# TESTING MKTOR IN TANZANIA UNIVERSITIES

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**ABSTRACT**

The objective of the study was to determine the extent to which market orientation (MO) is related to university performance. The study was based on 212 respondents from private and public universities across Tanzania. Market orientation was measured by MKTOR. Structural Equation Model (AMOS 22) and SPSS were deployed for data analysis. Tests for reliability and validity showed that the measures have sound psychometric properties. Two hypotheses were tested and both were supported. This is the first study in Tanzania which is pan territorial drawing its sample from both public as well as private universities, notwithstanding the relatively low representation by private universities. This study is cross sectional. A longitudinal study would have provided a more appropriate explanation on underlying relationships over a period of time. Furthermore, in view of complexity of high education industry, mediating variables would have shaded more light on the relationship between the two constructs under different set of circumstances. Obvious practical implication is that universities should design programs that address wider customer needs which will make them a "go to" universities and in the process increase their reputation. High reputation will attract funding from different sources thereby giving the universities ability to offer scholarships to students. This will lead to increased access to university education and hence help the Government to solve some of social problems.

Keywords: Market orientation, MKTOR, performance, Tanzania.

***ABSTRAK***

*Tujuan dari penelitian ini adalah untuk mengetahui sejauh mana orientasi pasar (MO) terkait dengan kinerja universitas. Studi ini didasarkan pada 212 responden dari universitas swasta dan negeri di seluruh Tanzania. Orientasi pasar diukur dengan MKTOR. Model Persamaan Struktural (AMOS 22) dan SPSS digunakan untuk analisis data. Uji reliabilitas dan validitas menunjukkan bahwa langkah-langkah tersebut memiliki sifat psikometrik yang baik. Dua hipotesis diuji dan keduanya didukung. Ini adalah studi pertama di Tanzania yang merupakan pan teritorial yang mengambil sampelnya dari universitas negeri maupun swasta, meskipun perwakilan universitas swasta relatif rendah. Penelitian ini bersifat cross sectional. Studi longitudinal akan memberikan penjelasan yang lebih tepat tentang hubungan yang mendasari selama periode waktu tertentu. Selain itu, mengingat kompleksitas industri pendidikan tinggi, variabel mediasi akan lebih memperjelas hubungan antara dua konstruksi dalam keadaan yang berbeda. Implikasi praktis yang jelas adalah bahwa universitas harus merancang program yang menjawab kebutuhan pelanggan yang lebih luas yang akan membuat mereka menjadi universitas "go to" dan dalam proses meningkatkan reputasi mereka. Reputasi tinggi akan menarik pendanaan dari berbagai sumber sehingga memberikan kemampuan universitas untuk menawarkan beasiswa kepada mahasiswa. Hal ini akan mengarah pada peningkatan akses ke pendidikan universitas dan karenanya membantu Pemerintah untuk memecahkan beberapa masalah sosial.*

*Kata kunci: Orientasi pasar, MKTOR, kinerja, Tanzania.*

## 1. INTRODUCTION

In 1967 (Six years after independence), the Government of Tanzania made a major policy shift by putting the commanding heights of the economy and social services including education in the hands of the Government. This was followed by another major policy shift when in late 1980s, the Government embraced market led economic policies. By 1995, liberalisation policy had extended to the education sector when Education Act No. 10 of 1995 was passed by the Parliament to allow private universities in Tanzania. Subsequently, in July 2005, Tanzania Commission for Universities (TCU) was established to regulate high learning

institutions (used interchangeably with university) to ensure standards are maintained, coordinate matriculation, training of staff, resource mobilization and gender mainstreaming. Furthermore, the Commission is responsible for accreditation of degrees earned outside the country by awarding its Tanzania equivalent. After the establishment of TCU and the passing of Education Act No. 10, the number of high learning institutions (including full fledge universities, university colleges & university campuses, Centers & Institutes) increased from 23 in 2005 (Mnubi, 2013) to 50 in 2019 (TCU, 2020). Similarly, enrollment increased from 55,290 in 2005 (Mnubi, 2013) to 189,291 in 2019 (TCU, 2020).

