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Factors Influencing Prospective Students to Join Higher Learning Institutions: Insights from Mbeya University of Science and Technology

Asheri Mwidege & Hadija Matimbwa*

Department of Business Management

Mbeya University of Science and Technology, P.O. Box 131 Mbeya, Tanzania

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ABSTRACT

The recent expansion of educational boundaries has created a competitive market, and higher learning institutions are resorting to digital marketing to reach out to prospective students. This study investigated the factors that affect potential students' enrollment in Higher Learning Institutions (HLIs). A sample size of 384 was used in the explanatory cross-sectional study design. We used both descriptive and inferential analyses. The results showed that students' education level and entry credentials were statistically significant at $p<0.05$ and $p<0.01$, respectively, while income level was statistically significant at $p<0.01$. It was also discovered that the National Council for Technical and Vocational Education (NACTE), alumnae, the Tanzania Commission for Universities (TCU), and university websites were trustworthy sources of information. Therefore, academic level, entry qualification of the respective institution, NACTE, alumnae, TCU, and university website influence information search on HLI opportunities. It is suggested that HLIs make admission qualifications available to prospective candidates and commit to quality programmes and excellent services.

*Corresponding author's e-mail address: hadija.matimbwa@must.ac.tz

1.0 Introduction

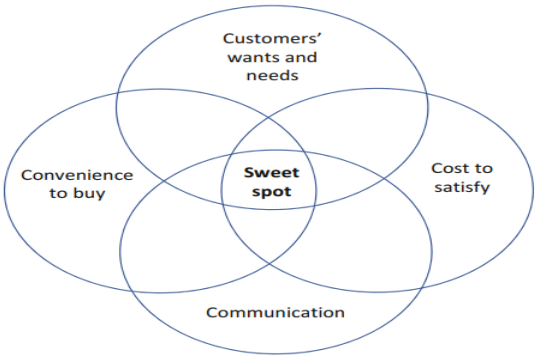
The flow of information, resources, and planning play important roles in the strategic advancement of marketing. However, this primary role is moderated by the cultural, inherent, and economic qualities essential for marketing (Azeez et al., 2022). The flow of the appropriate information, in the right form, to the right people at the right time is critical for the existence of any credible organisation in the market (Azeez et al., 2022). Thus, internal communication, market research, and vision are critical facets of internal marketing practices in higher learning institutions (Arora and Sharma, 2021). Similarly, Pardiyono et al. (2021) discovered that physical evidence, people, and processes had a positive impact on internal marketing in terms of drawing potential students' interest and boosting service quality. Furthermore, the 4Ps (location, product, price, and promotion) influence education institutions' external marketing (Pardiyono et al., 2021). Furthermore, Pradipta (2022) observed that the 3Ps (price, promotion, and process) of the seven Ps (product/programme; price: fee levels/scholarships; promotion: advertising/publicity; place: location of HLIs and ease of access; people: staff members/students; process: teaching-learning activities, evaluation processes, admissions, and staff recruitment; physical evidence, physical facilities) marketing mix have significantly changed. Conversely, Hung and Yen (2022) propose that the 4Cs (consumers' wants and needs, cost to satisfy the consumers, and convenience) of marketing should be integrated with an innovative strategy. From a customer-oriented standpoint, this will enable long-term future promotional strategies for higher education institutions.

Digital marketing via digital communication channels (emails, mobile phones, social networking) has been utilised for brand marketing to the right audience (Harbi and Ali, 2022). Digitization therefore complicates collaborations in marketing higher education institutions in this context. Thus, cultivating relationships and developing digital scalability are critical components of advanced higher education marketing (Jain et al., 2021). Today's education industry is influenced by the rising usage of social media, search engine optimisation, and mobile phones (Harbi & Ali, 2022). According to Harbi and Ali (2022), the extension of educational boundaries has resulted in a competitive market, and as a response, universities and colleges have employed digital marketing to reach out to prospective students, as opposed to the traditional approaches previously used.

