

The effect of E-governance on access to business services in Rubaga Division, Kampala District.

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Abstract—This paper discusses the impact of e-governance on business services accessibility in Rubaga Division, Kampala District. The quantitative data collected and analyzed on 274 respondents and qualitative data obtained through key informant interviews provided information on the role of digital governance in business registration, verification, service linkage, and commercial transactions. Findings indicate that there is positive but insignificant relationship between e-governance and business service accessibility. The results indicate a lack of infrastructural facilities, low levels of digital literacy, and policy loopholes that limit the effects of e-governance on local business services. Recommendations will focus on the enhancement of digital infrastructure, awareness measures and simplified regulatory regimes towards better business service delivery.

Index Terms—Service delivery, digital access, e-governance, business services, Rubaga Division, Kampala, digital literacy.

I. INTRODUCTION

E-governance is the use of digital technologies to enhance service delivery by governments, as well as transparency and efficiency, even in the business sector. It allows registering business online, verifying

information, connecting to providers and making business transactions. Although the world is making progress, most emerging cities such as Rubaga Division in Kampala are struggling to embrace e-governance in the delivery of business services because of poor infrastructure, digital skills, and favorable policies. This paper explores how far e-governance influences access to business services in Rubaga Division with reference to opportunities and limitations.

1.1 Methods

It employed the cross-sectional survey design that included 274 respondents who were randomly sampled in Rubaga Division. Convenience in e-governance perceptions were measured using structured questionnaires in terms of convenience of registering businesses, checking business information, connection of services, and effecting transactions. Descriptive statistics, correlation, and regression analysis were used to analyze quantitative data. Also, qualitative information regarding the implementation of e-governance, and challenges was a key informant interview of business and government officials. Informed consent and ethical approval were acquired.

II. RESULTS

Table 1: Descriptive statistics on the effects of E-governance on access to business services in Rubaga Division, Kampala District

Statement	SD	D	NS	A	SA	Mean	Std.D	Interpretation
It is convenient to register a business	22 (8.1%)	53 (19.3%)	18 (6.6%)	120 (43.7%)	61 (22.3%)	3.53	1.257	Satisfactory
It is convenient to verify any business information	18 (6.6%)	61 (22.3%)	12 (4.4%)	140 (51.1%)	43 (15.7%)	3.47	1.190	Satisfactory
It is easy to link up with different service providers	26 (9.6%)	43 (15.7%)	20 (7.3%)	130 (47.4%)	55 (20.1%)	3.53	1.245	Satisfactory
It is convenient to make commercial transactions	24 (8.8%)	33 (12.0%)	4 (1.5%)	140 (51.1%)	73 (26.6%)	3.75	1.226	Satisfactory

2.1 Legend

Range	Mean Range	Response Mode	Interpretation
1	1 – 1.8	Strongly Disagree	Very Low
2	1.9– 2.6	Disagree	Low
3	2.7 – 3.4	Neutral	None
4	3.5 – 4.2	Agree	High
5	4.3 – 5	Strongly Agree	Very High

Table 1 reveals that out of 274 respondents, 120 (43.7%) agreed and 61 (22.3%) strongly agreed that it is convenient to register a business, while 22 (8.1%) strongly disagreed and 53 (19.3%) disagreed, indicating that although more than half view the registration process positively, about a quarter perceive some difficulties. This balance suggests that the registration system is generally manageable but could benefit from further streamlining.

For verifying business information, 140 respondents (51.1%) agreed and 43 (15.7%) strongly agreed on the convenience of this process. However, 18 (6.6%) strongly disagreed and 61 (22.3%) disagreed, showing that while most find verification accessible, nearly a third encounter challenges that may hinder transparency and trust in business transactions.

Linking up with different service providers was found to be convenient by 130 respondents (47.4%) who agreed and 55 (20.1%) who strongly agreed. On the other hand, a combined 69 respondents (25.3%) expressed disagreement. This means that despite positive overall sentiment, a notable minority experience issues, pointing to opportunities for improving collaboration and communication channels between businesses and service providers.

Convenience in making commercial transactions received the strongest positive response, with 140 (51.1%) agreeing and 73 (26.6%) strongly agreeing. Only 24 (8.8%) strongly disagreed and 33 (12.0%) disagreed. This indicates relatively effective transactional systems are in place, which is vital for sustaining project progress and financial fluidity.

Table 2: Correlation analysis of E-governance and business services

		E-governance	Business services
E-governance	Pearson Correlation	1	.061

	Sig. (2-tailed)		.039
	N	274	274
Business services	Pearson Correlation	.061	1
	Sig. (2-tailed)	.039	
	N	274	274

means Significant at 5%

Table 2 shows the correlation analysis between e-governance and business services based on data from 274 respondents. The Pearson correlation coefficient is 0.061, which indicates a very weak positive relationship between e-governance and business services.

