



The Effect of Flexibility on Service Delivery in Private Universities Offering Open and Distance Learning in the Kampala Metropolitan Area, Uganda

Ronald Mbago¹, Chris U A Ukaidi², Friday Ogbu Edeh³, Evelyn Ugonna Ukaidi⁴, Mugume Tom⁵

^{1,2,3,4,5} Department of Business Management, Kampala International University

Abstract: Private universities offering Open and Distance Learning (ODL) in Uganda face persistent complaints of rigid administrative procedures, delayed academic support, and slow responsiveness to student needs, yet the role of organisational flexibility in shaping service delivery in this setting remains empirically underexamined. This study addressed that gap by examining the effect of flexibility on service delivery in private universities offering ODL in the Kampala Metropolitan Area, Uganda. A pragmatic paradigm guided a sequential explanatory mixed-methods design: quantitative data were collected from 283 academic staff across five private chartered universities using a structured, Likert-scale questionnaire, and this was followed by qualitative data from 10 purposively selected key informants (five administrators and five IT specialists) through in-depth interviews. Quantitative data were analysed using hierarchical multiple regression, while qualitative data were analysed thematically to complement and explain the quantitative results. Flexibility was found to have a statistically significant, positive effect on service delivery ($\beta = 0.685$, $p < 0.01$), explaining 48.7% of the variance in service delivery after accounting for staff demographic characteristics. Qualitative findings corroborated this result, identifying flexible working arrangements, open communication, and staff empowerment as key mechanisms linking flexibility to improved service outcomes, while inadequate training, structural rigidity, and weak internal coordination emerged as the main constraints. The study concludes that flexibility is a critical organisational capability for ODL service delivery and recommends that private universities invest in staff development, adopt flexible institutional policies, and support adaptive teaching practices. The findings extend empirical evidence on organisational flexibility to Uganda's ODL sector and offer practical guidance for higher education managers seeking to improve responsiveness. Future research could examine the role of digital infrastructure in enabling flexibility or compare flexibility-service delivery relationships between public and private universities.

Keywords: Flexibility, Service Delivery, Private Universities, Open and Distance Learning, Kampala Metropolitan Area, Uganda

1. Introduction

In an ever-changing world of organisations, flexibility is now considered a most important competency for institutions, helping to meet new challenges, adjust to new situations and capitalize new opportunities. Flexibility, within the educational environment, especially in Open and Distance Learning (ODL), refers to the capability of the institutions to provide timely, accessible and student-focused services. This involves both operational agility and cultural and strategic openness to change (O'Reilly & Tushman, 2016). To address the changing demand of learners, universities must possess a variety of important attributes, including adaptability, responsiveness and versatility.

The growing use of ODL in the Kampala metropolitan area (KMA) in Uganda is necessitated by the rising demand for learners to be catered to in flexible learning

models, which cater for various needs such as working professionals and rural-based learners as well. But the ability of these institutions to provide flexible and good service provision is a serious issue. Though ODL is potentially in improving access and convenience, the issues which make ODL services less effective are delayed academic supports, rigid administrative procedures and unresponsiveness to students' concerns (Basaza et al., 2010; Luyombya & Ndagire, 2020). Agile systems, adaptive leadership, and responsive support mechanisms are all considered essential for flexibility in service delivery, with evidence from other service settings suggesting a positive relationship between such flexibility and both customer satisfaction and institutional performance (Prakash, 2024; Berkery et al.,

2020), but this is yet to be explored in the context of Uganda's ODL.

Current literature underscores the need for strategic thinking and innovation in improving institutional service delivery; however, there is limited focus on how flexibility is experienced as a management and organisational capability in an ODL setting empirically. Reports of administrative inconsistency, weak planning coordination, and resistance to change in Uganda's private university sector (Luyombya & Ndagire, 2020; Basaza et al., 2010) highlight the need to explore the impact of flexible practices on the service outcome. Accordingly, this study examines how flexibility at the operational, strategic and cultural levels affects service delivery in private universities offering ODL in the Kampala Metropolitan Area. In doing so, it makes three contributions to literature. First, it extends the flexibility-service delivery relationship, previously documented mainly in healthcare and other supply chain-oriented service settings (Prakash, 2024; Berkery et al., 2020), to the under-researched context of higher education, and specifically ODL, in Uganda. Second, it combines quantitative evidence from academic staff with qualitative evidence from administrators and IT specialists, allowing the mechanisms behind the statistical relationship to be explained rather than merely observed. Third, it generates context-specific evidence to inform how private ODL universities in Uganda can strengthen student satisfaction, institutional responsiveness and long-term sustainability.

