

AN ASSESSMENT OF ICT AS A TOOL FOR EFFECTIVE SERVICE DELIVERY IN THE NIGERIAN LOCAL GOVERNMENT SYSTEM: A STUDY OF ETSAKO WEST LOCAL GOVERNMENT AREA OF EDO STATE

Abstract

One of the challenges facing public services in Nigeria is lack of effective and efficient service delivery. In Nigerian local governments, service delivery affects all citizens who demand quality services. Thus, the advent of Information and Communication Technology (ICT) creates opportunities for its use to promote effective service delivery in the Nigerian local government system. This study assessed ICT as a tool for effective service delivery in the Nigerian local government with a particular focus on Etsako West Local Government Area of Edo State. To achieve the purpose of the study, a sample size of 228 was taken for the research study. The chi-square procedure was used to test the significant relationship between the observed and the expected frequency of responses on the assessment of ICT as a tool for effective service delivery in the studied local government. The test of the hypotheses showed that X^2_{cal} (0.256) is less than X^2_{tab} (15.5). Thus, H_0 was accepted, which implied that there is no significant relationship between ICT and service delivery in the administration of Etsako West Local Government Area of Edo State. The study revealed low level of ICT penetration in the studied local government and recommended among others, the need for government to create opportunity for staff of the local government to own computers and be ICT literate for efficient service delivery.

Keywords: Citizens, ICT, Local Government, Public Services, Reform, Service Delivery
1.0 Introduction

Service delivery has continued to be a major challenge to public services in Nigeria. A major focus of reform in many countries according to Abdullah (2008:5) is the redesign of structures, systems and processes to improve the delivering of services. The third Nigerian National Development Plan (1975-80), expressed the desire to establish effective local governments that can provide major social services at the local level. To enable these reach every locality, effective local institutions have to be established. This led to the 1976 Nation-wide local government reform which was unique in the sense that it stated the major reason for the establishment of an effective local government system to be an efficient and humane delivery of basic social services. The 1976 local government reform sought to address, improve or modify the impoverishment of local government bureaucracies, the marked disparities in social services rendered between states and within states depending on the institutional capability of local government.

Arising from the above, the challenge of service delivery affects all citizens who demand quality services from public services. There is no doubt that the challenges and

complexities of service delivery are widening in the Nigerian local government system. The advent of information communication technology (ICT) thus presents opportunities for its use to facilitate effective service delivery in Nigerian public services particularly our local government system, as many countries in the globe have embraced ICT as a way forward. In the early 1980s, the need to reform bureaucracy was highly discussed all over the world and as a result, the governments of developed and developing countries faced the challenge of transformation and the need to modernize administrative practices and management system (Tapscott, 1996). To this end, ICT is seen as a tool to support the work of governmental institutions and agencies with the objective of delivering public services and information in a more convenient, citizen centric and cost effective manner. Thus, in Nigeria local government system, ICT can be an effective tool to ensure increased access to government services, improved value for money as well as increased productivity.

1.1 Statement of the Problem

One of the major reasons given for the establishment of effective local government system in Nigeria was the efficient and humane delivery of basic social services. It therefore means that local government in Nigeria were established to meet the basic social services needs of the citizens as quickly as possible. In the final analysis, local governments exist to provide services to the citizens and were expected to render these services more efficiently and more effectively than other levels of government because of their closeness to the people. Unfortunately, this has not been the case with the Nigerian local government system as epileptic services, impoverished bureaucracies as well as lack of responsiveness to the citizens continue to be evident in the system. It was on this basis that various Nigerian governments have been concerned with the performance of local government and all local government reforms so far introduced, have been geared towards this performance. Therefore, the problem which this paper seeks to address is poor service delivery common among local governments by assessing ICT as a tool for effective service delivery. In other words, the study seeks to investigate the extent to which ICT as a tool can promote effective service delivery in the Nigerian local government system.