However, in the recent past, many universities in Tanzania have been struggling to remain afloat because of increased competition from within (such as opening new universities & converting polytechnics to degree awarding institutions) and from other universities in the region. The problem is compounded by introduction of fee free secondary education scheme in 2015 and later extended to high school in 2022. The new scheme was applauded because it is in line with Sustainable Development Goal number 4. However, its introduction has resulted in reduction by the Government to finance higher education. While in 2017, Government spending in higher education was 4.4% of the GDP, the same was reduced to 3.2% in 2022 (UNESCO, 2022). Going forward, the country might see further reduction in high education budget because more resources will be allocated to fight Covid 19. This trend will inevitably push universities into looking for better means of sustaining themselves.

Prior to 1988, the Government met the costs of higher education in full. However, this changed in 1988 when the students were required to part-finance their education. Accordingly, in that year, the Government reduced the budget for higher education and challenged universities to look for alternative source of funding from both traditional non-traditional sources (Mainardes, et al., 2014). Some of these are Alumni, charging tuition to students and embark on income generation activities. In spite of euphoria about these projects, most of them failed partly because affluent parents preferred to send their children to overseas (e.g., Malaysia, India & China, among others) for better education. On the other hand, income generation activities such as cafeteria and accommodation services are priced below the market because many students cannot afford to pay market rates (Ishengoma, 2004). The problem is exacerbated by two trends. First is massification of higher education leading to 2002 Government's decision to impose a quota on students' loans (Ishengoma, 2004) and second is the higher rate of increase in costs compared to internally generated revenues by universities. This trend begs the question: how can universities sustain themselves under such conditions?

The literature is rich in studies on sustainability of universities. Ahmad et al., (2019) provide an excellent summary of studies which have suggested different ways in which universities can be financially independent. Several measures have been suggested such as raising tuition, philanthropists, asset monetization, retailing and services, corporate alliances with businesses, endowment, waqf, fundraising, full utilization of current resources and cost cutting. Unfortunately, most of these have failed because they provide short term solution. In order to address the problem, universities should seek for measures which will provide organic growth in student enrolment. Re-defining their

missions can be a good strategy to achieve this objective. In short, universities need to become market oriented in order to attract more students.

Many studies have examined the MO-performance relationship across different cultures and settings (Kohli & Jaworski 1993; Narver & Slater 1990; Deshpande & Farley 1998; Niculescu et al., 2013). Despite its wide recognition, current authors are not aware of any study that has examined MO-performance relationship in Tanzania be it in profit or non-profit making organizations including universities. This paper aims at filling this gap. To this end, a widely used MO scale, namely MKTOR (Narver & Slater 1990) was employed to assess the degree of MO of universities and how it is related with performance. Against this background, the objectives of the current study are two. First, is to examine the relationship between MO and performance of universities in Tanzania and second, was to determine which aspect of MO influences the performance.

## 2. LITERATURE REVIEW

### 2.1 Market orientation

As a business philosophy, MO aims at maximizing returns through customer satisfaction. Ellis, (2006) Kirca et al., (2005) Cano et al., (2004) give a good summary of meta-analysis on various studies on MO across different cultures. Notwithstanding its popularity, MO has been criticized for inhibiting innovation (Tjahjadi et al., 2022; Alobaidi & Kitapci, 2019). However, studies by Narver and Slater et al., (2004) Akman and Yilmaz (2008) Kocak et al., (2017) Vaikunthavasan, et al., (2018) and Buratti et al., (2021) found the criticism has no basis. In educational context, researchers like Khalifa (2010) are critical on application of marketing practices in the academia because the philosophy of business enterprises is to maximize profits while universities' mission is to deliver social goods (Svensson & Wood, 2007). In marketing literature, four models of MO have been reported. (MKTOR, MARKOR, MORTN & University MARKOR). In the current study, MKTOR scale (Narver & Slater 1990) was selected ahead of MARKOR (Kohli & Jaworski 1993) because of its superior psychometric properties (Cano, et al., 2004; Mokoena, 2019a). Mavondo and Farrell, (2000) found the scale to be more dynamic and responded well across different cultures (Ellis, 2006; Gupta, et al., 2019). On the contrary, much as it has been tested in USA, Europe and Asia, MORTN (Deshpande & Farley 1998) has not gained much fame. On the other hand, although University MARKOR is a special scale that was developed for measuring MO of universities, its application is still limited because it has only been tested in the US (Niculescu et al., 2013; Hampton 2007) and in Pakistan (Khuwaja, et al. 2019). MKTOR scale was also selected largely because its focus on satisfying customer needs (customer orientation), through meeting the challenges of competition (competitor orientation) and by involving everyone in the organization (inter-functional coordination).