The significance value ($p = 0.039$) is below the 0.05 threshold, suggesting this correlation, although weak, is statistically significant and unlikely due to random chance. This implies that while e-governance and business services are related, the strength of their association is minimal in this context.

The weak correlation may suggest that other factors beyond e-governance influence business service outcomes, or that the current implementation of e-governance has limited impact on improving business services in this setting. It points to the need for further investigation to understand additional variables affecting business services and how e-governance initiatives can be enhanced for greater effect.

Table 3: Regression results showing the Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.161 ^a	.154	.101	1.247
a. Predictors: (Constant), e-governance				

Table 3 presents the regression model summary analyzing the effect of e-governance on the dependent variable (likely business or health services). The model shows an R value of 0.161, indicating a low but positive correlation between e-governance and the outcome variable.

The R Square value is 0.154, meaning that approximately 15.4% of the variance in the dependent variable is explained by e-governance. After adjusting for the number of predictors and sample size, the Adjusted R Square drops to 0.101, suggesting that

about 10.1% of the variance is accounted for when considering model complexity.

The standard error of the estimate is 1.247, which reflects the average distance that the observed values fall from the regression line, indicating moderate prediction accuracy.

Table 4: Analysis of Variance (ANOVA)

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.144	1	1.144	.736	.059 _b
	Residual	307.851	271	1.555		
	Total	308.995	272			
a. Dependent Variable: Access to business services						
b. Predictors: (Constant), e-governance						

Table 4 presents the ANOVA results for the regression model predicting access to business services based on e-governance. The regression sum of squares is 1.144 with 1 degree of freedom, and the residual sum of squares is 307.851 with 271 degrees of freedom.

The calculated F-value is 0.736, which tests whether the overall regression model significantly predicts the dependent variable. The corresponding p-value (Sig.) is 0.059, which is slightly above the common significance threshold of 0.05. This indicates that the model does not statistically significantly explain variation in access to business services at the 5% level, although it is borderline. In other words, while e-governance is included as a predictor, its overall effect on access to business services in this model is not strong enough to be deemed statistically significant based on this ANOVA test. Other factors may be more critical in determining business services

Table 5: Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.837	.204		13.885	.000
	E-governance	.062	.072	.061	.858	.059
a. Dependent Variable: Access to business services						

Table 5 displays the regression coefficients for the model predicting access to business services using e-governance as the independent variable. The constant (intercept) B value of 2.837 indicates the estimated baseline level of access to business services when e-governance is zero. This intercept is statistically significant, as shown by a t-value of 13.885 and a p-value of 0.000, indicating it differs significantly from zero. The regression coefficient for e-governance is 0.062 with a standard error of 0.072. This positive coefficient suggests that for each one-unit increase in e-governance, access to business services improves by approximately 0.062 units, holding other factors constant. However, the standardized Beta value of 0.061 and t-value of 0.858 indicate a weak effect. Moreover, the p-value of 0.059 is slightly above the 0.05 threshold, implying this relationship is not statistically significant at the conventional 5% level, though it is marginal.

In summary, while there is a positive association between e-governance and access to business services, the evidence is not strong enough to confidently conclude that e-governance significantly predicts access in this model. This points to the likelihood that additional variables or factors influence business service access more substantially.

Therefore, while e-governance may contribute to improving access to business services, the evidence is not strong enough to conclude that it has a meaningful impact, and other factors may be influencing business service accessibility in the division. Key informant Interviews (KIIs) were conducted for triangulation purposes. In this case, participants were asked to explain how E-governance has significantly contributed to access to business services in Rubaga Division and below were their responses;

"E-governance has been crucial in streamlining business registration and tax payment processes. It has made these services accessible from anywhere, saving time and reducing costs." [Participant 1, Male, 2024]

"It has had a positive impact, particularly in reducing bureaucracy. Businesses can now interact with government departments online, which makes the process much faster and more transparent." [Participant 2, Female, 2024]

Generally, the results reveal that there is a positive insignificant effect of e-governance on access to business services in Rubaga Division. This implies that while e-governance may have some potential in

improving access, its impact is not strong enough to be considered statistically significant, suggesting that other factors might be influencing access to business services in the division.