1.2 Objective of the Study

The general objective of this study is to identify the challenges of service delivery in the Nigerian local government system and how to improve on it. The paper is however set to achieve the following specific objectives:

1. To determine the level or otherwise of awareness of ICT penetration in the Etsako West Local Government in Edo State.

- 76 2. To find out whether staff of Etsako West Local Government in Edo State use ICT
77 facilities where available to perform their functions for effective service delivery.

78 **1.4 Statements of Hypothesis**

79 The following hypotheses shall be tested to realize the objectives of the research.

- 80 1. **That** there is no relationship between ICT penetration in Etsako West Local Government
81 of Edo State and service delivery.
82 2. **That** the use of ICT by staff of Etsako West Local Government of Edo State for the
83 performance of their functions is not directly related to service delivery.

84 **1.5 Scope of the Study**

85 The study is an attempt to assess ICT as a tool for effective service delivery in
86 Nigerian local government system, using Etsako West Local Government of Edo state as a
87 case study. Etsako West Local Government is one the 774 local governments in Nigeria and it
88 is located in Edo North. The workers in Etsako West Local government comprise the junior
89 and senior staff. It is in this establishment that the study aims at examining the relationship
90 between the use of ICT and service delivery. The study covers both the junior and the senior
91 staff of this local government council who are the service providers. It is hoped that using this
92 local government as a case study will give insight into what happens in Nigerian local
93 government system and other levels of government.

94 **1.6 Significance of the Study**

95 In many organisations whether public or private, efforts are being made to enhance
96 service delivery to citizens/customers as the case may be. Thus, the study is relevant to both
97 public and private organizations who are services providers as well as citizens/customers that
98 are the end users of these services. Against this background, the management of Etsako West
99 Local Government, Edo State will find the study on the relationship between ICT and service
100 delivery useful in policy making.

101 The study will equally contribute meaningfully to the growing literature in this field of
102 research and will provide theoretical base on which subsequent researchers in this area will
103 build.

104

105 **2.0 Literature Review**

106 Central to this study is the understanding of impact of ICT on service delivery in
 107 public organizations such as local government. Access to ICT is crucial to sustainable agenda
 108 for grassroots transformation. ICT enhances efficiency and makes positive impact on growth
 109 and development, enabling better delivery of public services such as health, education,
 110 agriculture, new sources of income and employment for less privileged members of the
 111 society. Therefore, any local government that is able to establish and develop ICT will reap
 112 the benefits of improved delivery of public services. ICT improves the overall efficiency of
 113 government at all levels and increase the effectiveness of services in areas such as health,
 114 education, agriculture etc.

115 In focusing on service delivery, public services also need to focus on the need to
 116 develop internal workplace environments that will ensure staff act in a way that deliver high
 117 quality services. The creation of a service quality culture is therefore, one of the challenges
 118 facing public services as they focus on service delivery issues (Abudullah, 2008:6).
 119 According to the report on the Review of ICT governance in Queensland Government
 120 prepared by Service Delivery and Performance Commission(2006), government's investments
 121 in technology provides benefits to government, industry and the community at large
 122 including:

- 123 i. Increased accessibility, inclusivity and flexibility in government service delivery - the
 124 ability for more of the communities to interact with government, with the flexibility of
 125 choice by multiple channels and at more convenient times;
- 126 ii. Improved value for money - it enables quality services to be provided through lower
 127 cost delivery options;
- 128 iii. Improved productivity – both public servant and the economy,
- 129 iv. Stimulation of ICT industry – through identification of opportunities for innovation and
 130 partnering with the private sector to improve government service delivery.

131 According to Magabagbeola(2004), rapid expansion of internet holds substantial
 132 promise for developing nations which can benefit greatly from internet communications and
 133 information delivery capabilities to help meet their needs.... Nigeria generally and local
 134 government in particular, have much to gain from that revolution in communication and
 135 information access. The communication and information delivery capability of internet to all
 136 sectors of the society in areas of education, health, social policy, commerce and trade,
 137 government, agriculture, communication and science and technology, all benefits from
 138 internet access to information and to individuals through electronic mail.