### 2.2 Performance

Company performance is a periodic assessment of the organization vis-à-vis its objectives. The objectives can be financial (profitability, return on assets, return on investments etc) or non-financial such as customer satisfaction, customer value and customer retention among others (Ross et al., 2013). Financial performance can be measured objectively against pre-determined budget and key performance indicators. However, due to difficulties in divulging this sensitive and commercially valuable information, many researchers have

resorted to subjective measures as the second-best alternative, much as they are susceptible to common source bias (Meier & O'Toole, 2013; Podsakoff et al., 2003).

### 2.3 Market orientation-university performance relationship

There is no dearth in the literature on studies that have examined the relationship between MO and university performance (UP) and the evidence of a positive relationship between them is almost unanimous (Anabila et al. 2019; Tjahjadi et al. 2022; Hidayati 2020; Sefnedi, 2017; Mokoena and Dhurup, 2017; Niculescu et al., 2013; Ross et al., 2013). Despite the unanimity, generalisation of their findings is difficult because of limitations inherent in some studies. Typical example is the narrow scope where some studies are not pan territorial (Sefnedi, 2017) while others covered only specialized universities (Mokoena, 2019a; Mokoena & Dhurup, 2017; Mokoena et al., 2015) and some collected data from a single university (Niculescu et al., 2013). In Tanzania, studies on MO and performance in any industry are almost non-existence. Since this is the first study to examine MO-UP relationship, our hypotheses are based on studies conducted elsewhere. Since a positive relationship has been widely reported, we hypothesize that:

H1: There exists a significant positive relationship between MO and UP in Tanzania.

Past studies that have used MKTOR as a measure of MO in high learning institutions are almost unanimous in their findings about the importance of each element in the scale. Many such studies have found all three elements of MO are important but customer orientation emerged as the most important predictor of performance (Mokoena et al., 2015; Mokoena 2019a; Sefnedi 2017). In view of the evidence in the extant literature, we hypothesize as follows:

H2: Customer orientation is the most important predictor of university performance.

## 3. METHOD

### 3.1 Sample

The population constituted 6,238 members of academic staff from public and private universities in Tanzania. From these, a sample of 364 was drawn based on the table by Krejcie and Morgan (1970). Questionnaires were then sent as google forms directly to the respondents. Google forms were preferred because they are less costly and minimize errors in data entry. Significantly, google forms have demonstrated to be very reliable in collecting data (Loomis & Paterson, 2018; Ma and Todorovic 2011; Ross et al., 2013; Vallen et al., 2009), have quick and high response rate (Griffis et al., 2003) and have fewer missing values (Stanton, 1998). A response rate of 58.2% was considered adequate (Swoboda et al., 1997; Oreskovick et al., 2012). This is even more so for a questionnaire coming from an anonymous sender (Willott, 2019). To avoid common method bias, questions were carefully worded and the sequence started with UP, i.e., the dependent variable which was followed by MO (Modi & Sahi, 2018). Following Podsakoff et al., (2003), test for common method variance was conducted by using Harman's single factor. The results showed that common method variance was not an issue because the explained variance in a single factor solution with no rotation was below 50%.

### 3.2 Questionnaire

The questionnaire had 33 items. Demographic data for respondents had 9 items, while UP and MO had 6 and 18 items respectively. All items (except demographic variables) were measured

by a 5 points Likert scale ranging from "Strongly Agree" to "Strongly Disagree". Narver and Slater (1990) scale for measuring MO was adapted after taking into account some adjustments made by Niculescu et al., (2013) to conform with university environment. University performance was measured by the scale developed by Ross et al., (2013) after deleting the word "international" and introducing a time frame of 3 years to assist respondents in assessing their performance. The assessment was based on the judgement by the respondents against criteria such as overall student satisfaction, providing value to students, student admission, student retention, growth and market share. The questionnaire was a bit lengthy but had no bearing on response rate for online surveys (Vallen et al., 2009).

