

THE INFLUENCE OF INTELLECTUAL CAPITAL ON NON-FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN TANZANIA

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Abstract

The purpose of this study was to establish the predictive model for non-financial performance measures of commercial banks in Tanzania. This study employed a cross-sectional survey design to examine how an intellectual capital component influences the non-financial performance measures of a firm. The participants for this study came from employees of the top ten best commercial banks in Tanzania. Convenience sampling was used to select the desired participants, and purposive sampling was used to select the four banks. Three fifty nine (359) respondents participated in this study and a linear multiple regression analysis was used to establish the best predictive model. The predictive model developed explained 71 percent of the variance in non-financial performance measures of a firm. The model developed is significant as it provides empirical evidence that links intellectual capital components to non-financial performance measures. Further, it explains that by embracing distinctive non-financial performance measures, a firm may have quality services, satisfied customers, and thus, building a long-term competitive advantage. In general, human, customer, structural, and innovation capital were found to be significant predictors of non-financial performance measures of a firm. This study recommends that future researchers may use a structural equation modeling approach to explore more the understanding of the influence of human, customer, structural and innovation capital on non-financial performance measures of a firm.

Keywords: Intellectual Capital, Human Capital, Customer Capital, Structural Capital, Innovation Capital, and Non- financial performance measures of the firm.

INTRODUCTION

Essentiality of the Non-Financial Performance Measures (NFPM) avows on its ability to influence the long-term survivability of a firm (Alves, & Lourenço, 2022; Kaplan & Norton, 2001; Kaplan, 2010). In essence competitiveness and the survival of a firm critically depend on firm performance, particularly the NFPM. Using NFPM is an attempt to solve the problem that arises from the over-emphasis on traditional financial measures in assessing firm performance. The reason could probably be seen in (a) perceived limitations in the use of traditional financial measures, (b) increased competitive pressure, and (c) implementation of other programs as total quality management that calls for the use of NFPM (Alves, &

Lourenço, 2022; Ittner & Larcker, 1998; Kaplan, 2010).

Kaplan and Norton (1992) developed and promoted the Balanced Score Cards (BSC) and claimed that “the scorecard addresses a deficiency in traditional management accounting system”: their inability to link a company’s long-term strategy with its short-term action. Hence, the model was equated by three NFPMs which include (1) *organizational learning and growth* which refers to the priorities of the firm to “create a climate that supports organizational change, innovation, and growth”, (2) *internal process measures* that air on what the firm must do internally to meet its customers' expectations, (3) *customer satisfaction* that airs attention to the firm if customers are not satisfied, they will eventually find

other suppliers that will meet their needs (Kaplan & Norton, 1992, Kaplan, 2010).

The added NFPM to the BSC model was to give managers and executives the benefits of a more balanced view of firm performance. Furthermore, firms that use BSC measures have the benefits to communicate their priorities to different groups of stakeholders (Kaplan & Norton, 1992, 1996). Kaplan (2010) also advocates that the adoption of NFPM metrics helps the firm in the development of investment in employee training. Investment in employee training can lead the firm to improve its quality of service. Better service quality leads to higher customer satisfaction and loyalty. The increase in customer loyalty generates an increase in sales and revenues (Kaplan, 2010).

Generally, the NFPM was developed as a consequence of the shortages of financial-based performance measures in determining the long-term performance of a firm (Ahmad & Zabri, 2016). According to Ahmad & Zabri (2016) firms that still focuses only on the financial performance measures indicators are resisting the rapidly changing business environment that needs business organization to focus on the long-term competitive advantages of a firm. Hence, when you improve this NFPM, you are enhancing the long-term survivability of a firm (Abdullahi, Ardo, Hassan & Indrahim, 2021; Ahmad & Zabri, 2016; Datar, Kulp, & Lambert, 2001; Ibrahim & Lloyd, 2011; Ittner, Larcker, & Rajan, 1997; van Gijssel, 2012; Vélez-González et al., 2012).