139 ICT extends the reach of public services to the remotest areas, and allows information
140 to flow in both directions, thus effectively empowering the poor and giving them a voice.
141 Most communities in our local governments are isolated and may not be aware of the
142 activities of government. This no doubt, will hamper service delivery on the part of the local
143 government. ICT will help to promote the integration of such isolated communities into
144 global economy (Ainabor, 2012). Oloyede (1997) and Opadiran (1997) observed that active
145 community participation and involvement especially in matters that affect them is a sine-qua-
146 non to proper resources handling and maintenance. This is reinforced by genuine acceptance
147 by officials of local government of the rights of community members to determine their needs
148 and allow them to direct their efforts as opposed to pseudo-participation for programmes
149 decided by officials as this is capable of encouraging people's dependence on government to
150 do things for them. The gains of participatory democracy as illustrated above can be fully
151 maximized by a local government service that has keyed into the ICT programmes. Empirical
152 research by Adeyeye and Aladesanmi(2010) had reviewed the challenges facing ICT
153 application and opportunities accruable from it, especially in the area of service delivery.
154 Findings from the data in the sampled local governments revealed an incredibly low level of
155 ICT presence and application. Likewise, lack of web presence and web portals had deprived
156 the local governments of efficient delivery of basic services; more so as most councils were
157 riddled with bureaucratic lethargy. The paper recommended the development of web based
158 application to harvest data, catalyze data processing, develop capacity building, establish
159 telecentres and integrate the local government councils into the national ICT strategic plan
160 (Adeyeye and Aladesanmi, 2010).

161 In the same vein, Ssweanyana and Busler (2007) from Uganda and USA respectively
162 examined the extent of adoption and usage of ICT on one hundred and ten firms in Uganda.
163 As regards the contribution of ICT to the firms, the study explained that the majority of
164 respondents strongly agreed that ICT provides increased savings, increased efficiency,
165 improved service delivery, low transaction costs, and improved market performance to
166 organisation that invest in ICT. The results revealed that the adoption and usage of ICT by
167 firms in developing countries follow the same pattern as in developed countries, and they only
168 differ in the level of usage and adoption as there are various factors such as high costs of
169 hardware, software, internet and ICT professionals, which inhibit government from adopting
170 appropriate policies to address them (Ssweanyana & Bussler, 2007).

171 Dhakal and Jamil(n.d) had undergone research in the internal revenue offices of
172 Kathmandu Valley in order to understand the problems and challenges of ICT for improving
173 service delivery in Nepal. Data revealed that the majority of the respondents saw much

174 improvement in terms of easiness to know information in time(70%), easiness to make
175 complaint (59%); and service delivery in time (52%). On the other hand, more than half of the
176 respondents confirmed that reporting of services like ‘decreasing discrimination’(61%) and
177 ‘easier to report’(50%) has been in the improvement process. The study concluded that there
178 has been improvement in the application of ICTs; but that there is still lack of skill and
179 technical know-how to use ICT for better delivery of services (Dhakal & Jamil, n.d).

180 Monga(2008) has analyzed the experiences of e-governance at the local, state and
181 federal levels of government in India. The study found that e-governance has brought about
182 revolution in the quality of service delivery to the citizens by improving transparency in the
183 administrative process, saving time due to single window service provisions, simplifying
184 procedures, reducing corruption, improving office and records management and improving
185 attitude and behaviour of civil servants (Monga, 2008).

186 Heaks(2001) found that the use of ICT can make a significant contribution to the
187 achievement of good governance. Analyzing case studies from countries such as the
188 Philippines, Honduras, Chile and South Korea, the study outlined three key contributors of e-
189 governance: improving government process (e-administration), connecting citizens (e-citizens
190 and e-services) and building external interactions (e-society). Heaks also identified two major
191 challenges that developing countries face when it comes to the successful implementation of
192 e-government: (i.) the strategic challenge of e-readiness and (ii.) the tactical challenge of
193 closing design-reality gap, adopting best practice in e-governance projects in order to avoid
194 failure and to achieve success.

