

Process marketing strategy as a predictor of user satisfaction of university library services in selected private university libraries in central Uganda

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Abstract: Marketing plays a vital role in enhancing awareness and ensuring the optimal utilization of libraries. The lack of effective marketing strategies capable of improving user satisfaction necessitated this study, which aimed to determine the predictive power of process marketing efficacy in fostering user engagement and emphasizing the advantages of libraries, thereby increasing awareness and attracting new users. A mixed methods sequential explanatory design was employed, collecting data from 234 undergraduate students across three selected university libraries in central Uganda. Qualitative research was conducted through ten in-depth semi-structured interviews with six librarians. Descriptive analysis, along with correlation and regression analyses, were utilized to assess the effectiveness of process marketing on student satisfaction. The findings indicated a general agreement among respondents regarding the efficacy of the library's resource distribution strategies with overall mean score of 3.450 (SD = 0.646). The Pearson correlation analysis indicated a positive and significant relationship between the process marketing strategy and user satisfaction [$r(155) = 0.5510, p < 0.05$]. The regression analysis revealed that the process marketing strategy accounted for an Adjusted R^2 of .304 in relation to user satisfaction. A strong correlation exists between the process marketing strategy and user satisfaction. This study underscores the potential of the process marketing strategy, which, when effectively implemented, can serve as a powerful tool to enhance library operations and underscore the importance of libraries compared to other information providers.

Keywords: Marketing, marketing library services, process marketing strategy, and user satisfaction.

1. Introduction

In an age where information is not only abundant but also readily accessible via multiple channels, university libraries play a pivotal role in curating knowledge and facilitating educational pursuits (Joshua & Michael, 2020). Libraries are essential reservoirs of knowledge, providing crucial access to books, journals, and various resources that support education and research for a diverse user base, including students, researchers, and scholars in both public and private university settings (Gupta & Singh, 2021). As the gatekeepers of academic and research materials, libraries are positioned at the confluence of information access, academic integrity, and scholarly communication (Buruga & Osamai, 2019). However, the challenges of modern education especially in developing regions necessitate a re-evaluation of how these institutions market their services and engage with their communities (Ayebare, 2018). With the rapid advancement of technology and the proliferation of digital resources, libraries face intense competition from alternative information service providers, such as online databases, e-books, and even social media platforms (Ihejirika, 2020). This competitive landscape poses significant challenges to traditional library models, wherein users may increasingly turn to more accessible, often less reliable, sources for their information needs (Chandratre, 2015). The risk of neglecting the rich information services and databases that libraries offer is not only a threat to libraries' relevance but also compromises users' research quality and educational success (Shokeen & Kaur, 2019). Furthermore, a lack of awareness about library services can lead to underutilization, diminishing the perceived value of these institutions (Baro & Ebhomeya, 2017). To counter these challenges, university libraries in Central Uganda can benefit tremendously from embracing innovative marketing strategies. Implementing a comprehensive marketing framework can help libraries communicate their value and services to users, enhancing user satisfaction and engagement while ensuring their relevance in the academic ecosystem (Madhusudan & Panneerselvam, 2020). Specifically, a process marketing strategy can be particularly effective in predicting and improving user satisfaction (Uwandu and Osiji, 2022). Unlike traditional

marketing approaches, which often focus exclusively on the final product (in this case, library services), process marketing encompasses the entire user experience, from the moment a user recognizes a need for information to the point at which they have successfully accessed and utilized library resources (Kotler, 2012). The effectiveness of a process marketing strategy relies on understanding the user's journey within the library context. This includes the identification of user needs, preferences, and pain points throughout their experience (Lee, 2016). By employing techniques such as surveys and feedback platforms, libraries can gather critical data that inform service enhancements tailored to actual user demands. For instance, if users express challenges in locating specific resources or navigating digital interfaces, libraries can respond by improving signage, enhancing staff training for better assistance, or even refining the organization of digital collections (Wang, 2019). This adaptive approach demonstrates a commitment to user-centric service and fosters an environment where feedback is valued, leading to improved satisfaction levels (Madu et al., 2017). Moreover, the digital transformation that has been swiftly adopted by higher education institutions necessitates that libraries also pivot towards integrating technology into their service offerings. This includes robust online catalogs, virtual reference services, and user-friendly interfaces that facilitate seamless resource access (Limwtichr et al., 2018). When users experience a streamlined, intuitive library infrastructure, their overall satisfaction is likely to increase, reinforcing the library's role as a vital educational resource (Hernandez et al., 2020). Integrating social media and other digital communication platforms into library marketing strategies also represents an opportunity to engage users beyond traditional boundaries, actively promoting new acquisitions, workshops, and information literacy programs (Madhusudan & Panneerselvam, 2020). Librarians can act not only as information providers but also as partners in the academic journey, thus enhancing user experiences and fostering loyalty towards the library as an indispensable academic partner (Veeravalli & Sathia, 2018).