Even though various models and theories acknowledge that the use of non-financial measures is important, still most companies emphasize the use of financial performance measures that includes cash flow, return on capital, and project profitability and ignore the non-financial performance measures. This indicates that companies emphasize more on short-term financial performance measures instead of long-term performance measures as credible performance indicators (Richards, 2022; Abdullahi et al., 2021; Kaplan & Norton, 1996; Marie, Ibrahim, & Al Nasser, 2014). Kasie and Belay, (2013) attested that firms that poorly apply NFPM as credible performance indicators do not get a complete performance projection of their firms (Alves, & Lourenço, 2022; Kasie & Belay, 2013). Hence, the understanding of factors influencing NFPM becomes necessary as it affects the long-run competitive advantage of a firm.

Few studies have been used in the literature in an attempt to understand the non-financial performance of a firm (Dudic et al. 2020; Kori, Muathe, Maina, 2020; Maditinos, Ševi, & Tsairidis, 2010; Mashovic, 2018; Kaplan & Norton, 2001). For instance, a study by Duho and Agomor, (2021) on intellectual capital and performance found structural capital to play a significant role in driving performance, particularly the NFPM. Similarly, Ahmad and Zabri's (2016) study on the effect of non-financial performance measurement on firm performance found NFPM to have a “significant role in the production and operations environment especially for increasing the performance of the firm”. In simple terms, the NFPM tells the organization what is likely to be done while financial performance measures (FPM) tell the organization what has already been done (Ernst & Young, L. nd.).

Few studies were found reporting the influence of intellectual capital on non-financial performance measures of a firm. However, the researcher did not find a current study reported on how intellectual capital constructs predict the non-financial performance measures of Tanzanian commercial banks particularly in Arusha Region. Therefore, the key to this study is the following constructs: human capital, customer capital, innovation capital, and structural capital. Specifically, this study aimed to find out the ability of human, customer, innovation, and structural capital in predicting the non-financial performance measures of commercial banks in Arusha Region, Tanzania.

LITERATURE REVIEW

The review of related literature below aimed to present to the readers the ideas and knowledge that have been established by scholars and researchers on a specific topic and the objectives of this study. The specific objectives were to find if intellectual capital components that are human, customer, innovation, and structural capital influence NFPM of the commercial banks in Arusha Region, Tanzania. In order therefore to decide what resources to be included in this phase of the literature review, research questions, abstracts, theories, methodology, findings, conclusion, and recommendations were reviewed and the presentation here below is the results of related

articles, books, and discussion that is specific to the objective of this study.

The intellectual capital framework contains components that have been identified as constructs that set the long-term strategic objectives of the firm (Bontis et al. 2000; Khalique & Isa, 2015; Kaplan & Norton, 2001; Maditinos, Ševi, & Tsairidis, 2010; Wudhikarn & Pongpatcharatorntep, 2022). These constructs include human capital, structural capital, customer capital, and innovation capital (Dumay, et al., 2020; Choong, 2008; Edvinsson & Malone, 1997; Marr, 2018). Various authors refer to intellectual capital as a “composition of knowledge, skills, experience, and information that influence the present and future success of the business and establish its rank in comparison with other firms” (Dumay et al. 2020; Funda, et al., 2010; Marr, 2018; Wudhikarn, & Pongpatcharatorntep, 2022;). This study is an attempt to examine the influence of the intellectual capital components especially human capital, customer capital, innovation capital, and structural capital on the NFPM.

Human Capital

Human capital represents the human factor for the firm. Several definitions and approaches to understanding human capital subscribe to Bontis et al. (2000) and Maditinos et al. (2010) definition that human capital is “the individual knowledge asset of a company’s employees” (as cited in Maditinos et al., 2010, p. 149). In other words, human capital presents the brainpower of the employee inside the organization (Kenton, 2022; Maditinos et al., 2010; Wudhikarn, & Pongpatcharatorntep, 2022;). Crook et al. (2011) meta-analysis of 66 studies on firm performance found human capital to be strongly related to firm performance. Others have also argued that human capital has a direct effect on firm performance (Drakes, 2019; Kenton, 2022; Mushref, 2018). Regardless of how it is perceived, the literature is in agreement that the firm needs to capitalize on developing human capital in order “to have a great impact on performance” (Marimuthu et al., 2009; Xue, et al., 2019).

H₁. There is a positive relationship between human capital and Non-financial performance measures of a firm.