195 Ogbomo (2009) in his study used 200 respondents to investigate information and
196 communication technology (ICT) in local government administration, using Oshimili North
197 Local Government Area of Delta State as a case study. The study found out that the benefits
198 of ICTs towards local government administration are enhancement of communication and
199 increased productivity. The study equally revealed that ICT in government has set the stage
200 for greater transparency and possibility for greater citizens’ participation. It identified limited
201 availability of ICT facilities and recommended that ICTs such as internet, GSM system,
202 computer and online tools for effective information and communication service delivery
203 should be made available in the local government area.

204 Using a sample of 99 ICT end users from public and private sector corporations and
205 government departments and ministries in Nigeria, Babale and Adamu (2011) investigated the
206 contribution of ICT to good governance and government. The study found that in Nigeria, the
207 areas most affected by ICT are as follows; the provision of ‘easy to use services’, ability to do
208 the job’, ‘services of convenient time and place’, ‘facilitating communication between citizens

and their elected representatives', and citizen's access to information from government agencies'. The result of the study however showed that there is a positive relationship between progress made in Nigeria towards improved coordination among government agencies, services and efficiency and the impact of the introduction of ICT projects in government organizations. The study also supported the proposition that there is a positive relationship between users' perception of improved services and the effectiveness achieved in different areas affected by the introduction of ICT. The study however recommended that future studies should investigate further the link between how ICT is managed and ICT effectiveness focusing on the transformative effects on government behaviour, including transparency and accountability as well as service delivery. A resulting implication of this study is that effective introduction of ICT can indeed fundamentally alter the way public services are delivered.

In their research based article titled –E-Governance, corruption and Public Service Delivery: A comparative study of Fiji and Ethiopia, Pathak et al (2008) concluded that e-governance is positively related to improved government-citizen relationships and corruption reduction. The study using a structured questionnaire, explored the perceived role of e-governance in reducing corruption among 400 respondents each from Fiji and Ethiopia. The study has suggested that while e-governance initiatives can make important contributions to improving public services, they can best do so by helping to improve the overall relationships between governments and citizens.

Pathak et al (2009) in another study examined the perceptions of public service delivery in Fiji so as to explore the potential of e-governance to cut corruption and improved governance. The result of the study showed that service delivery-oriented information technology can contribute to an effective, multi-pronged strategy to cut corruption in the Fiji public sector.

3.0 Method

This aspect focuses on the method of data collection, the population and sample size of the study and the statistical technique used in the analysis of data.

3.1 Population and Sample Size

A total of 450 structured questionnaires were randomly administered to the targeted Etsako West Local Government workers. Only 420 questionnaires were returned. After data mining of the questionnaire for inconsistency, omission and incomplete filling, a sample size of 228 was taken for the research study.

244 3.2 Method of Data Analysis

245 In this study, the statistical techniques adopted are simple percentage analyses, the use
246 of charts for representation and chi-square analysis to test the hypotheses. A chi-square
247 procedure was used to test the significance relationship between the observed and the
248 expected frequencies of response on the assessment of ICT as a tool for effective service
249 delivery in Nigerian Local Government System (AIESDNLGS).

250 Method of Data Collection

251 The source of data for this study is primary source. A structured questionnaire was
252 designed into various sections A, B, and C to gather possible information from the
253 respondents. Each section asks specific question from the targeted respondents. Section A is
254 to gather data on the demographic background, section B deals with the ICT awareness and
255 usage level while section C seeks from the respondents in what manner ICT has contributed
256 to the effective service delivery in the Local Government System.

257 DATA PRESENTATION AND ANALYSIS

258 Demographic Information Analysis

259 **Table 1: Distribution According to Age Bracket**

Option	Response	Percentage
21-30yrs	29	12.7%
31-40yrs	68	29.8%
41-50yrs	62	27.2%
51-69yrs	48	21.1%
61yrs and above	21	9.2%
Total	228	100.0%

260 *Source: Field Survey, 2011*

261 Based on the demographic information on age bracket, 29 out of 228 respondents fall
262 in the age bracket of 21-30yrs making 12.7% of total respondents, 68 respondents are 31-
263 40yrs making 29.8%, 62 respondents are 41-50yrs making 27.2%, 48 respondents are 51-
264 69yrs and 21 respondents are 61 and above making 21.1% and 9.2% respectively. The bar
265 chart above indicates that the age bracket of 31-40yrs has the highest respondents.