## 4. RESULTS

### 4.1 Profile Respondents

In many respects, the profile of respondents was somewhat balanced. The results show that 154 respondents (72.8%) were from public universities and 58 (27.2%) were from private universities whose characteristics are described in table 1 below:

Table 1 Profile of Respondents

| Position: | Criteria | Frequency | Percentage |
|---|---|---|---|
| Junior Staff | | 80 | 37.7 |
| Senior Staff/Head of Dept. | | 117 | 55.2 |
| Professors/Deans/Directors | | 15 | 7.1 |
| Gender | Male | 63 | 70.3 |
| | Female | 149 | 29.7 |
| Age: | < 25 years | 1 | 0.5 |
| | 25-45 years | 145 | 68.4 |
| | >45 years | 66 | 31 |
| Qualifications | PhD | 113 | 53.3 |
| | Master degree | 85 | 40.1 |
| | Bachelor degree | 14 | 6.6 |
| Experience: | < 10 years | 87 | 41.1 |
| | 10-20 years | 98 | 46.2 |
| | > 20 years | 27 | 12.7 |
| Ownership: | Public Universities | 154 | 72.2 |
| | Private Universities | 58 | 27.8 |
| Size: | < 5,000 students | 72 | 34 |
| | 5,000-10,000 students | 50 | 23 |
| | > 10,000 students | 90 | 42 |

Source: Survey data (2022)

Majority of participants were male comprising 70.3% of respondents. From the table above, most respondents are senior members of staff and more than half have 10 or more years of experience in teaching. The faculty is very strong in terms of education (more than half have doctoral degrees) and age wise, majority of the staff are either 45 years or above. The profile shows majority of participants are young, qualified, matured and experienced.

### 4.2 Factor Analysis

We started data analysis with Exploratory Factor Analysis (EFA) to test if the internal structure of MO and UP conformed to well established theory. EFA (varimax rotation) was carried out for both independent and dependent variables. The exercise resulted into a 2-factor solution (based on eigenvalues greater than 1) for independent variables. The item that describes "coordinating use of resources with other departments" (IFC1) and "success and failures of recruitment of students communicated to other departments" (IFC2) did not load as expected. Instead, they both migrated to Factor 1 (competitor orientation). These results are inconsistent with almost all past studies of MO. However, a closer examination of IFC 1 and IFC2 shows that the two indicators are in a way related to analysis of competitors strengths and weaknesses (Factor 1). On the other hand, "responsiveness in serving students" (IFC3) and "understanding university contribution to creating value for students" (IFC4) loaded in Factor 2 i.e., customer orientation. These results are not surprising because serving customers promptly (IFC3) and creating value for money (IFC4) play a significant part in customer orientation.

Table 2 Exploratory Factor Analysis MO Factors

| | 1 | 2 |
|---|---|---|
| CUST1 | .174 | **.737** |
| CUST2 | .377 | **.762** |
| CUST3 | .297 | **.780** |
| CUST4 | .287 | **.775** |
| CUST5 | .418 | **.703** |
| CUST6 | .443 | **.689** |
| CUST7 | **.736** | .421 |
| COMP1 | **.753** | .410 |
| COMP2 | **.722** | .340 |
| COMP3 | **.802** | .324 |
| COMP4 | **.770** | .246 |
| COMP5 | **.675** | .353 |
| COMP6 | **.727** | .356 |
| IFC1 | **.730** | .268 |
| IFC2 | **.765** | .273 |
| IFC3 | .317 | **.643** |
| IFC4 | .399 | **.603** |

Source Survey data (2022)
Extraction Method: Principal Component Analysis.
Rotation converged in 3 iterations KMO .949.
Variance explained 64.95%.
CUST = customer COMP = competition IFC = inter-functional coordination

Contrary to our expectations, "giving attention to servicing students after enrollment" (CUST7) did not load in customer orientation but instead, loaded in Factor 1 (competitor orientation). Although the migration came as a surprise, it can be reasonably assumed and perhaps rightly so, to assess competitors' strategy on after sale services (CUST7) is an aspect of analysis of competition. The migration of indicators did not change the structure of the scale materially, hence, the original factor labels were maintained. After these adjustments, one independent variable namely inter functional coordination (IFC) was eliminated and MKTOR scale was left with two talent variables, i.e., customer orientation and competitive orientation. As for dependent variable (table 3), a 3-factor solution emerged with all variables loading as expected, hence no variable was dropped.