So far, digital transformation, information interchange, digitization, and social media have challenged the notion of gaining a competitive advantage in the education industry (Hasim et al., 2022). The drastic change to digital information, followed by online information accessibility, has provided both higher learning institutions and prospective customers in Tanzania with new experiences (Babbar and Gupta, 2021; Matimbwa and Masue, 2019).

Digital transformation is a social requirement of governments, companies, and institutions to meet the market demand for information symmetry for decision-making (Park, 2021). Digitalization stresses the importance of using the comparative advantage model as a decision support system to generate, regulate, and retain student experience and expectations (Hasim *et al.,* 2022). Consequently, marketing strategies for higher learning institutions can act as supporting and facilitating tools for attracting more potential students to join their academic programmes (Grace et al., 2020). Park (2021) reveals that consumer-created information is more persuasive when consumers have more favourable prior brand attitudes than expert-created information. Thus, universities like Mbeya University of Science and Technology (MUST) act as competent and competitive human resource makers by incorporating the needs of potential stakeholders into their curricula (Shino *et al*., 2022). Sayaf et al. (2021) revealed a connection between computer self-efficacy, computer anxiety, and perceived satisfaction with social media. The authors also concluded that it plays a significant role in the usefulness and ease of use by prospective customers in accessing information. Thus, the 4Cs as a model for the marketing planning of an institution places emphasis on the customer's viewpoint rather than the organisation's, as depicted in Figure 1 (Akbar & Lawson, 2022).

Figure 1
Sweet Spot for Successful Market Planning Sources (Akbar and Lawson, 2022)



Furthermore, Zulfikar et al. (2022) contend that digital marketing and brand image influence interest in purchasing or utilising a service both simultaneously and partially. Similarly, Edumadze and Demuyakor (2022) found that the use of social media platforms increases the academic output of university members. Sujatmikanto et al. (2022) also discovered that quality programmes, the use of digital media for promotion, the development of a cordial relationship between the university and stakeholders, and the use of integrated marketing increase university publicity. Rukaeni et al. (2022) found that online marketing strategies utilised by educational institutions during the COVID-19 pandemic included: (i) promoting 7P excellence (marketing mix) packaged with interesting online content through social media; (ii) target market and social media platforms through segmentation, targeting, and positioning; and (iii) optimising organisational performance and ability to build good relationships with customers as effective marketing tools to increase public interest.

Ejime (2022) also noted that marketing public relations (MPR) is a promotional idea that gives quality and positive communication support to a product and an organisation, which makes MPR unique and pushes a brand without needing much advertising. Opoku (2022) further supports that the choice and use of attitudinal lexis with inscribed and up-scaled positive attitudes about the university's reputation are negotiated through a monoglossic stance to stimulate the interest of the audience and align them with their values, thus winning their loyalty.

Adzovie & Jibril (2022) and Magasi *et al.* (2022) observed that the outbreak of the novel COVID-19 has strengthened the adoption of e-marketing strategies, academic innovativeness, and technological growth and development. However, limited empirical data is available on key factors and sources of information that influenced prospective students' decisions to join various programmes at Mbeya University of Science and Technology. As observed, many higher learning institutions offer business-related studies compared to engineering sciences in Tanzania. This study, therefore, investigated factors that influenced prospective students to join programmes in Tanzania's higher learning institutions, with Mbeya University of Science and Technology as a case study to optimise marketing automation.

2.0 Materials and Methods

2.1 Study Area

This study was conducted at the Mbeya University of Science and Technology, located in Tanzania's Mbeya Region. This decision was influenced by the fact that the institution delivers competence-based diploma and bachelor's degree programmes through a marketing promotion approach under the university qualification framework (UQF). Furthermore, students enrol in business programmes through a variety of marketing strategies, just as they do in non-business programmes within and outside the versity. To meet the study's objective, a stratified proportionate number of students from UQF 4 (diploma first year) to UQF 8 (bachelor third year) were selected to participate in this research. The study sought to examine the sources of information that enabled potential students to enrol in specific programmes so that the institution could better optimise the same for future promotion.