266 **TABLE 2: Distribution According to Sex**

Option	Response	Percentage
Male	79	34.6%
Female	149	65.4%
Total	228	100.0%

267 *Source: Field Survey, 2011.*

268 Based on the response on sex, it was shown that 149 out of 228 respondents are males,
269 making 65.4%, while 79 respondents are females, making 34.6% of total respondents. Also,
270 the pie chart indicates that the male has the highest respondents.

271

272 **Table 3: Distribution According to Position Mode**

Option	Response	Percentage
By employment	87	38.2%
By appointment	39	17.1%
By election	24	10.5%
Others	78	34.2%
Total	228	100.0%

273 *Source: Field Survey, 2011.*

274 Based on the position mode, it was revealed that 87 out of 228 respondents have their
 275 position by employment making 38.2% of total respondents, 39 have theirs by appointment
 276 making 17.1%, 24 respondents are employed by election making 10.5%, while 78 respondents
 277 have theirs from other sources making 34.2% of total respondents. The chart above indicates
 278 that by employment have the highest respondents.

279 **Table 4: Distribution According to Duration**

Option	Response	Percentage
<2yrs	63	27.6%
3-5yrs	47	20.6%
6-8yrs	35	15.2%
9yrs and above	63	27.6%
Total	228	100.0%

280 *Source: Field Survey, 2011*

281 In order to investigate on the period of operation, 63 out of 228 respondents have been
 282 in service for less than 2yrs making 27.6% of total respondents, 47 respondents have been in
 283 service between 3-5yrs making 20.6%, 35 respondents is 6-8yrs making 15.2%, while 63
 284 respondents have been in service between the range of 9yrs and above making 27.6% of total
 285 respondents. The chart shows that those who have been in service for less than 2yrs and 9yrs
 286 and above have the highest respondents.

287 **Table 5: Distribution According to Educational Level**

Option	Response	Percentage
Primary	36	15.8%
Secondary	132	57.9%
Tertiary	60	26.3%
Total	228	100.0%

288 *Source: Field Survey, 2011.*

289 Based on the educational level of the respondents, it was shown that out of 228
 290 respondents, 36 respondents have attained primary education level making 15.8%, 132 have
 291 attained secondary level of education making 57.9% of total respondents, while 60
 292 respondents attained tertiary level of education making 26.3% of the total respondents.

293

294

295 **Table 6: Distribution According to Religious Belief**

Option	Response	Percentage
Christianity	78	34.3%
Islam	102	44.7%
Pagan	18	7.9%
Others	30	13.2%
Total	228	100.0%

296 *Source: Field Survey, 2011.*

297 Based on the distribution according to religion of the respondents, out of 228
 298 respondents, 78 are Christian making 34.3% of total respondents, 102 are Muslims making
 299 44.7%, 18 are pagans making 7.9%, while 30 are practising other religion making 13.2% of
 300 the total respondents. The chart above depict that those practising Islamic religion have the
 301 highest responses.

302 **Table 7: Distribution According to Occupation**

Option	Response	Percentage
Accountant	14	6.1%
Auditor	6	3.0%
Politician	48	21.1%
Civil servant	62	27.2%
Administrator	20	8.8%
Educationist	36	15.8%
Others	32	14.0%
Total	228	100.0%

303 *Source: Field Survey, 2011.*

304 The distribution according to occupation revealed that out of 228 respondents, 14, 6,
 305 48, 62, 20, 36, and 22 respondents are accountants, Auditors, Politicians, Civil Servants,
 306 Administrators, Educationists and Other occupation having the percentage respondents of
 307 6.1%, 3.0%, 21.1%, 27.2%, 8.8%, 15.8%, and 4.0% respectively. The chart indicates that civil
 308 servants have the largest respondents.