Customer Capital

Customer capital is the value of the customer relationship with a firm. The earlier pioneer of the inclusion of customer capital defines it as “the knowledge that is developed to the customer-supplier relationship when conducting business” (Bontis et al., 1999; Maditinos et al., 2010. p. 149; Sveiby, 1989). Customer capital has been studied in terms of its relation to the non-financial performance of firms (Khalique & Isa, 2015; Mention & Bontis, 2013; Maditinos et al., 2010; Qi et al., 2022) and these studies suggest that if firms invest in customer capital they will have chances of achieving a higher competitive advantage in a competitive market.

Chen et al. (2004) argued that “without customer capital, market value or firm performance could not be achieved” (p. 203). It was also added that customer capital acts as a bridge and a promoter of the operations of intellectual capital. Intellectual capital needs customer capital to convert the intellectual ability into market value and thereupon-firm performance. Hence, customer capital cannot be achieved without human capital (Chen et al., 2004; Ekaningrum, 2021).

H₂. There is a positive relationship between customer capital and the Non-financial performance measures of a firm.

Innovation Capital

Innovation capital is considered to be the core element of intellectual capital that provides “a powerful drive for gaining and sustaining a competitive advantage” of a firm (Sullivan, as cited in Kijek, 2012,). The resource-based theory treats innovation capital as “the ability of the firm to create and commercialize innovations” (Kijek, 2012, p. 54; Qi et al., 2022). Likewise, Maditinos et al. (2010), theorized innovation capital as the “ability to build on previous knowledge and generate new knowledge” (p. 149). These theories count innovation capital as the fundamental driver of performance and competitive advantage (Alkhateeb, Yao & Cheng, 2018; Conner, 1991; Kenton, 2022).

Abdullah and Sofian (2013) reviewed the literature on the relationship between intellectual capital and innovation, supporting the idea that

innovation capital and structural capital influences the performance of a firm. Hence, encourages top managers to sustain, develop, and manage intellectual capital components to increase innovation and create a competitive advantage for the firm (Abdullah & Sofian, 2013).

Similarly, Tenai, Cheboiand Chelogoi's (2019) study on the effect of innovation capital on the performance of firms listed in the Nairobi security exchange found innovation capital to have a positive relationship with firm performance. These studies suggest that innovation capital plays a significant role in influencing non-financial firm performance. Hence, the organization should encourage top managers to sustain, develop, and manage intellectual capital to increase innovation and create a competitive advantage for the firm. (Abdullah & Sofian, 2013; Qi et al., 2022).

H₃. There is a positive relationship between innovation capital and non-financial performance measures of a firm.

Structural Capital

Structural capital is “part of the intellectual capital that is owned by the firm and its efficient management is essential” for sustaining competitive advantage of the firm (Van Zyl, 2005, p.9). Bronzetti, et al. (2011) and Khalique et al. (2013) considered structural capital as a skeleton and a glue for the firm that creates, and transform knowledge into performance. Skandia's navigator model (1997) presents structural capital as an organizational, process, and innovation capital that influences the organization's ability to perform and deliver goods and services.

Several studies have been conducted in terms of structural capital and its relation to the non-financial performance of a firm (Duho & Agomor, 2021; Shanthi, 2018, Khalique & Isa, 2015; Bontis et al., 2000; Joshi et al., 2013, Maditinos et al., 2010) and these studies suggest that structural capital have a positive relationship with the overall performance of a firm. Therefore, structural capital should work as a tool and be used as an architecture for reinforcing, and transferring knowledge to the firm performance (Cabrita & Bontis, 2008; Qi et al., 2022).

H₄. There is a positive relationship between the

structural capital and non-financial performance measures of a firm.

Non- Financial Firm Performance

Non-financial firm performance is parameter to evaluate a non-financial aspect of a firm. These aspects can be identified “through product quality, customer satisfaction, and employee satisfaction” (Ittner, Larcker & Rajan, 1997, p. 237). The balance scorecard model proposed *customer, internal process, learning, and growth* as indicators of non-financial performance measures (Kaplan & Norton, 1992). Customer perspectives were to define how the firm differentiates itself from competitors to attract, retain, and develop relationships with the target customer. The internal process perspectives were to determine how the internal process will achieve the differentiated value proposition for customers and productivity improvements.

The learning and growth perspectives were for the managers to define the employee's capabilities and skills, technology, and corporate climate needed to uphold a strategic plan that reflects the long-term viability and health of the firm (Dudic et al., 2020; Blandina, et al., 2021; Kaplan & Norton, 2001). The aforementioned NFPM are needed as a predictor of a firm's long-term performance as they help managers gauge and direct their business to planned targets (Dudic et al., 2020; Kaplan & Norton, 1996, 2001).