2.2 Research Design and Sample Size

The current study used an explanatory cross-sectional research design with an equal chance of involvement for each respondent from different business programme levels (Neuman, 2014). The sampling frame is based on the university qualification framework (UQF 6, Diploma First Year), diploma (UQF 6, Diploma Third Year), and bachelor students from the College of Humanities and Business Studies specialisations. A stratified random

selection method was used to select a sample that was representative of the research population. The stratified random sampling technique was adopted since study findings could potentially vary across sub-groups and avoid over- or under-representation (Mwidege et al., 2014). Therefore, a sample of 384 was utilised in the study, which was computed using Cochran's (1997) formula, as illustrated in equation (i).

$$\frac{n=Z^2}{e^2} * pq \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \text{(i)}$$

Whereby: n stands for sample size, Z refers to the critical value of a suitable confidence level (in this case being 1.96 for a 95%), p stands for the proportion in the population of interest (in this case being 50%), q is 1-p, and e is the acceptable margin of error often set at 0.05.

$$\frac{n = 1.96^2}{0.05^2} * 0.5 * 0.5$$

n= 384

Therefore, the sample constituted 384 students.

Table1

Distribution of UQF Students Interviewed Based on Programs Levels

Categories	Frequency	Percept, %
UQF 6 (Diploma, 1st Year)	97	25.3
UQF 6(Diploma, 2nd Year)	81	21.1
UQF 8 (Bachelor, 1st Year)	92	24.0
UQF 8 (Bachelor, 2nd Year)	57	14.8
UQF 8 (Bachelor, 3rd Year)	57	14.8
Total	**384**	**100.0**

2.3 Data Collection Instruments

The questionnaire was designed to capture demographic information such as gender, age, and the course of study of students. Respondents were asked to rank a specific source of information based on how well it enabled them to access programmes of interest to which they had enrolled at MUST. Questionnaires were utilised because they are convenient for collecting data from students who express their opinions without being influenced by the researchers. The questionnaire incorporated closed-ended questions to discover factors that impacted potential students to enrol in programmes at Mbeya University of Science and Technology. The researchers personally administered questionnaires to the students in their separate departments. Similarly, respondents provided consent to participate in the study.

2.4 Quantitative Analysis of Factors Influencing Choices of Students' Interest Given Information Symmetry

The association between factors impacting higher learning marketing, socioeconomic features, and the business information reliability model was established. The study employed a multiple linear regression model analysis, which investigated multi-collinearity issues, link tests for model specification, variance inflationary components (Greene, 2018; Wooldridge, 2009), and causal logic (Leavy, 2017). Furthermore, information reliability was specified as a function of sex, participants/aspirants, employment status, and admission qualification. Hence, the information reliability model was expressed as follows:

$$\text{Informn\_ HLIs} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \varepsilon \quad ..(1)$$

Where:

β_0 = constant term; $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ are coefficients of variables that were estimated;

X_1 = Sex; X_2 = Participant/ HLIs beneficiary; X_3 = Age; X_4 = Employment status; $X_5 = \text{Entry\_ qualification}$; $X_6 = \text{Location}$; $X_7 = \text{Income level}$.

2.5 Data Analysis

Stata version 15 was used for data analysis, and both descriptive statistics and multiple regression techniques were used. This was to present a detailed depiction of the frequencies, percentages, and significant levels of

explanatory factors and the magnitude of their influence on decisions (Neuman, 2014).