309 **Table 8: ICT for Effective Service Delivery**

Option	Response	Percentage
YES	183	80.2%
NO	45	19.8%
Total	228	100.0%

310 *Source: Field survey, 2012*

311 To investigate if the use of ICT facilities can lead to effective service delivery in Local
 312 Government System, out of the 228 respondents, 183 said Yes making 80.2% of total
 313 respondents while 45 respondents said No making 19.8%

314

315

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317 **Table 9: Exposure to ICT Facilities**

Option	Response	Percentage
YES	122	53.5%
NO	106	46.5%
Total	228	100.0%

318 *Source: Field survey, 2012*

319 Based on the exposure to ICT facilities for service delivery in Local Government
 320 System, 122 out of the total respondents concluded that “Yes” they have been exposed to ICT
 321 facilities making 53.5% of total respondents while 106 respondents said “No” that they have
 322 not been exposed to ICT facilities making 46.5%.

323 **Table 10: Level of Exposure**

Option	Response	Percentage
Very long	16	15.1%
Long	38	31.15%
Not too long	40	37.7%
Just recently	28	26.4%
Total	122	100.0%

324 *Source: Field survey, 2012*

325 Out of the total respondents that concluded that Yes they have been exposed to ICT
 326 facilities, 16 out of the 106 respondents said that their level of exposure is for a very long time
 327 making 15.1%, 38 respondents said is for a long time making 31.15%, 40 said it is not too
 328 long making 37.7%, while 28 respondents said that their level of exposure is just recently
 329 making 26.4% of total respondents.

330 **Table 11: Availability of ICT in Office**

Option	Response	Percentage
YES	138	60.59%
NO	90	39.5%
Total	228	100.0%

331 *Source: Field survey, 2012*

332 Investigating the availability of ICT facilities in offices, out of the 228 respondents,
 333 138 said “Yes” that ICT facilities are available in their offices making 60.59% of total
 334 respondents while 90 respondents said “No” to that making 39.5%

335 **Table12: Degree of Availability**

Option	Response	Percentage
Highly Available	46	33.3%
Moderately Available	72	52.2%
Not Available	20	14.5%
Total	138	100.0%

336 *Source: Field survey, 2012*

337 Relating the degree of availability of ICT in offices, it was shown that 46 out of 138
 338 respondents said ICT facilities are highly available making 33.3% of total respondents, 72

339 concluded that they are moderately available making 52.2%, while 20 respondents said that
340 ICT facilities are not available in their offices making 14.5% of total respondents.

341 **Table 13: ICT Facility for Administration for Effective Service Delivery**

Option	Response	Percentage
YES	158	69.3%
NO	70	30.7%
Total	228	100.0%

342 *Source: Field survey, 2012*

343 As to whether the local government uses ICT facilities for administration for effective
344 service delivery, 158 respondents out of the total respondents said “Yes” to that making
345 69.3%, while 70 respondents said “No” making 30.7% of the total respondents.

346 **Table 14: If Yes, How Often Do You Use ICT**

Option	Response	Percentage
Very often	21	13.3%
Often	50	31.6%
Sometimes	87	55.1%
Total	158	100.0%

347 *Source: Field survey, 2012*

348 Based on the respondents’ perception on the usage of ICT and how often they use it, it
349 was revealed that 21 out of 158 respondents said it is very often making 13.3%, 50
350 respondents said it is often making 31.6%, while 87 respondents said they use it sometimes
351 making 55.1% of total respondents.

352 **Table 15: Rate the Optimum Use of ICT Facilities**

Option	Response	Percentage
Highly utilized	33	14.5%
Moderately utilized	101	44.3%
Low utilization	94	41.2%
Total	228	100.0%

353 *Source: Field survey, 2012*

354 Rating the optimum usage of ICT facilities by respondents, 33 respondents out of 228
355 respondents concluded that ICT facilities are highly utilized making 14.5% of total
356 respondents, 101 respondents said ICT facilities are moderately utilized making 44.3%, while
357 94 respondents accepted low utilization of ICT facilities making 41.2% of total respondents.