Khalique et al. (2013) study on predicting the impact of intellectual capital management on organizational performance, using multiple regression analysis among 120 workers in the Islamic banking sector in Malaysia, shows human capital to be positively correlated with structural capital. Also, structural capital, innovation capital, and customer capital were found to be positively correlated with organizational performance. The results are the indicators of the importance of human capital, customer capital, innovation capital, and structural capital in the overall performance of the Islamic banking sector in Malaysia.

Additionally, the study considered human capital as the “lifeblood of the organization and it is the crucial source of innovation and development in the organization” (p. 78). The results are consistent with the findings of Khalique et al. (2015) and Dudic et al. (2020) which revealed a positive correlation between

human capital and structural capital, structural capital, innovation capital, customer capital, and organizational performance. The study suggested to the “concerned authorities to explore and capitalize their intangible asset to enhance the performance” (Khalique et al., 2013).

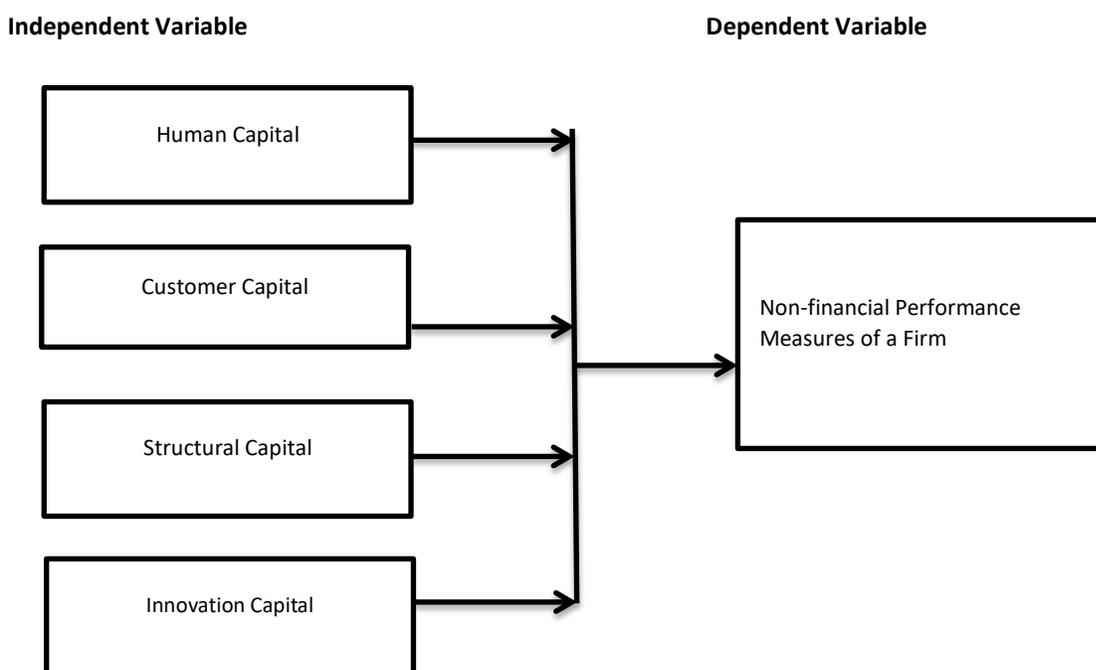
Similarly, the study by Marimuthu et al. (2009) on firm performance suggested firms to invest in developing human capital, customer capital, innovation capital, and structural capital to have a great influence on performance (Duho, & Agomor,

2021; Marimuthu, 2009). Therefore, the purpose of this study is to find out whether human capital, structural capital, innovation capital and customer capital can predict the non-financial performance measures of a firm.

Further, for the practitioner’s purpose, it is also important to find out which of the human capital, customer capital, structural capital, and innovation capital has a higher influence on the non-financial performance measures of a firm.

H_s. Human capital, customer capital, structural capital, and innovation capital positively influence the non-financial performance measures of a firm.

The Conceptual Framework



METHODOLOGY

Research Design

There are two types of survey research design: the longitudinal and cross-sectional survey design: the cross-sectional survey design was considered convenient because it is a one-time testing of the hypothesized model (Jacobsen, 2008). This type of research design is used to gather the population’s feelings, judgments, connections, or perceptions of any topic, through the use of an instrument or questionnaire (Garcia, 2011).