3.0 Results

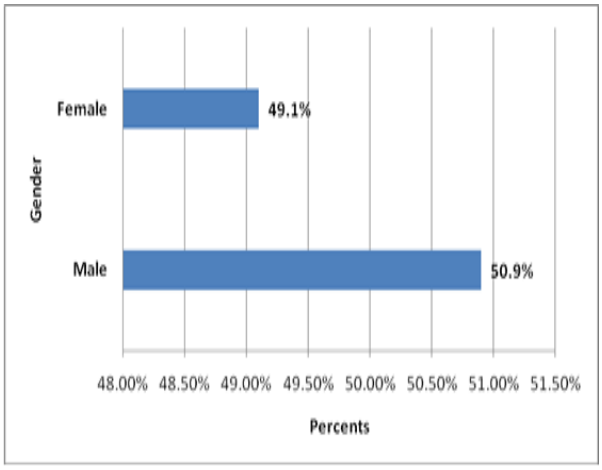
3.1 Demographic Information

3.1.1 Gender of Participants

The findings in Figure 2 show that 50.9% and 49.1% of students who participated were male and female, respectively. The results imply that, although both male and female students participated in the study, the sample consisted of slightly more male respondents. This suggests that business programmes attract all students, irrespective of gender.

Figure 2

Gender of Participants (n=384)

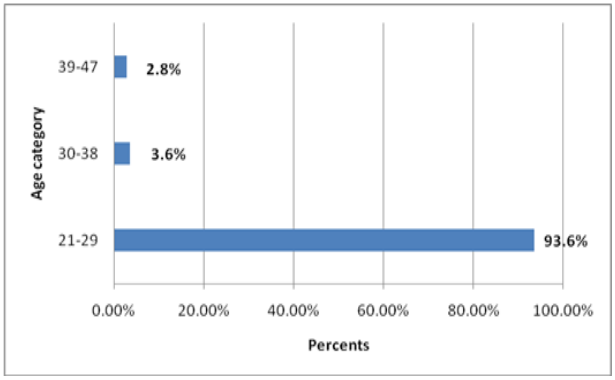


3.1.2 Age of Participants

Research findings in Figure 3 show that 93.6% of students are aged 21–29 years, followed by 3.6% aged 30-38 years and 1.8% aged 39–47 years. According to the findings, the majority (93.6%) of participants are between the ages of 21 and 29, which is a crucial transitional age for students to join higher learning institutions.

Figure 3

Age of Participants (n= 384)

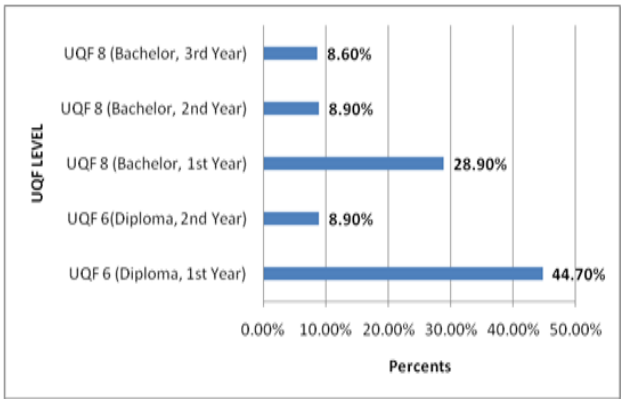


3.1.3 University Qualification Framework Levels

Figure 4 reveals that 44.7%, 28.9%, and 8.9% of students had joined UQF 6 (first year) and UQF 8, respectively, while 8.9% were bachelor students in various years. According to the findings, the majority of students enrolled in diploma-level programmes as a bridge to joining bachelor ograms. Findings indicate that when students join in their first year, they study general programmes while specialising in their courses of interest. Their prospective career interests often influence the choice of specialised courses, which is why the number tends to decrease on an annual basis (Pardiyono et al., 2021).