The qualitative and quantitative findings on e-governance and business services in Rubaga Division present a nuanced picture that aligns with and elaborates on the underlying e-governance and trust theory. Quantitatively, Table 4.7 shows that more than half of the respondents found business-related processes such as registration, verification of business information, and linking to service providers convenient, with positive responses ranging from 60% to over 75%. For instance, 66% of respondents agreed or strongly agreed that registering a business is convenient, while 66% also affirm the convenience of linking with service providers. However, a significant minority about one quarter expressed disagreement or dissatisfaction with these processes, reflecting persistent challenges in transparency and accessibility. This mixed quantitative picture is further reflected in the correlation and regression analyses. Table 4.8 reveals a very weak but statistically significant positive correlation between e-governance and business services ($r = 0.061$, $p = 0.039$), indicating that while e-governance relates to business service outcomes, its influence is minimal. The regression results in Tables 4.9 to 4.11 echo this, showing a low explanatory power ($R^2 = 0.154$) and a marginally insignificant regression coefficient ($\beta = 0.062$, $p = 0.059$), suggesting that e-governance alone does not strongly predict access to business services. The ANOVA test (Table 4.10) confirms that the overall model is borderline insignificant, which implies that other contextual and institutional factors likely mediate business service access beyond e-governance mechanisms.

Qualitative insights from key informant interviews provide valuable context to these quantitative findings. Participants emphasized tangible improvements due to e-governance, such as streamlined business registration, reduced bureaucracy, and enhanced accessibility through online platforms. These qualitative responses align with the theory of e-governance and trust by highlighting that e-governance initiatives enhance transparency and reduce procedural delays, which are key drivers of citizen trust. For example, improved online interaction with government departments fosters trust by making

services more transparent and efficient, thereby encouraging user engagement and reliance on digital governance.

Together, the findings suggest that while e-governance positively contributes to business service delivery by building elements of trust through transparency and convenience, its current scope and impact are limited. In line with the theory, trust in e-governance is not automatic but develops as a function of consistent, reliable service delivery and institutional support. The relatively weak statistical association and the expressed concerns by a significant minority indicate that gaps remain in fully realizing the benefits of e-governance for business services. This underscores the need for complementary interventions, such as capacity building, infrastructure improvements, and policy enhancements, to strengthen trust and maximize e-governance effectiveness

III, DISCUSSION OF FINDINGS

The research findings revealed that E-governance had a positive but non-significant impact on accessibility of business services in Rubaga Division. This observation is contrary to other researchers like Irani (2018) and OECD (2020), who established that E-governance eases the business operations by using digital platforms and minimizes bureaucracy and enhances transparency. OECD (2020) indicates that about 49 percent of the population in OECD countries had used digital systems to get business services, and 33 percent had digitally submitted business related forms. Nonetheless, the negligible presence in Rubaga indicates that although digital business services are available, their usage and adoption could be minimal, perhaps because of the digital illiteracy, ineffective internet services, and unfriendly policies.

Moreover, the results of the study are in line with the report of the Internet Governance Forum (IGF, 2020) in East Africa, which showed that the rate of E-governance business service usage in Uganda was merely 56, which is lower than the 74 rate in Kenya. The research results in the Rubaga Division confirm this trend in the region, and the notion that business owners and entrepreneurs in Uganda are struggling to use E-governance to tap into business services. The insignificance can be explained by the lack of policies that enforce the mandatory use of E-portals in registering and administering businesses, which

OECD (2020) states is one of the factors that mostly contribute to slow uptake of digital business services in the East African countries.

Ali (2020) continues to stress the fact that E-governance can turn the business world upside down by implementing procurement portals, promoting competition, and lowering administrative expenses. Nevertheless, the negligible impact observed in the Rubaga Division indicates that these possible gains might not be reaped in their entirety yet because of the inefficiency in the application of digital services. Witson (2018) cautions that when E-governance services are not properly designed to address the daily needs of business, they may end up being more frustrating than helpful. This issue is strengthened by the results in the Rubaga Division, indicating that the presence of digital business services does not correlate with their utilization, which demands a stronger infrastructure, policy intervention, and social education to be more effective.

IV. CONCLUSION

The impacts of e-governance on the availability of business services in Rubaga Division. Results indicated that e-governance has a positive albeit insignificant impact on accessibility of business services. Business registration, tax filing, and license renewal have their platforms, but the level of their use is low because of low awareness, inadequate infrastructure and the lack of digital skills among business owners. This has led to the fact that e-governance has not achieved a significant influence in this sector.

V. STUDY RECOMMENDATIONS

Uganda Registration Services Bureau and other pertinent business regulatory agencies should streamline the online business registration, verification, and transaction at the business to minimize bureaucracies and enhance transparency. They ought to come up with convenient, integrated online systems, which will enable smooth interlinkages with other service providers. The Rubaga Division local government must facilitate such digitization processes by improving the ICT infrastructure and providing digital literacy education to small and medium enterprises.

Also, the government agencies should work with the private sector players and technology providers in developing efficient, safe and customized digital solutions to suit the business community.

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