Population and Sample

The established target population of this study were 420 respondents employees from four banks (Cooperate and Rural Development Bank (CRDB), National Bank of Commerce (NBC), National Microfinance Bank (NMB), Standard Chartered Bank (SCB) in Tanzania, These banks are well-known banks in Tanzania and their branches in the Arusha areas are enough to provide participants for the study.

Sampling

Convenience sampling was used to select the desired participants. Convenience sampling was used in the sense that the researcher distributed the questionnaires to the human resource department of each bank and the human resource department distributed and collected the questionnaires on behalf of the researcher. It must be stated that the banks are chosen purposively. Although there is no one best sampling approach, the sample chosen was intended to be the representative sample that has the largest potential characteristics under investigation (Palys, 2008; Saunders, et al., 2012).

A total of 420 questionnaires were distributed to the selected respondents. Of the 420 distributed questionnaires only 379 (90 percent) were returned which were reduced to 359 after subjecting the data to a normality test.

Data Collection Procedure

A survey that consists of questions about the five variables of this study was administered and collected from the participants. The questionnaire contains 64 items and it took approximately 10-15minutes to complete. The bank human resources personnel distributed the envelopes that contains questionnaires. The filled-out questionnaires were then returned to the envelopes and collected by the researcher.

Data Analysis

The data collected from the participants were coded first using the statistical package for social sciences (SPSS) program. After coding, the outliers were identified and removed. Then, the remaining participants' responses were analyzed. Pearson

correlation was used to test hypotheses 1, 2, 3, and 4 while multiple regression analysis was used to test hypothesis 5 to establish the best predictive model from the aforementioned variables.

Ethical Considerations

Prior to the data collection, the respondents were informed about the purpose and content of the questionnaire. All participants were assured of confidentiality and protection of privacy as the questionnaire excluded any item that could be used to identify the participants. The participants were also, clearly informed and assured that they would not experience any psychological or physical harm because the results will be reported in aggregate and would be used for academic purposes only. Also, participants were openly informed about their voluntary participation. Therefore, only those who accepted and signed the consent form were eligible to participate. Participants were also guaranteed that they were free to withdraw from their participation at any time without any consequences.

RESULTS AND DISCUSSION

This section consists of the analysis of the hypothesis results focusing on the variable's relationships and the results for the best predicted model for non-financial performance measures of a firm. The 5-point Likert-type scale response 1 (*strong disagree*) to 5 (*strong agree*) was employed for each of the five variations of the study.

H₁. There is a positive relationship between human capital and Non-financial performance measures of a firm.

When testing *H₁*, it was found that human capital is strongly related to non-financial performance measures of a firm ($R=0.764$, $P=0.000$), but also, strongly related to the structural capital ($R=0.708$, $P=0.000$), innovation capital ($R=0.730$, $P=0.000$), and customer capital ($R=0.662$, $P=0.000$). Hence, the research hypothesis was accepted that there is a relationship between human capital and non-financial performance measures of a firm. This result implies that an employee's competence; skills, commitment, internal relationship, ability to think, and ability to

corporate are directly influencing the employee's creativity, knowledge management, and support performance.

These findings are similar to that of Khalique and Isa (2015) study on the impact of intellectual capital on the organizational performance. The study found a positive correlation between human capital and non-financial performance measures of a firm. Also, Garima et al. (2021) study on the relationship between human capital and firm value found a positive relationship between human capital and firm value. Khadra and Ishaq (2015) study on effect of human capital management on firm performance via balanced scorecards found human capital to have also a great impact of firm performance. So the finding suggested that in order to increase firm performance, investors and top managers have to make more investments in developing employees' skills experience and knowledge, and involve them to get increased learning capacity, talent development to yield the desired outcomes.

Management of the selected banks in Tanzania therefore, needs to also focus more on the elements that promote employees' competence, skills, commitments, internal relationship, ability to think, and ability to corporate. In essence, the Tanzanian banks need to enforce the aforementioned factors to support innovation and performance, employee creativity, and knowledge management of a firm. It can be concluded that the evaluation and execution of human capital, innovation capital, and structural capital measures are the propellers of customer satisfaction, excellent service, and outstanding reputation of a firm that gives the organization long-term comparative advantages (Chen et al., 2004).