Table 3 Exploratory Factor Analysis

| (dependent variables) Factors | | | |
|---|---|---|---|
| | 1 | 2 | 3 |
| P1 | **.802** | .068 | .320 |
| P2 | **.861** | .191 | .100 |
| P3 | .474 | **.746** | .053 |
| P4 | .009 | **.859** | .276 |
| P5 | .101 | .441 | **.761** |
| P6 | .293 | .580 | **.874** |

Source: Survey data (2022)
Extraction Method: Principal Component Analysis.
Rotation converged in 6 iterations KMO .745
Variance explained 79.5%

### 4.3 Confirmatory Factor Analysis

Were subjected to reliability and validity tests. Prior to dispatching the questionnaires, 10 academicians at the Muslim University of Morogoro were asked to evaluate the instrument and check for ambiguities. No serious changes were made as a result of this exercise. This confirmed that the measures met content validity criterion; more so since their psychometric properties were proven by previous studies. The next step was to determine to what extent the measuring items are holding together in measuring a particular construct (Nunnally, 1978). This was measured by Cronbach alpha. A Cronbach alpha value of higher than .70 indicate internal consistency of the measures employed (Hair et al., 2014). We then computed composite reliability (CR) which measures the reliability and internal consistency of latent construct. The benchmark is .70 (Hair et al., 2014). From table 4 below, both MO and UP have shown sound psychometric properties. All factor loadings were >.60, KMO >.70 and the *least* variance explained was 64.9%. Cronbach alpha coefficients were within acceptable range (Nunnally, 1978) and composite reliability values were >.60.

Construct and discriminant validities for both measures were also put to test. Convergent validity measures how close the indicators are related to determine the latent variable. This is measured by Average Variance Extracted (AVE) which, as a rule of thumb, should be >.50. Convergent validity was achieved as AVE for all measures are >.50 (Hair et. al., 2014). Discriminant validity measures how different one latent variable is from the other. To check for discriminant validity, we compared the discriminant value (DV), i.e., the square root of AVE against correlations with other variables (Fornell & Larcker, 1981). Admittedly, MO scale failed discriminant validity test because DV for one variable (customer) is less than its corresponding correlation coefficient with compete (Table 5).

Table 4 Reliability

| Factor Variables/Items | Factor Loadings | AVE | Cronbach Alpha | CR | DV |
|---|---|---|---|---|---|
| **Performance** | | | | | |
| P1 | .802 | | | | |
| P2 | .861 | .570 | .706 | .724 | .755 |
| P3 | .746 | | | | |
| P4 | .859 | .531 | .622 | .686 | .728 |
| P5 | .761 | | | | |
| P6 | .874 | .572 | .723 | .958 | .756 |
| **Customer** | | | | | |
| CUST1 | .737 | | | | |
| CUST2 | .762 | | | | |
| CUST3 | .78 | | | | |
| CUST4 | .775 | | | | |
| CUST5 | .703 | | | | |
| CUST6 | .689 | | | | |
| IFC3 | .643 | | | | |
| IFC4 | .603 | .572 | .913 | .914 | .756 |
| **Compete** | | | | | |
| COMP1 | .753 | | | | |
| COMP | .722 | | | | |
| COMP3 | .802 | | | | |
| COMP4 | .770 | | | | |
| COMP5 | .675 | | | | |
| COMP6 | .727 | | | | |
| CUST7 | .736 | | | | |
| IFC1 | .730 | | | | |
| IFC2 | .765 | **.622** | **.936** | **.937** | **.789** |