Figure 4

UQF Levels of Study of Participants (n=384)



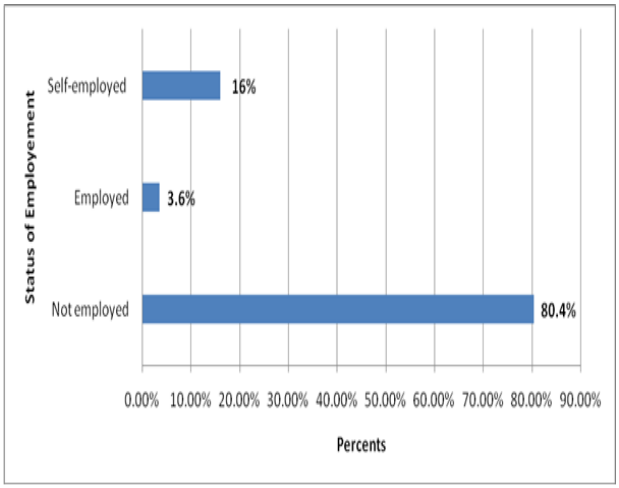
3.1.4 Employment Status of Participants

As revealed in Figure 5, 80.4% and 3.6% of students were unemployed and employed, respectively, while 16% were self-employed. The majority of participants (80.4%) were unemployed at the time they enrolled in a

higher education institution. The findings indicate that past education abilities obtained at the secondary level before enrolling in higher education have little influence on one's ability to find employment. Hung and Yen (2022) and Ejime (2022) highlight the relevance of the 4Cs in the marketing mix and students' employability upon graduation.

Figure 5

Employment Status of Participants (n=384)

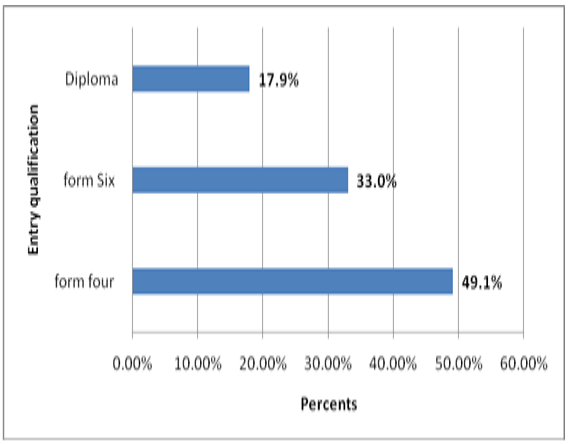


3.1.5 University Entry Qualification of Participants

Study findings in Figure 6 show that 49.1% and 33.0% of students had entry qualifications of Form 4 and Form 6, respectively, while 17.9% had diploma certificates. Findings reveal that the majority (49.1%) of participants are students from ordinary secondary education levels (form four). Results suggest that advanced and ordinary secondary education levels are the main catchment for enrolment in the competitive education industry. The current findings support those of Pardiyono et al. (2021), who found that the quality of services and excellent programmes provided by higher learning institutions influence external marketing and set cut-off points given entry competition.

Figure 6

Entry qualification of participants (n=384)