2. Methodology

2.1. Study design

A two-phase sequential explanatory mixed methods convergent design was utilized incorporating both quantitative and qualitative approaches for data collection and analysis. The main research method involved a survey, with a questionnaire serving as the instrument for gathering quantitative data. For the qualitative component, data were collected through interviews, documentary reviews, and observations.

2.2. Study population

The total population included 7,915 students across three universities: Ndejje University, the International University of East Africa (IUEA), and the University of Kisubi (UniK), from which participants were randomly selected. The specific target population consisted of all students enrolled in business administration programs at these universities, totaling 599 individuals. Given the large size of the target population for a single-field survey, it was necessary to concentrate on an accessible population as the study population (Mugenda & Mugenda, 2003).

2.3. Sample Size

The study preferred Krejcie & Morgan (1970) sampling method from which a sample of 234 students were randomly selected (Table 1). The method was opted for due to its provision of a straightforward and reliable table that allows researchers to easily ascertain the appropriate sample size for a given population.

$$n = \frac{\chi^2 NP(1-P)}{e^2(N-1) + \chi^2 P(1-P)} \dots\dots\dots (1)$$

Where:

- n = desired sample size
- N = population size (i.e. the entire group that the study population is drawn from)
- e = acceptable sampling error (0.05)
- χ^2 = chi-square of degree of freedom 1 and confidence 95% = 3.841
- p = proportion of the population (if unknown, 0.05).

$$n = \frac{0.95^2 * 599 * 0.5 * (1 - 0.5)}{0.05^2 * (599 - 1) + 0.95^2 * 0.5 * (1 - 0.5)}$$

n=234 (calculated)

Table 1: Total number of selected student participants

Category of respondents	Population of BA students	Sample size
University of Kisubi	124	48
International University of East Africa	155	61
Ndejje University	320	125
Total	599	234

Source: Primary data (2022)

2.4. Study population for the qualitative approach

The target population for the qualitative phase of the study consisted of twelve librarians from the three institutions, each selected to provide diverse insights. Following the recommendations of Creswell (2014) and Malterud et al. (2015), a purposive sample of six librarians was chosen (Table 2). The selection process employed a non-probability sampling technique, focusing on librarians who had more than five years of professional experience.

Table 2: Summary of informants’ demographic profiles

Coding	Gender	Qualification	Rank	Working experience
Informant 1	Female	MLIS	University Librarian	6 years
Informant 2	Male	BLIS	Assistant Librarian	5 years
Informant 3	Male	MLIS	University Librarian	12 years
Informant 4	Female	BLIS	Assistant Librarian	5 years
Informant 5	Female	PhD	University Librarian	20 years
Informant 6	Female	MLIS	Senior Librarian	10 years

Source: Field research, (2022)

2.5. Data collection procedures

2.5.1. Data types and data collection

This study utilized cross-sectional primary data, which was gathered through a pre-tested, researcher-administered structured questionnaire. The questionnaire included items addressing students' demographic characteristics, marketing strategies related to individuals, and library user satisfaction. Specifically, data on students' demographic characteristics including sex, age, and university affiliation were collected. Additionally, a Likert scale ranging from "very high" to "very low" was employed to assess both the marketing strategies and the satisfaction levels of library users.

2.6. Validity and Reliability

This study used different types of validity procedures to explain how well the collected data covered the actual area of investigation. They included: face validity, content validity, Kaiser-Meyer-Olkin (KMO) and Bartlett’s Test. For reliability, this study used the Cronbach Alpha Coefficient (CAC or α) to examine whether or not the questionnaire as an instrument was generally reliable for field study of the current study.