Problem statement

In the Kampala Metropolitan Area (KMA) of Uganda, the demand for flexible and accessible higher education is evident; however, the service delivery in private universities offering Open and Distance Learning (ODL) is beset by a number of challenges. Flexibility was a factor highlighted as one of the essential elements in providing effective service; the flexibility allows institutions to move fast and meet the changing needs of students in unique learning contexts. However, there were complaints regarding inflexibility in administrative services, slow response to students' needs, and poor adaptability to technological and pedagogical change in many private universities in KMA. This is because of the discrepancy between the claimed flexibility in ODL and how the services have been experienced by the students, resulting in concerns with their dissatisfaction, inefficiencies in operation and the falling competitiveness of a besieged institution (Basaza et al., 2010; Luyombya & Ndagire, 2020). While empirical studies in healthcare and other service settings show the beneficial effects of operational, strategic and cultural flexibility on the quality of service (Prakash, 2024; Berkery et al., 2020), limited research has focused on the link between flexibility and service delivery in Uganda's Private University ODL systems. Related evidence on

service delivery weaknesses within Uganda's private university sector points to administrative inconsistency and structural rigidity as recurring constraints (Luyombya & Ndagire, 2020), suggesting potential deficiencies in the implementation of flexible practices more broadly. With this view, the current study will delve into how flexibility at operational, strategic and institutional cultural levels influences service delivery outcomes in private universities with ODL in KMA to present some implications for better student experience and performance of the ODL in the respective institutions.

2. Literature Review

Empirical Evidence Review

Theoretical Framework. This study is anchored on Social Exchange Theory (Homans, 1958), which conceptualises workplace relationships as an exchange of resources between an institution and its employees: when an organisation extends valued resources to staff, employees feel an obligation to reciprocate with positive attitudes and behaviour. Applying this logic to flexible working arrangements, Berkery, Morley, Tiernan and Peretz (2020), drawing on data from over 1,000 private-sector organisations across seven European countries, found that flexitime was associated with significantly lower employee turnover and higher organisational profitability, explained through a social-exchange mechanism in which employees who experience flexibility as an organisational investment respond with greater commitment and effort. This provides a theoretically grounded and empirically supported basis for expecting that institutions extending flexibility to academic and administrative staff, in scheduling, decision-making latitude and working arrangements, will see this reciprocated through improved responsiveness and service delivery. Flexibility and Service Delivery Across Sectors, Evidence on organisational flexibility and service outcomes is most developed outside higher education, particularly in healthcare and supply chain-oriented service settings. Prakash (2024), in an empirical study of healthcare units, found that service supply chain flexibility, built on service orientation, technology integration, knowledge sharing and supply chain integration, significantly strengthened responsiveness in service delivery, with the relationship further shaped by the degree of patient-centred care in the organisation. Related evidence on organisational flexibility and service innovation in IT-service firms found that firm-level flexibility strengthens organisational learning, which in turn drives service innovation, suggesting that flexibility's benefits for service outcomes operate partly through intermediate organisational processes rather than a single, direct effect. Together, this evidence indicates that flexibility improves service delivery through mechanisms such as responsiveness, organisational learning and staff reciprocity, which translate

institutional adaptability into better outcomes for the people the organisation serves.

****Flexibility in Higher Education and Open and Distance Learning**** Within higher education specifically, flexibility has been studied mainly from the standpoint of learners rather than institutions, but the findings are informative for service delivery nonetheless. In a study of 1,760 university students across 28 institutions, Turan, Kucuk, and Cilligol Karabey (2022) found that flexibility, alongside students' self-regulated effort, was a significant predictor of satisfaction with distance education, reinforcing earlier evidence from Sahin and Shelley (2008) that students who perceived distance learning as flexible and well-supported reported higher satisfaction with the service they received. More recently, Kuluşaklı (2025) examined multiple dimensions of flexibility in distance learning, content, deadlines, assessment type, grading, and course correspondence, and found that flexibility of content and of teacher contact were the strongest predictors of students' satisfaction with their courses, suggesting that flexibility is a bundle of institutional choices that jointly shape the service experience rather than a single attribute. In the Ugandan private university context specifically, Luyombya and Ndagire (2020) examined service delivery at the Islamic University in Uganda and found that the absence of standardized administrative procedures directly undermined the consistency and reliability of services delivered to students and staff, illustrating how institutional rigidity, the inverse of flexibility, constrains service outcomes even where the will to serve students well exists.