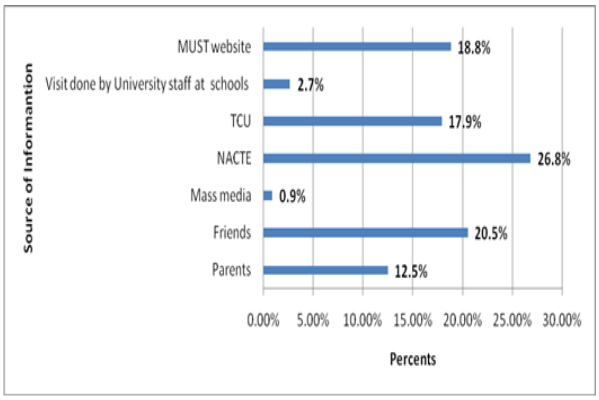


3.1.6 Sources of Information Accessed by Participants

The current findings (in Figure 7) demonstrate that 26.8%, followed by 20.5%, of students who enrolled in business management programmes obtained information from NACTE and Friends, respectively, while 0.9% obtained information from a visit by university staff to their schools and advertisements in the mass media. Hence, the majority of students obtained substantially more information from NACTE than from TCU, and much less from staff visits and mass media. This implies that individuals who went through NACTE accessed more information because they first sought award verification numbers after graduation to join universities. Furthermore, the findings indicate that strong ties between NACTE and university graduates raise the university's reputation for successful enrollment. Furthermore, the data suggest that the institution would be better off investing in relationships between NACTE, TCU, institution graduates, and the university website rather than staff visits and mass media. The current findings support Harbi and Ali's (2022); Jain et al.'s (2021); and Edumadze and Demuyakor's (2022) conclusions that digital has lowered information search expenses compared to the traditional manner of travelling from one location to another for the same cause.

Figure 7

Source of Information Participants Accessed (n=384)



3.2 Factors Influencing the Choice of Programs Given Information Symmetry

Multi-collinearity concerns and link tests for model design were tested using multiple linear regression analysis. There was no multi-collinearity problem because the mean-variance inflationary factor was 1.63, thus less than 10 (Greene, 2018), with adj R-squared = 0.4859. Furthermore, model specification (prediction variable, _hat, and squared prediction variable, _hatsq) was not significant at p > 0.05, indicating that the model was correctly described (Table 2).

Findings in Table 2 showed that prospective students' education level and entry qualifications are positively correlated with the search for information for programmes in higher learning institutions and statistically significant at p<0.05 and p< 0.01 levels, respectively. Results suggest that as the education level of prospective students and entry qualifications increase by one percent, it influences information to search for programmes offered by higher learning institutions by 7.7% and 21.05%, respectively. The present findings support those of Sujatmikanto et al. (2022) and Opoku (2022), who concluded that excellent programmes offered by HLIs attract prospective students to join.

Moreover, findings show that the income level of prospective students is positive and significantly related to the choice of programmes given information at p<0.01 level. Findings reveal that as the income of prospective students increases by one percent, the search for information for higher learning institutions programmes increases by 7.8%. According to the findings, prospective students are less likely to pursue higher education if they have the option of working or participating in any activity that raises their standard of living by generating income (Hung and Yen, 2022; Akbar & Lawson, 2022).

Table 2

Regression Coefficients for Factors Influencing the Choice of Programs Given Information

Variable	***Coef.***	***Std. Err.***	***t***	***P>|t|***
Sex	0.0303596	0.0694566	0.44	0.663
Participant – educ level	0.0770879	0.0301132	2.56	0.012
Age	-0.0000251	0.0102167	-0.00	0.998
Employment status	0.0290739	0.0508326	0.57	0.569
Entry_ qualification	0.2105107	0.0704961	2.99	0.004
Location	0.0250589	0.2850393	. 0.09	0.930
Income level	-0.0785844	0.0286215	-2.75	0.007
_Constant	0.5882355	0.3428438	1.72	0.089

Mean VIF = 1.65; R-squared = 0.4011; Adj R-squared = 0.3709

4.0 Conclusions and Recommendations

Based on the findings, students' education level and entry qualifications are positively correlated with the search for information for programmes in higher learning institutions and are statistically significant at p<0.05 and p< 0.01 levels. Furthermore, the income level of prospective students is negatively correlated with their information search for higher learning institutions and is statistically significant at p<0.01 level. It is therefore concluded that education level and entry qualification to the respective institutions influence information search on opportunities for joining universities. Furthermore, it is concluded that prospective students' income levels lower the need for information searches for further studies as they are satisfied with their source of livelihood. Therefore, it is recommended that higher learning institutions ensure entry qualifications are accessible to prospective students and commit to quality programmes that

enhance students' motivation to be self-employed after graduation.

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