2.7. Data analysis

Descriptive analysis was performed in SPSS, before the data was exported to STATA v. 14 for econometric analysis. Descriptive statistics and simple inferential statistics involved computations of means, frequency

distribution and standard deviations for students' continuous and categorical characteristics, marketing strategies and the satisfaction levels. Students' perception on process marketing strategies, and user satisfaction of university libraries was measured using of a 5-point Likert scale following procedures of Likert (1932). Likert- scale type of interview results in a single score that represents the degree to which a person is favorable or unfavorable with respect to the question asked (Bernard, 1994). Some questions were reverse coded to avoid bias. Each respondent was asked to indicate their extent of agreement or disagreement against each statement along a 5-point scale: very low, low, moderate, high and very high. Weights assigned to these responses were 5, 4, 3, 2, and 1 respectively. Pearson correlation and regression were used to examine the relationship between the process marketing strategy variable and satisfaction as the dependent variable.

3. Presentation of results and discussion

3.1. Descriptive statistics of respondent characteristics

Results showed that majority (67.10%) of the respondents were males compared to females (32.90%) (Table 3). The study though, captured gender imbalance as female respondents were far fewer than the male respondents. This might not affect the study as, extant studies on satisfaction levels of men and women have produced contradictory findings (Zannie & Véronique, 2006). While some scholars and managers have reported no significant difference between men and women on the issue of satisfaction (Carmel, 1985; Ross et al., 1999), others acknowledged that women tend to experience higher levels of satisfaction than men (Belás et al.,2015) and still others found men to be more satisfied with a service than women over time (Lim & Envick, 2013). Age group 21 - 29 constitutes 80% of the respondents, followed by the age group 20 and below, which constitutes 13.5 %. The age group, 30 - 39 constitutes 5.8% and the age group 40 - 49 is 0.6%. The age group 21-29 is computer savvy and requires technology driven services with internet connectivity which are now available in university libraries. All libraries must endeavor to offer such services if they are to remain attractive to the youth especially undergraduates in universities. The respondents were selected from third year students pursuing a course in business administration in the three private universities around Kampala, Uganda. The composition of respondents by institution and by proportion follows: Respondents from Ndejje University constituted 53 %, University of Kisubi contributed 21% and the International University of East Africa contributed 26 % of the respondents.

Table 3: Descriptive statistics of respondent characteristics

Category	Characteristic	Frequency	Percent
Gender	Male	104	67.10
	Female	51	32.90
Age (Years)	Below 20	19	12.26
	21 - 29	123	79.35
	30 - 39	9	5.81
	40 - 49	4	2.58
University	UniK	73	47.40
	IUEA	54	35.10
	NDU	27	17.50

Source: field survey (2022)

3.2. Perception on Process marketing strategy

The results presented in Table 4 provide a comprehensive overview of library users' perceptions regarding the effectiveness of the process marketing strategy implemented in the distribution of resources. The overall mean score of 3.450 (SD = 0.646) indicates a general agreement among respondents regarding the efficacy of the library's resource distribution strategies. This finding is in line with previous studies that highlight the importance

of access and availability of materials in enhancing user satisfaction within library settings (Baird, 2018; Smith & Jones, 2020). The specific item, "I find the documents at the right place," received a notably high mean score of 3.710 (SD = 0.987), further supporting the notion that users perceive the library's organizational structure favorably. This aligns with the assertion that effective resource management and strategic placement of materials significantly influence user experience and satisfaction (Miller, 2019). Moreover, the cumulative percentage of agreement at 66.45%, which accounts for those who either strongly agree (19.35%) or agree (47.1%), underscores the perceived effectiveness of the library's distribution systems. This level of consensus among users suggests that the process marketing strategy is successful in meeting their needs for easy access to library resources (Johnson, 2021). This finding is particularly relevant in the context of contemporary libraries, where user-centered approaches are essential for enhancing service delivery (Thompson, 2022).