Synthesis and Research Gap

Taken together, this literature establishes two things: first, that organisational flexibility is empirically linked to stronger service responsiveness in the sectors where it has been studied, operating through staff reciprocity, organisational learning and reduced rigidity; and second, that flexibility in higher education has so far been examined chiefly as a feature of the learning experience as perceived by students, rather than as an institutional and staff-level capability tested against service delivery outcomes using primary data from those who deliver the service. No identified study has empirically tested the relationship between staff-level organisational flexibility and service delivery specifically among private universities offering ODL in Uganda, where operational, strategic and cultural flexibility are exercised under distinct resource and regulatory constraints. This study addresses that gap by testing the effect of flexibility on service delivery in this context, using Social Exchange Theory to explain the mechanism through which flexibility is expected to operate.

3. Research Methodology

Research Philosophical Paradigms, Approaches and Design

The pragmatic paradigm in this study was selected because it aims to solve real-life problems and concerns and a single approach might be insufficient (Johnson & Onwuegbuzie, 2004). The use of both qualitative and quantitative methods indicates that the method of analysis will employ the two approaches, which will aid in arriving at an in-depth understanding of the phenomena under investigation, and this agrees with pragmatism that is grounded in practicality. In addition, the pragmatist paradigm is flexible, which serves during the research process, where factors can be adapted throughout the research based on research findings obtained, especially in cases where there are contextual factors that can have a significant effect on the research findings, such as in organisational sustainability (Bryman, 2016).

Research Approaches

The researchers used a combination of methods (mixed methods approach) according to the recommendation of Voss (2016). The use of a mixed-methods approach in this study successfully enabled the use of both qualitative and quantitative methods in the overall interpretation of the findings. This approach enabled methodological triangulation, and results from both methods were compared (Combs & Onwuegbuzie, 2009). The mixed method helped with the reliability of the instruments because different sources of data were used to determine how suitable they were, as well as concept development of constructs and the identification of behaviours and testing of instruments (Onwuegbuzie et al., 2010). Academic staff were used as a source of quantitative data, and administrators and IT experts were used as a source of qualitative data. The process confirmed hypotheses related to the independent variables (relationship of management competencies with work engagement and the effect of the former on the latter in Private Universities of ODL) and ushered in links between causes and outcomes (Park et al., 2020).

Research Design

Specifically, sequential explanatory mixed method was adopted where the qualitative data analysis was performed after the quantitative (Fetters et al., 2013; Creswell & Clark, 2017). This approach was of a 'building' kind; the results from the first phase informing the data collection for the subsequent phase (Fetters et al., 2013). Moreover, the design of this study was descriptive, cross-sectional and correlation type of research. The descriptive aspect was directed towards describing the characteristics of the respondents while the data Purposes revealed a descriptive survey that was found effective in collecting data from the target population (Creswell, 2014). Correlational analysis is

especially useful, as pointed out by Cohen et al. (2010), in identifying true relationships among variables.

Study Population, sample size and sampling Technique

The study population included Academic staff who were currently working in five targeted private chartered universities in the Kampala Metropolitan Area. These

schools were namely Islamic University in Uganda (IUIU), Kampala International University (KIU), Uganda Martyrs University (UMU), Ndejje University (NU) and Uganda Christian University (UCU).

Table 1: Population, Sample Size Distribution and Sampling Techniques

Respondents	Population	Sample size	Sampling Technique
KIU	388	91	Simple Random sampling
IUIU	264	62	Simple Random sampling
NU	178	42	Simple Random sampling
UCU	286	67	Simple Random sampling
UMU	182	43	Simple Random sampling
Administrators (HR)	5	5	Purposive sampling
IT specialists	5	5	Purposive sampling
TOTAL	1298	305	