Source: Survey data (2022)
P1 and P2 Retain
P3 and P4 Satisfy
P5 and P6 Growth

*Table 5 Discriminant validity*

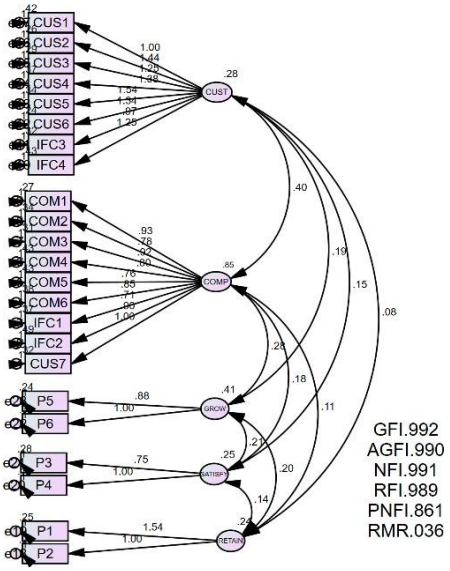
| | Customer | Compete | Retain | Satisfy | Growth |
|---|---|---|---|---|---|
| Customer | **.756** | .821 | .317 | .577 | .576 |
| Compete | | **.789** | .253 | .385 | .482 |
| Retain | | | **.755** | .56 | .632 |
| Satisfy | | | | **.728** | .666 |
| Growth | | | | | **.756** |

Source: Survey data (2022)

Figures in diagonal represent Cronbach alpha. The rest are correlations among latent variables. Two known alternative ways of determining discriminant validity are to use factor loadings (Sin et al., 2005; Sin et al., 2002) or Cronbach alpha coefficients (Zebal & Goodwin, 2012; Gaski 1986). Both alternatives were tried but the results were no better. Following Peter (1981), since our measures of reliability (factor loadings, Cronbach alpha & composite reliability) are high,

we believe discriminant validity was achieved. The model fit was very good (RMR 0.036, GFI .992, AGFI .990, NFI .991, RFI 989 & PNFI .861). All ß >0.5, p value .000. No further improvements were made. Diagrammatically, the model is presented in Fig. 1 below:

*Fig 1 Measurement model*

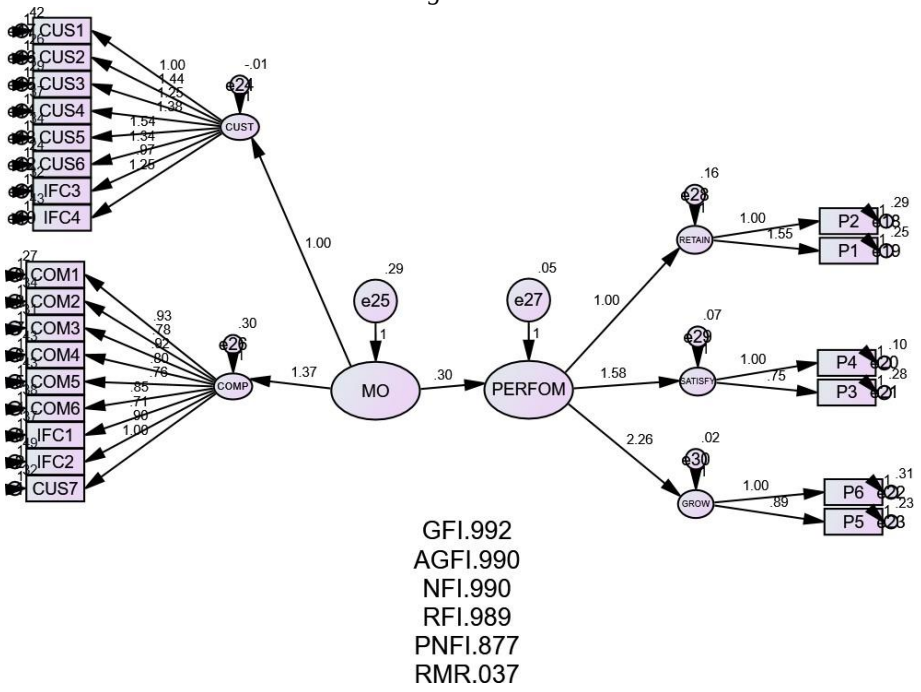



Source: Survey data (2022)

## 4.4 Structure model

In order to test MO-UP relationship, customer orientation and competition orientation were collapsed into one construct (market orientation) and three dependent variables, i.e., retain, satisfy and growth were combined to form one variable (performance). Pictorial presentation is seen in Fig 2.