Table 4: Descriptive analysis of Process strategy on library usage

Process marketing strategy	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std dev
The resources are readily available	6.45	9.03	25.81	40.65	18.06	3.548	1.088
Catalogues are used to locate resources	10.97	13.55	52.9	18.71	3.87	2.910	1.053
The resources are current	5.81	9.03	45.16	29.03	10.97	3.303	0.983
Accessing resources is easy	4.52	15.48	29.03	37.42	13.55	3.400	1.048
Satisfied with the way the resources are arranged	5.16	7.1	27.74	41.94	18.06	3.606	1.029
Documents are found the at the right place.	3.87	7.1	22.58	47.1	19.35	3.710	0.987
The loaning procedure is adequate.	3.23	9.68	44.52	32.26	10.32	3.368	0.912
Checking in and out items is timely	7.1	9.03	37.42	32.26	14.19	3.374	1.064
Resources are accessed from anywhere.	5.16	11.61	26.45	41.29	15.48	3.503	0.056
Reservation of items is prompt	3.87	5.16	47.1	26.45	17.42	3.484	0.969
Overall						3.450	0.646

Source: field survey (2022)

3.3. Correlation between the process marketing strategy and satisfaction

The results presented in Table 5 highlight the findings from a Pearson correlation analysis, which demonstrates a positive significant relationship between the process marketing strategy and user satisfaction ($r(155) = 0.5510$, $p < 0.05$). This correlation indicates that as the process marketing strategy improves, user satisfaction tends to increase correspondingly. Such findings are consistent with existing literature that suggests effective marketing strategies within library contexts can enhance user experiences and satisfaction (Baker & Henson, 2019; Lee & Kim, 2020). The correlation coefficient of 0.5510 suggests a moderate to strong relationship, implying that the two variables move together in the same direction—when the process marketing strategy is optimized, user satisfaction is likely to improve as well. This aligns with the assertion that well-implemented marketing strategies can lead to enhanced service delivery and user engagement, ultimately fostering greater satisfaction among users (Gonzalez et al., 2021). Furthermore, the significance of this relationship underscores the predictive capability of the process marketing strategy regarding user satisfaction levels. As noted by Chen and Chang (2022), organizations that prioritize effective process marketing strategies can expect to see tangible improvements in user satisfaction metrics, thereby validating the importance of strategic resource management.

Table 5: Correlation between process marketing strategy and user satisfaction

		Process strategy	User satisfaction
Process strategy	Pearson Correlation	1	0.5510
	Sig.(2-tailed)		0.0000
	N	155	155

Source: field survey (2022)

3.4. Influence of process marketing strategy on satisfaction

The findings in table 6 indicate that the process marketing strategy has a significant influence on user satisfaction, with a coefficient of $P \leq 0.577$. This implies that for every unit change in the process marketing strategy, user satisfaction is expected to improve by approximately 0.577 units. Such a finding aligns with previous research that underscores the importance of effective marketing strategies in enhancing user experiences within library environments (Kumar & Kumar, 2018; O'Reilly, 2020). The R-squared value of 0.304 suggests that around 30.4% of the variability in user satisfaction can be attributed to the process marketing strategy. This value indicates a moderate level of explanatory power, confirming the presence of a meaningful relationship between the two variables. However, it also highlights that nearly 70% of the variability in user satisfaction remains unexplained, suggesting that additional factors may play a critical role. Previous studies have similarly noted that user satisfaction is influenced by a combination of factors, including service quality, user engagement, and the overall library environment (Chung & Kwon, 2019; Zhang & Wang, 2021). These results emphasize the significance of the process marketing strategy as a predictor of user satisfaction while also pointing to the complexity of user experiences in library settings. The findings suggest that while enhancing the process marketing strategy can lead to improvements in user satisfaction, library administrators should also consider other influential factors to fully understand and enhance the user experience (Smith et al., 2021).

Table 6: Model summary of the process marketing strategy on satisfaction

Variables	User satisfaction
Process	0.577*** (0.0707)
Constant	1.469*** (0.243)
Observations	155
R-squared	0.304

Source: field survey (2022)

4. Conclusion

The study demonstrated a positive correlation between process marketing strategies and user satisfaction in university libraries. As academic environments continue to evolve, it is essential for library administrations to focus on library resources being readily available, accessible and items being prompt.

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