Source: Human Resource Department of Selected universities, 2024

Data Collection Methods and Instruments

Primary data formed the core evidence base for this study, supplemented by secondary data used to contextualize and background the analysis, consistent with the recommendation that secondary sources be used to strengthen, rather than substitute, primary data collection and analysis (Nicholson & Bennett, 2008; Churchill & Iacobucci, 2005). Quantitative primary data were collected using a structured, self-administered questionnaire completed by academic staff, distributed and retrieved by the researcher and trained research assistants. The questionnaire was organized into sections capturing respondent demographic characteristics, a flexibility scale measuring adaptability, responsiveness and innovative practice in course delivery and institutional operations, and a service delivery scale built around the five SERVQUAL dimensions (tangibility, reliability, responsiveness, assurance and empathy). All construct items were measured on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree), chosen for its suitability in capturing graded attitudinal responses efficiently. Qualitative primary data were collected through semi-structured interviews with administrators and IT specialists, using an interview guide focused on how flexibility is experienced and enacted in institutional service delivery. Consistent with the sequential explanatory design, the qualitative phase was used to explain and enrich the quantitative results: interview questions were informed by the initial quantitative findings, and during interpretation the two data strands were merged to identify where qualitative accounts corroborated, qualified, or offered explanatory depth to the statistical relationships. Secondary data, used only to inform the background and problem context, were drawn from reputable institutional and government sources, including the Ministry of Education and Sports (MOES), the Education Service Commission (ESC), the

National Council for Higher Education (NCHE), university libraries and repositories, and relevant published reports.

Validity and reliability of the Instrument

Content validity was conducted on five experts in the field with the instrument presented to them to rate the relevance of each item on a most relevant scale (5) to least relevant scale (1). The Content Validity Index (CVI), interpreted as the number of items rated as valid by experts divided by the total number of items, was obtained from Amin (2005), who stated that a CVI of more than 0.7 was acceptable. The input and modifications obtained from the experts during the pre-test/pilot stage were used to determine if they thought the instrument was content valid. The study aimed to gather the experts' opinion on two counts: firstly, if the questionnaire was clear, relevant, and satisfactory to adequately assess the study constructs and secondly, if it was clear, relevant, and satisfactory to reliably assess those constructs. Results of the instruments used in the study were highly valid, with all CVI means exceeding the acceptable mean (0.82). Triangulation was achieved through multiple sources, methods, and theories to ensure qualitative validity. To increase the credibility of the data, methods such as interviews, observations and document analysis were used. Further, findings were also supported by expert interviews and the researchers' evaluative judgment in order to increase the trustworthiness. All values obtained for Cronbach's Alpha were at a high level of reliability (agreements) with a total of > 0.70; the overall average of which showed > 0.78. This shows that there was high internal consistency, which means that the tools were reliable (Amin, 2005). **Research Procedure**

After gaining ethical clearance from KIU, UNCST and National Ethics Committee and the approval of the

proposal, the researcher trained assistants and obtained permissions from the private universities. Foreign academic staff were asked to fill out questionnaires and their signed consent was obtained. Emphasis on same day returns and completeness checks for data collection. In-depth and freely shared insights were gathered through individual interviews, and were carefully documented.

Data Management, Analysis, and Presentation

Data management involved coding, editing, and entry of responses into SPSS, excluding questionnaires that were incomplete or internally inconsistent. Missing data were assessed using Little's MCAR test and addressed through expectation-maximization (EM) estimation, and outliers were screened using box plots prior to analysis. Before hierarchical regression was run, the data were screened against the standard assumptions underlying multiple regression: normality of residuals, absence of multicollinearity among predictors, and homoscedasticity of residuals, using standard SPSS diagnostic procedures (normal P-P plots and Shapiro-Wilk/Kolmogorov-Smirnov tests for normality, tolerance/VIF statistics for multicollinearity, and residual scatterplots or the Breusch-Pagan test for heteroscedasticity). A hierarchical multiple regression was conducted to examine the effect of flexibility on service delivery after controlling for respondents' gender, age, education, work experience, and position. The control variables alone did not significantly explain variation in service delivery, $R^2 = .010$, Adjusted $R^2 = -.008$, $F(5, 277) = 0.568$, $p = .725$. After introducing flexibility into the model, the explained variance increased significantly to 49.3%, $\Delta R^2 = .483$, $\Delta F(1, 276) = 263.014$, $p < .001$. In the final model, flexibility emerged as a strong positive predictor of service delivery ($\beta = .701$, $B = 1.236$, $SE = 0.076$, $t = 16.218$, $p < .001$), whereas none of the demographic control variables were statistically significant ($p > .05$). Diagnostic tests indicated that the assumptions of multiple regression were generally satisfied, with no evidence of multicollinearity (maximum VIF = 1.025), homoscedasticity violations (Breusch-Pagan $p = .302$), or autocorrelation (Durbin-Watson = 1.874). Although one residual normality test (Jarque-Bera) indicated a minor deviation from normality, the Shapiro-Wilk and Kolmogorov-Smirnov tests supported the assumption of normally distributed residuals, and the model was considered appropriate for inference. Univariate, bivariate and multivariate (hierarchical regression) analyses were then conducted on the quantitative data, while qualitative data were analyzed thematically; the two strands were subsequently integrated at the interpretation stage, consistent with established mixed-methods analysis practice (Pallant, 2005; Onwuegbuzie et al., 2010).