358 **Table 16: Service Delivery**

S/N	Service Delivery	Mean Response	Rank
1	Sound accountability	3.57	7
2	Legal system/regulation	4.06	4
3	Administration of specific matters	4.30	1
4	Dialogue on important issues	4.1	3
5	Presentation/training for capacity building	3.85	5
6	Conference/workshop on innovation	4.15	2
7	Political discussions/allied matters	3.31	9

8	Planning/development scheme	3.63	6
9	Security checks/challenges	3.44	8

359

360 Discussion of Result

361 ICT as service delivery tool for effective administration of local government services
 362 revealed that among the mean response analysis, ICT for administration of specific matters
 363 ranked highest, and conference/workshop on innovation ranked second followed by dialogue
 364 on important issues with very low application on security checks and challenges for the
 365 service delivery in L.G.A.

366 Test of Hypothesis

367 Ho: There is no significant relationship between ICT penetration and Service Delivery in the
 368 administration of Etsako West Local Government Area of Edo State.

369 H1: There is significant relationship between ICT penetration and Service Delivery in the
 370 administration of Etsako West Local Government Area of Edo State

371 Analysis

$$372 \chi^2_{cal} = \sum_{i=1}^n \frac{(o_i - e_i)^2}{e_i} = 0.256. \quad \text{See appendix 2 for the detail analysis}$$

$$373 \chi^2_{tab} = \chi^2_{(8,0.05)} = 15.5$$

374 From the test of hypotheses of research study, the $\chi^2_{cal}(0.256)$ is less than
 375 $\chi^2_{tab}(15.5)$ which implies accepting H_0 and concluding that there is no significant
 376 relationship between ICT and service delivery in the administration of Etsako West Local
 377 Government Area of Edo State. This implies that ICT awareness and usage in the studied
 378 local government is very low. This study confirms the work of Adeyeye Aladesanmi(2010),
 379 which revealed an incredibly low level of ICT presence and application in their sampled local
 380 governments. The study equally supports the work of Ogbomo (2009) which identified
 381 limited usage of ICT facilities in Oshimili North Local Government Area of Delta State.

382 Conclusion

383 From the empirical evaluation of ICT as a service delivery tool for effective
 384 administration of Etsako West Local Government Area of Edo State, it was found that ICT
 385 penetration has been very low. In addition, we also found out that ICT is mainly used in
 386 administration of specific matters, dialogue and workshop/conferences in the Etsako Local
 387 Government Area of Edo State, Nigeria.

388 Recommendations

389 Based on the findings, the following recommendations are hereby made:

1. Government should create opportunity for the local government workers in Nigeria to own computers and be ICT literate for effective and efficient performance in service delivery.
2. The role and importance of ICT should be emphasized to enable Local Governments participate in the e-governance.
3. Security and safety which is utmost responsibility of any nation for healthy growth and development should be seen adopting ICT measure for security checks and challenges.

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Appendix Test of Hypothesis Analysis

Chi-Square Analysis Table

S/NO	Observed Response (o_i)	Expected Response (e_i)	$[(o_i) - e_i]$	$[(o_i) - e_i]^2$	$\frac{[(o_i) - e_i]^2}{e_i}$
1	3.57	3.82	-0.25	0.0625	0.01626
2	4.06	3.82	0.24	0.0576	0.01508
3	4.30	3.82	0.48	0.2304	0.06031
4	4.10	3.82	0.28	0.0784	0.02052
5	3.85	3.82	0.03	0.0009	0.00024

6	4.15	3.82	0.33	0.1089	0.02851
7	3.31	3.82	-0.51	0.2601	0.06809
8	3.63	3.82	-0.19	0.0361	0.00945
9	3.44	3.82	-0.38	0.1444	0.03780
					$\chi^2_{cal} = 0.25636$

470

471 The expected value $(e_i) = \frac{\sum o_i}{n}$

472 $(e_i) = \frac{3441}{9} = 3.82 \text{ (2d.p)}$