H₂. There is a positive relationship between customer capital and the Non-financial performance measures of a firm.

When testing H_2 , it was found that customer capital is strongly related to non-financial performance measures of a firm ($R=0.690$, $P=000$). But also, strongly related to structural capital ($R=0.675$, $P=000$), innovation capital ($R=0.675$, $P=000$), and human capital ($R=0.662$, $P=000$). Hence, the research hypothesis was not rejected that there is a positive relationship between customer capital and non-financial performance measures of a firm. This result

implies that brand name, customer loyalty to products and services, customer demand, knowledge sharing, resolving customer problems, and gathering feedback from customers support organizational performance.

These findings are similar to that of Chen et al. (2004) and Ekaningrum, (2021) who founds customer capital as an important element of firm performance. It was also added that customer capital acts as a bridge and a promoter of the operations of intellectual capital. Intellectual capital needs customer capital to convert the intellectual ability into market value and thereupon-firm performance (Chen et al., 2004; Ekaningrum, 2021).

The study of Khalique et al. (2013) using multiple regression analysis among 120 workers on Islamic banking sector in Malaysia, found customer capital to be positively correlated with firm performance. Also, Khalique and Isa (2015) attested a positive correlation between customer capital and organizational performance for the Airline industry in Malaysia. The results are the indicators of the importance of customer capital in the overall performance of the firm.

H₃. There is a positive relationship between innovation capital and non-financial performance measures of a firm.

When testing H_3 , it was found that innovation capital is strongly related to non-financial performance measures of a firm ($R=0.764$, $P=000$). But also, strongly related to structural capital ($R=0.754$, $P=000$), customer capital ($R=0.675$, $P=000$), and human capital ($R=0.730$, $P=000$). Hence, the research hypothesis was not rejected that there is a positive relationship between innovation capital and non-financial performance measures of a firm. The results suggest that when a firm supports innovation, employees become creative by bringing new ideas that can be managed and shared with others.

This kind of managing, creating, and innovating was found to promote customer satisfaction, excellent service, and the outstanding reputation of a firm. The study of Sharabati et al. (2010) on business performance similarly, found a correlation between innovation [capital] creation and structural capital ($r=0.638$). In addition, structural capital was found to be positively correlated with business performance

($r=0.557$). Furthermore, a study by Yuliansyah and Razimi (2015) on NFPM and managerial performance found a positive relationship between innovation and NFPM ($\beta= 0.026, t = 0.279, p < 0.1$). Abdullah and Sofian (2013) reviewed literature also, supporting the idea that innovation capital influences the performance of a firm. Therefore, managers should sustain, develop, and manage innovative ideas that lead, and create a competitive advantage of a firm.

H₄. There is a positive relationship between the structural capital and non-financial performance measures of a firm.

Table 1: Correlation Among the Variables

| Variables | HC | CC | IC | SC | NFFPM |
|-----------|--------|--------|--------|--------|-------|
| HC | 1 | | | | |
| CC | .662** | 1 | | | |
| IC | .730** | .675** | 1 | | |
| SC | .708** | .675** | .754** | 1 | |
| NFFP | .764** | .690** | .764** | .766** | 1 |

Note**. Correlation is significant at the 0.01 level (2-tailed). Number of respondents=359

When testing *H₄*, it was found that structural capital is strongly related to non-financial performance measures of a firm ($R=0.766, P=0.000$). But also, strongly related to innovation capital ($R=0.754, P=0.000$), customer capital ($R=0.675, P=0.000$), and human capital ($R=0.708, P=0.000$). Hence, the research hypothesis was not rejected that there is a positive relationship between structural capital and non-financial performance measures of a firm. Similarly, a study by Khalique and Isa (2015) attested to a positive correlation between structural capital and organizational performance ($r=0.296$) among the 195 participants in the Airline industries in Malaysia. Maditinos et al. (2010) study on business performance also, found structural capital to have a positive

relationship on business performance both for the service and non-service industries ($\beta=0.197/0.122$). Furthermore, Ahmad et al. (2011) among 191 managers of Iraqi companies found structural capital to have a positive correlation with business performance ($r=0.167$). Hence, is important for the business organization to realize the importance of structural capital.