A multiple regression model was used to evaluate the aforementioned relationships. Independent Flexibility was analyzed as to the effect it has on the dependent variable, service delivery of Private universities that offer ODL. However, to understand the associations the dependent variable was examined in relation to the chosen independent variables. The following structured regression models were used:

$$\gamma = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \epsilon \dots \dots \dots (1)$$

γ = Dependent Variable

X_1 -2 = Independent variables

β_0 is service delivery when the independent variables are zero

β_1 -3 = the Regression coefficient of the independent variables

ϵ = is the error term

Model

$$\gamma = \beta_0 + \beta_1 FI + \epsilon \dots \dots \dots (2)$$

Testing for the effect of flexibility on service delivery in Private Universities offering ODL. This model was adopted. Where FI = Flexibility

Ethical Considerations

Ethical considerations were maintained in the study through providing informed consent, confidentiality, coding identities, and institutional approvals. Participants were made aware of their rights which included the right to withdraw and precautions were taken that there should not be any harm or deception. This study's cross-sectional design is a limitation in determining how service delivery in ODL universities changes over time. Self-reported measures could also be a source of bias, as could cultural influences on how respondents interpret flexibility. In addition, results of the study might not be transferable to other types of universities, or to private universities beyond the Kampala Metropolitan Area.

4. Results

Response Rate

Table 2 Response Rate

Response rate	Sample size	Percentage (%)
Received questionnaires	283	92.7
Missed questionnaires	22	7.2
Interviews with Key informants	10	100
Total	305	100

Source: Primary Data, 2024

The study had a high response rate of 92.7% (283/305 questionnaire) and 10 key informants were interviewed for whom all respondents were who applicable, giving credibility to the study and reliability of data. This high participation rate reduced the problem of non-response bias and increased the generalizability. It was a result of the effective follow ups, collaboration and strategic sampling of informed interviewees from ODL universities in KMA.

University Name of the Respondents.**Table 3: University Name**

University	Frequency	Percent
Kampala International University	104	36.6
Ndejje University	44	15.5
Uganda Christian University	53	18.7
Uganda Martyrs University	44	15.5
Islamic University in Uganda	37	13.0
Total	283	100.0

Source: Primary data, 2024

Table 3 illustrates that foreign academic staff are spread evenly among the five private universities, with the top number being found in KIU at 36.6% after UCU, NU, UMU, and UIIU. KIU's supremacy is associated to the University's Ranking among the best in Uganda. It is visible and has a good academic reputation, which means that it gets more foreign staff and students. This is a reflection of the overall popularity of ODL with the well-ranked institutions.

Descriptive Statistics for flexibility**Table 4: Descriptive statistics for Flexibility**

Descriptive Statistics		
Flexibility	Mean	Std. Deviation
	28.6254	6.97419

Source: Primary Data, 2024.

Flexibility (28.63 mean) has a higher level of agreement with its extremely high effectiveness – this means employees consider flexibility a vital attribute for adjusting to different situations. This score highlights the need for a workforce capable of easily responding to changes in the nature of organisational needs or in the external environment of the market. The standard deviation of 6.97 indicates some variability is more

indicative of how flexibility is applied or valued across the organization as opposed to the strategic thinking measure. Having flexibility can make the organisation more resilient in response to changing conditions and in the end, contribute to a more flexible and creative culture at work.

