growth of SACCOs as  $\beta_1 = 0.335$ , PV=0.0000, t= 18.014. This clearly indicated that an increase in SACCOs' risk taking as entrepreneurial orientation would lead to increase in growth of DTSACCOs by 0. 335. Risk taking as entrepreneurial orientation was executed at DTSACCOs to a great extent. Entrepreneurial SACCOs, in actuality, tend to proactively deal with the risks in as efforts to achieve better performance and promote growth of firms. This was evidenced as SACCOs were utilizing market intelligence sharing to take calculated Risks, always willing to accept a certain level of risk in terms of losses and supported employees to take risks without fear of reprimand. The study revealed that SACCOs were not shving from taking up new opportunities due to the risk investment, use information technology in management of credit risks, increased in risk acceptance and increase in SACCOs venturing in new products fostering improvement on customer base, sale performance and achieving more returns in long-terms. Further, increase in new lending channels, SACCOs were using different new distribution channels for SACCOs products and services in an effort to increase SACCOs financial returns and attract more customers and taking risk under control right from its inception in SACCOs. The study revealed that Information technology Capability has a significant and positive moderating effect in the relationship between entrepreneurial risk taking and growth of DTSACCOs as R<sup>2</sup>1<R<sup>2</sup>2 from 0.652 to 0.664. Application fosters the SACCO continuation to operational effectively and efficiently in their business. The results revealed that there was IT application in SACCOs operations effectively and efficiently, staff of the SACCO were regularly training in the use of IT new tool, equipment and handwares and that IT streaming in marketing intelligence is more efficient and effective to foster risk mitigation communication.

#### **5.3 Conclusions**

The study concluded risk taking has a significant, positive effect on growth of DTSACCOs. Through risk taking as entrepreneurial orientation, DTSACCOs increase in SACCOs' risk taking as entrepreneurial orientation would lead to increase in growth of DTSACCOs. Risk taking as entrepreneurial orientation contribute to SACCOs proactively dealing with the risks in as efforts to achieve better performance and promote growth of firms, foster utilization of market intelligence sharing to take calculated Risks, enable SACCOs to always willing to accept a certain level of risk in terms of losses and supported employees to take risks without fear of reprimand and not to shy from taking up new opportunities due to the risk investment, use information technology in management of credit risks, increased in risk acceptance and increase in SACCOs venturing in new products fostering improvement on customer base, sale performance and achieving more returns in long-terms. The study concluded that Information technology Capability impact significantly and positively on the relationship between entrepreneurial risk taking and growth of DTSACCOs as a moderating variable. IT capability enhances risk taking to enhance growth of DT SACCOs.

#### 5.4 Recommendations

The study recommend that SACCOs should embrace entrepreneurial risk taking as it has a significant, positive effect on growth of DTSACCOs .Through risk taking SACCOs increase risk taking appetite as would lead to their increase in growth. Risk taking as an entrepreneurial orientation contribute to DTSACCOs proactively deal with the risks in as efforts to achieve better performance, foster utilization of market intelligence and sharing of calculated Risks, while enabling SACCOs to always willing to accept a certain level of risk in terms of losses. This leads to increase in risk acceptance and number of bankig SACCOs venturing in new products fostering improvement on customer base, sale performance thus more returns in the long-run. The study recommends that SACCOs should enhance IT capability to foster provision of banking services. Integration of IT functional needs and IT application foster the banking SACCOs continuation to operate effectively and efficiently in their business. The results revealed that where there was IT application in banking SACCOs operations, staff of the SACCO were regularly trained in the use of IT new tool, equipment and that IT streaming in marketing intelligence was more efficient and and handwares effective to foster risk mitigation communication strategy.

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