*Fig 2 Structure Model*




Source Survey data (2022)

Normality tests (Kolmogorov-Siminorv-Shapiro-Wilk) showed that data are not normally distributed (p value .000). For this reason, unweighted least squares method was used because it is accurate for parameter estimation and meets minimum number of iterations (Mîndrilã, 2010). Second order SEM resulted into the following acceptable fit indices: RMR 0.037, GFI 0.992, AGFI 0.990, NFI 0.990, RFI 0.989 and PNFI 0.877 (Hair et. al., 2014).

### 4.5 Hypotheses Testing

Based on standardized regression weights, as seen in table 6 below, H1 is accepted. Marketing orientation is positively related with performance (ß .592, p value .000). This finding is consistent with past studies on MO/UP relationship using MKTOR as a measure of MO (see for example, Ross *et.al*., 2013; Sefnedi, 2017; Mokoena et al., 2015). The finding did not come as a surprise because empirical evidence aside, common sense suggests that a university that constantly identifies evolving students' needs with the view to satisfying them, will be ahead of competition in terms of attracting and retaining students. As for the second hypothesis, H2 was also supported as predicted because customer orientation had a strong relationship with performance (ß 1.024, p value .000). This too has considerable support in the literature (Mokoena et al., 2015; Mokoena 2019a; Sefnedi 2017). Satisfied students will freely promote the university through the word of mouth and often times, their messages are more believable.

Table 6 Hypothesis results

| | Decision | MO | Compete | Customer |
|---|---|---|---|---|
| Performance | H1 supported | 0.592 | 0.000 | 0.000 |
| Customer | H2 supported | 1.024 | 0.000 | 0.000 |
| Competition | | 0.803 | 0.000 | 0.000 |

Source: Survey data (2022)

### 4.6 Discussion

The objectives of this study were two-folds. The first one was to examine the relationship if any, between MO and UP in Tanzania and second was to determine which aspect of MO influences performance. In order to do so, two hypotheses were developed and tested. As expected, H1 was supported. This finding is consistent with previous studies that have examined the relationship between MO and UP (Hampton, 2007; Niculescu et al., 2013; Khuwaja et al., 2019; Mokoena and Dhurup, 2017; Zebal & Goodwill, 2012). Significantly, the results are also consistent with studies that have used MKTOR as a measure of MO (Ma & Todorovic, 2011; Ross *et.al*., 2013; Sefnedi, 2017; Mokoena et al., 2015; Mokoena, 2019a). Furthermore, the results show that both elements of MO (i.e., customer orientation and competitor orientation) are positively related with performance. Practical implication of accepting H1 is a call to universities to be market oriented with particular focus on meeting students' needs and constant monitoring of competition. Universities should therefore adopt a systems approach where the marketing function is not left to the PR department or office of the dean of students. As noted by David Packard, the co-founder of HP marketing is too important to be left to the marketing department. A typical market oriented university is the one that identifies students' needs, analyse competitors' strength and weaknesses in areas such as

fees, university ranking, quality of programs and staff. Information is then shared within the university for appropriate action. This way, universities will be able not only to attract but also to retain students whose long term implications, both in financial and non-financial terms are obvious.

As expected, H2 was also supported. These results are consistent with past studies by Sefnedi (2017) and Mokoena et al., (2015) where customer orientation was found to be the strongest predictor of performance. This is in line with common wisdom that suggests customer satisfaction leads to good performance because of positive word of mouth about a product/brand which eventually results into repeated purchase. While it is important to understand the dynamics of competition in all its facets, proper understanding of students' needs is paramount. Universities should strive to understand what students look for when selecting a university. Some of the attributes are better programs, better fee structure, competitive scholarship schemes, higher ranking than competing universities, career development opportunities, accreditation and affiliation with reputable universities around the world (Nor, 2018). Already some of the universities in Tanzania have adopted Competence Based Evaluation (CBE) where emphasis in student evaluation is given in continuous assessment and oral examinations. Others have started teaching Mandarin in response to an increase in trade and investments between Tanzania and China. Yet others are offering programs in collaboration with reputable universities outside Tanzania so as to attract international students and faculty.