Table 5: Descriptive statistics for Service delivery

Descriptive Statistics		
	Mean	Std. Deviation
Tangibility	13.83	3.46
Reliability	12.75	3.51
Responsiveness	19.32	3.61
Assurance	13.11	2.88
Empathy	20.13	3.56

Source: Primary Data, 2024

The findings show that empathy scored highest (mean = 20.14), indicating strong agreement on its effectiveness in service delivery, with consistent perceptions among respondents. Responsiveness also ranked well (mean = 19.33), though with moderate variability, highlighting a need for continued improvement. However, tangibility, reliability, and assurance scored lower, suggesting uncertainty or weaker agreement about their effectiveness. Organisations should strengthen these areas to enhance overall service quality and customer satisfaction.

Correlation

Correlation measures the linear relationships between variables, which can be positive, negative, or absent (Hair et al., 2014). Field (2005) notes that bivariate correlation can be assessed using various methods, including Pearson's product-moment correlation coefficient, Spearman's rho, and Kendall's tau, with Pearson's correlation being recommended for its suitability in testing both directional and non-directional hypotheses. The analysis revealed that all study variables were positively related, as detailed in Table 6

Table 6: Correlation between flexibility and Service delivery in Private Universities offering ODL

		Flexibility	Service delivery
Flexibility	Pearson Correlation	1	.698
	Sig. (2-tailed)		.000
Service delivery	Pearson Correlation	.698	1
	Sig. (2-tailed)	.000	
	N	283	283

Source: Primary data 2024

Flexibility demonstrates an even stronger positive correlation with service delivery ($r = 0.698$, $p < 0.01$),

indicating that adaptability is closely linked to service effectiveness. Organisations that cultivate flexibility within their workforce, through training and adaptable work practices, may see enhanced responsiveness to customer demands and a greater ability to navigate service-related challenges. This strong relationship suggests that flexibility is particularly valuable in

dynamic environments, where the capacity to adjust quickly to changing conditions can directly benefit service quality.

Regression Analysis

Table 7: Hierarchical Multiple Linear Regression of Service Delivery with Flexibility (N = 283)

Variables	Model 1		Model 2	
	B	β	B	β
Constant	78.783	—	45.040	—
Gender	0.117	.004	-1.030	-.038
Age	-0.857	-.040	0.381	.018
Education	-3.106	-.147	-1.239	-.059
Experience	1.381	.111	1.051	.084
Position	2.700	.251	0.481	.045
Flexibility	—	—	1.206*	.685*

Model Statistics

R ²	.051	.498
Adjusted R ²	.034	.487
ΔR^2	.051	.447
ΔF	2.988	246.061
F	2.988	45.703
Sig. F	.012	< .001

Dependent variable: Service delivery

The regression coefficient is significant at the 0.05 level (2- tailed)

The regression coefficient is significant at the 0.01 level (2 tailed)

Model 1, with control variables, explained only 3.4% of the variance in service delivery, with Position being the

only significant predictor. In Model 2, adding flexibility significantly improved the model, raising the explanatory power to 49.8%. Flexibility showed a strong positive effect on service delivery ($\beta = 0.685$; $p < 0.01$). This highlights the importance of adaptability, responsiveness, and diverse teaching approaches in enhancing service quality. Institutions should prioritise flexibility to improve student satisfaction and outcomes in ODL settings

Table 8: ANOVA and Coefficients results for flexibility and Service Delivery

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20687.928	1	20687.928	266.316	.000 ^b
	Residual	21828.595	281	77.682		
	Total	42516.523	282			
a. Dependent Variable: Service delivery						
b. Predictors: (Constant), Flexibility						

Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	44.007	2.217		19.850	.000

Flexibility	1.228	.075	.698	16.319	.000
-------------	-------	------	------	--------	------

a. Dependent Variable: Service delivery

The ANOVA results demonstrate that the regression model is highly significant ($p < .001$), indicating that it accounts for a substantial portion of the variance in the dependent variable. The intercept coefficient of 44.007 signifies the predicted value of the dependent variable when the independent variable is set to zero. Additionally, the slope coefficient for "Flexibility" is 1.228, suggesting that a one-unit increase in this independent variable corresponds to a 1.228-unit increase in the dependent variable.

$$\gamma = \beta_0 + \beta_1 X_1 + \varepsilon$$

The model equation is therefore, $\gamma = 44.007 + 1.228X_1$

The regression results show that flexibility significantly and positively affects service delivery, with each unit increase in flexibility raising service delivery by 1.228 units. The model explains 48.7% of the variation in service delivery (Adjusted $R^2 = 0.487$). This finding refutes hypothesis H02, confirming flexibility's crucial role in ODL service quality. However, 51.3% of the variation remains unexplained by the model.