The table 1 is the summary of the correlation among the variables. The results suggest that the infrastructure of the organization that helps employees to access relevant information, the management system to serve the customer, organizational policies, procedures, databases, and networks need to be an up-to-date to support the firm performance. Also, the linear Pearson correlation Table 1 is an evidence that banking sectors need to emphasize more on the evaluation and execution of human capital, customer capital, structural capital, and innovation capital measures to improve customer satisfaction, excellent service, and the outstanding reputation of a firm performance.

H₅. Human capital, customer capital, structural capital, and innovation capital positively influence the non-financial performance measures of a firm.

When testing *H₅* it was found that human capital, customer capital, structural capital, and innovation capital predict non-financial performance measures of a firm ($P=0.000$). Human capital had the highest beta value (0.298) followed by structural capital (0.277), customer capital (0.143), and innovation capital (0.241). The adjusted r-square for this model is 71.9% which means that human capital, structural capital, customer capital, and innovation capital explain 71.9% of changes in non-financial performance measures of a firm. The linear regression model for the non-financial performance measures of a firm is as follows. $0.298HC + 0.277SC + 0.143CC + 4.354=NFFP$.

These findings are similar to that of Khalique et al. (2013) using multiple regression analysis among 120 workers in the Islamic banking sector in Malaysia, which found customer capital to be positively correlated with structural capital ($r=0.664$). In addition, structural capital had a positive correlation with organizational performance. Also, a study by Khalique and Isa (2015) attested a positive correlation between customer capital and structural capital ($r=0.348$), structural capital and organizational performance ($r=0.296$) among the 195 participants for Airline industries in Malaysia. Maditinos et al. (2010) study on intellectual capital and business performance for the Greek listed companies also found, human, customer, innovation, and structural capital to have a positive relationship on business performance both for the service and non-service industries. The results are the indicators of the importance of human, innovation, structural and customer capital in the overall performance of the firm. Table 2 is the summary of the Predict model for NFPM.

Table 2: Predict Model for NFPM

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .850 ^a | .722 | .719 | .24529 | .722 | 230.365 | 4 | 354 | .000 |

a. Predictors: (Constant), SC, CC, HC, IC

b. Dependent Variable: NFFP

CONCLUSION AND RECOMMENDATIONS

Conclusion

Based on the finding of the study, the following conclusions were drawn:

1. Human capital, customer capital, structural capital, and innovation capital were found to be significant predictors of non-financial performance measures of a firm;
2. Furthermore, structural capital has been identified in this study to be more correlated ($r=0.664$) followed by human capital and innovation capital both having a positive correlation ($r=0.664$). This means when employees are more connected to the structures of the organization they save better and perform better;
3. Additionally, all the variables were found to have a direct influence on the non-financial performance of a firm. This result implies that when a firm supports its employees, innovation, customers, and structure, employees become more creative, in bringing new ideas, and

satisfaction to customers and improving the overall performance of the organization;

4. Management support for innovation, employees, or continuously encouraging employees to bring new knowledge, and ideas, and share with colleagues, is highly important in enhancing the non-financial performance measures of a firm; and
5. Finally, the adjusted r-square for this type of organization was high which means the model's predictive ability is high. In other words, human capital, structural capital, customer capital, and innovation capital explain 71.9 percent of changes in non-financial performance measures of a firm.

Recommendations

Based on the results of this study, it is still recommended that:

1. Human capital, customer capital, structural capital, and innovation capital were found to be significant predictors of NFPM. Management of the selected banks in Tanzania therefore, needs to focus more on the elements that promote employees' competence, skills, commitments, internal

relationship, ability to think, and ability to cooperate. In essence, the Tanzanian banks need to enforce the aforementioned factors to support innovation and performance, employee creativity, and knowledge management of a firm;

2. In order to help employees expose their competence abilities, bank leaders are to assure a cooperative environment that permits employees to think, develop, and maintain internal relationship among various groups in the organization;
3. Structural capital has been identified in this study to be more correlated ($r=766$) followed by human capital and innovation capital both having a positive correlation ($r= 764$). Therefore, leaders need to insure that employees are more connected to the structures of the organization in order for them to save and perform better; and
4. Creating a working environment that encourages employees to come up with new knowledge and ideas that supports innovation, competence, and customer loyalty needed to be reinforced in order to enhance the NFPM.

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