In testing H2, the results show standardised regression weights is >1 implying existence of multicollinearity in the independent variables. Bivariate Pearson correlation showed correlation coefficient between independent variables lied between .786 and .833 all significant at .01 level (2 tailed), suggesting existence of multicollinearity. Paradoxically, the maximum value of Variance Inflation Factor (VIF) was 3.266, maximum Collinearity Tolerance (CT) was .383 and maximum Condition Index (CI) was 20.5. All these coefficients are within acceptable limits. However, to address the problem of multicollinearity, Deegan, (1978, p. 887) had this to say: By modifying models simply to reduce the presence of multicollinearity and/or to rid a model with standardized coefficient greater than one an analyst risks the biasing effects of model specification error. Such behavior must be considered most damaging since the presence of multicollinearity in a model causes no bias in estimated coefficients. Model specification errors, on other hand, can occur which bias all estimated coefficients in a model, and consequently can completely distort interpretation of the results.

Following Deegan (1978), we believe that multicollinearity, whatever its source, was not an issue in the current study. Another interesting finding is the composition MO construct. Almost without exception, in the literature, MKTOR has been characterized by three elements, i.e., customer orientation, competitor orientation and inter-functional coordination. The results of this study are to the contrary. Inter-functional did not stand out as an element of MKTOR in its own right. Rather, it has been masked into customer and competitor orientations. Much as this finding was unexpected, it is logical, understandable and has support from the literature (Ma & Todorovic 2011). Successful identification of student needs (customer orientation) and gathering intelligence about competing universities

(competitor orientation) invariably requires coordination among different players/departments. Since organizations operate as a system, the role of inter functional coordination should therefore be implied in daily routine. Proper execution of customer orientation and competitor orientation will make inter-functional coordination (a dimension which is missing in this study) becomes like a glue that binds the lower and the upper part of a shoe. It is a necessary material in shoe making but it is not a shoe in itself.

## 5. CONCLUSION, LIMITATION, AND DIRECTIONS FOR FUTURE RESEARCH

There are two hypotheses that were supported. Like past studies, this too has its own limitations. The first one is not taking into account mediating variables. Higher education environment is very complex. As such, UP is determined by many factors such as the ranking of the university, both national and world-wide, availability and adequacy of funding, competence of staff and research capabilities. Future research should see how these variables mediate performance. The cross-sectional nature of this study gives it a somewhat limited scope for interpretation. A longitudinal study will be more helpful in explaining if the observed relationships will hold over a period of time. Finally, like the previous ones, in this study, university performance was more influenced by customer orientation than competitor orientation. More research needs to be done on how to reconcile the needs of the customers (students) vis-a-vis the rigor which universities must maintain. How for example," the customer is a King" philosophy should be aligned with the mission of universities of delivering "goods" which they think are of international standards or even those that meet the standards of local Regulators. Put it differently, is the "customer is a King" philosophy compatible with marketing of university education?

### 5.1 Managerial Implications

Although not central to the objectives of this study, our findings do not support a seemingly well-established phenomenon that MKTOR has three dimensions. Instead, we have found that MKTOR can be best measured by two variables while inter-functional coordination is implied. The resulting model fit was, by any standards, very good. Significantly, both variables (customer and competitor) are externally oriented. The implication of this finding is that universities should be more concerned about its interaction with stakeholders while its internal set up will be dictated through these interactions. Another addition to the literature is that this is the first study of its kind in Tanzania which drew its sample from several universities across the country having different sizes and types of ownership. This study has many implications to universities, large corporates and policy makers. Post Covid 19, the world will witness more resources being diverted to economic recovery programs. This will compel universities (especially public owned) to search for alternative sources of funding. Commercialization and commoditization are options which universities should explore with much vigor (Jacob et al., 2003). Being more market oriented will result into high student enrolment and retention which will lead to high reputation and ability to attract funding through various sources such as grants.

This will have wider implications on access to higher education in Tanzania because universities will be in a position to offer scholarships thereby raising their profiles. Universities should also consider

new ways of academic staff evaluation to put more emphasis on innovations and/or providing solutions that address problems facing society. These and other measures will make such universities "a go to" Colleges. For their part, Governments should support universities in their quest to integrate with stakeholders. Tax breaks should be introduced to companies which support research initiatives by universities be it in social or live sciences. These initiatives will invariably create new jobs and increase Government revenues in form of taxes which can be used to fund higher education.

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