Hypothesis Results

The findings show a significant positive relationship between flexibility and service delivery ($\beta = 0.685$, $p < 0.05$), rejecting the null hypothesis H02. Both quantitative data and qualitative insights from key informants affirm that flexibility enhances

the study's theoretical framework: consistent with Social Exchange Theory (Homans, 1958) and its application to flexible working arrangements (Berkery et al., 2020), staff

extended to them by their employer appear to reciprocate with greater responsiveness and effort in service delivery, an exchange dynamic that helps explain why flexibility functions as more than a procedural convenience in this context. These findings extend evidence on flexibility and service performance, previously concentrated in healthcare and other service sectors, to the specific setting of Uganda's private ODL institutions.

Alongside this positive effect, key informants identified structural and cultural barriers that limit how far flexibility translates into better service delivery: rigid organisational structures, weak internal communication, inadequate staff training, and constrained resources for innovation. Participants linked these barriers directly to delayed responses to student needs and to demoralization among staff. This finding is consistent with Luyombya and Ndagire's (2020) observation that the absence of standardized administrative procedures undermines the consistency of service delivery in Ugandan private universities, and it mirrors barrier patterns reported in healthcare service settings, where flexibility strengthened service responsiveness only where it was

responsiveness, innovation, and staff motivation. Participants emphasized that empowering staff to adapt improves service quality and engagement. Thus, private universities should invest in continuous staff training to foster flexibility and improve ODL service delivery.

5. Discussions

This study found a strong positive correlation between flexibility and service delivery ($r = 0.698$, $p < .01$) in private universities offering ODL in Uganda, and regression results confirmed that flexibility significantly predicts service delivery ($\beta = 0.685$, $p < .01$), rejecting the null hypothesis and explaining 48.7% of the variance after controlling for staff demographic characteristics. Qualitative accounts from key informants reinforced this result, attributing improved service delivery to responsive decision-making, innovative teaching methods and flexible scheduling, which together were seen as drivers of greater student satisfaction and institutional performance. This convergence between the quantitative and qualitative strands strengthens confidence in the finding and is consistent with prior evidence that flexibility improves responsiveness and organisational outcomes in other service settings (Prakash, 2024; Berkery et al., 2020), and with evidence from higher education that flexibility, alongside self-regulated effort, is a significant predictor of satisfaction with the service students receive (Turan et al., 2022; Kuluşaklı, 2025). The result also supports

Exchange Theory (Homans, 1958) and its application to who experience institutional flexibility as a resource

supported by service orientation, technology integration and organisational learning (Prakash, 2024). Read together with the present findings, this suggests that flexibility's positive effect on service delivery is conditional rather than automatic: it depends on institutions actively investing in training, leadership support and process redesign to remove the barriers identified above, a point the broader literature on distance education challenges in Uganda has so far only implied rather than tested directly in relation to institutional flexibility (Basaza et al., 2010).

6. Conclusions

This study set out to determine whether, and how, flexibility affects service delivery in private universities offering ODL in Uganda, a relationship previously untested in this context despite being well established elsewhere. The evidence confirms that flexibility, expressed through adaptability, responsiveness, openness to change and staff empowerment, is a significant driver of service delivery quality, and the qualitative findings show that this effect operates largely through staff who

reciprocate institutional flexibility with greater responsiveness to student needs, consistent with a social-exchange mechanism. The study's central contribution is therefore to demonstrate empirically that flexibility functions as an institutional capability rather than an incidental convenience: where private ODL universities enable it through supportive structures and training, service delivery improves; where rigid structures and communication gaps persist, that benefit is constrained. This has direct implications for how private ODL institutions in Uganda, and potentially in similar Sub-Saharan African contexts, should prioritize investment in flexibility as a management strategy rather than treating it as a by-product of other reforms.

Recommendations

Flexible Course structure & Teaching styles are required in private universities to meet the learning needs of ODL students. This will ensure effective service provision.

The University management should take flexible policies with the staff and students where, to ask staff and students to modify their schedules and approaches if needed, thereby increasing the responsiveness and quality of education in ODL.

Areas for Further Studies

It is suggested that further studies determine the contribution of digital infrastructure toward providing flexibility and its influence on service delivery in ODL institutions.

Comparative research on public colleges/universities and private colleges/universities may lead to a better understanding of different institutions' approaches to flexible service delivery.

References

- Amin, M. E. (2005). *Social science research: Conception, methodology and analysis*. Makerere University Printery.
- Basaza, G. N., Milman, N. B., & Wright, C. R. (2010). The challenges of implementing distance education in Uganda: A case study. *International Review of Research in Open and Distributed Learning*, 11(2), 85–91. <https://doi.org/10.19173/irrodl.v11i2.833>
- Berkery, E., Morley, M. J., Tiernan, S., & Peretz, H. (2020). From start to finish: Flexi-time as a social exchange and its impact on organizational outcomes. *European Management Journal*, 38(4), 591–601. <https://doi.org/10.1016/j.emj.2020.02.003>
- Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.
- Churchill, G. A., Jr., & Iacobucci, D. (2005). *Marketing research: Methodological foundations* (9th ed.). South-Western College Publishing.
- Cohen, L., Manion, L., & Morrison, K. (2010). *Research methods in education* (6th ed.). Routledge.
- Combs, J. P., & Onwuegbuzie, A. J. (2009). Describing and illustrating data analysis in mixed research. *International Journal of Multiple Research Approaches*, 3(1), 1–15.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
- Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications.
- Fetters, M. D., Curry, L. A., & Creswell, J. W. (2013). Achieving integration in mixed methods designs: Principles and practices. *Health Services Research*, 48(6 Pt. 2), 2134–2156. <https://doi.org/10.1111/1475-6773.12117>
- Field, A. (2005). *Discovering statistics using SPSS* (2nd ed.). SAGE Publications.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate data analysis* (7th ed.). Pearson Education.
- Homans, G. C. (1958). Social behavior as exchange. *American Journal of Sociology*, 63(6), 597–606. <https://doi.org/10.1086/222355>
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14–26. <https://doi.org/10.3102/0013189X033007014>
- Kuluşaklı, E. (2025). Student engagement and flexibility in distance learning in higher education. *SAGE Open*, 15(2). <https://doi.org/10.1177/21582440251329979>
- Luyombya, D., & Ndagire, S. (2020). Records management procedures and service delivery in private universities: A case study of the Islamic University in Uganda. *Journal of the South African Society of Archivists*, 53, 1–15.
- Nicholson, B., & Bennett, J. (2008). Using secondary data in educational research: Benefits and challenges. *Educational Research Quarterly*, 31(3), 26–37.
- Onwuegbuzie, A. J., Slate, J. R., Leech, N. L., & Collins, K. M. T. (2010). Mixed data analysis: Advanced integration techniques. *International Journal of Multiple Research Approaches*, 4(1), 13–33.
- O'Reilly, C. A., III, & Tushman, M. L. (2016). *Lead and disrupt: How to solve the innovator's dilemma*. Stanford Business Books.
- Pallant, J. (2005). *SPSS survival manual: A step by step guide to data analysis using SPSS for Windows* (3rd ed.). Open University Press.
- Park, Y. S., Konge, L., & Artino, A. R., Jr. (2020). The positivism paradigm of research. *Academic Medicine*,

95(5), 690–694.

<https://doi.org/10.1097/ACM.0000000000003093>

Prakash, G. (2024). How does service supply chain flexibility influence responsiveness in service delivery? An empirical analysis of healthcare units. *The TQM Journal*. Advance online publication. <https://doi.org/10.1108/TQM-10-2023-0318>

Sahin, I., & Shelley, M. (2008). Considering students' perceptions: The distance education student satisfaction model. *Educational Technology & Society*, 11(3), 216–223.

Turan, Z., Kucuk, S., & Cilligol Karabey, S. (2022). The university students' self-regulated effort, flexibility and satisfaction in distance education. *International Journal of Educational Technology in Higher Education*, 19, Article 35. <https://doi.org/10.1186/s41239-022-00342-w>

Voss, C. (2016). Combining quantitative and qualitative research in operations management. *International Journal of Operations & Production Management*, 34(2), 145–167.

of Operations & Production Management, 34(2), 145–167.