

1 E-Government, A Tool for Service Delivery in Botswana's Local  
2 Authorities?

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6 **Abstract**

7 The Government of Botswana has spent billions of Pulas since the inception of egovernment  
8 project in 2012. The country is in pursuit of better service delivery as it owes it to the people.  
9 However, just like other countries, New Public Management (NPM) brought in exciting  
10 reforms, e-government included. This paper wanted to find out challenges faced by local  
11 authorities when delivering services through the Information Communication Technology  
12 (ICT). This was a qualitative research which used secondary data sources. The findings of the  
13 study showed that it is close to a decade since the inception of e-government yet there are still  
14 complaints on service delivery. In this era e-government remains key in ensuring that there is  
15 good service delivery however challenges such as poor infrastructure, mishandling of  
16 egovernment funds, language barrier, lack of trust, lack of financial autonomy of local  
17 authorities continue to limit egovernments effectiveness in the local authorities.

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19 **Index terms**— e-government, service delivery, local authority, botswana

20 **1 I. Introduction**

21 here is a revolution of new technology across the globe. Technology is fundamentally changing our everyday lives.  
22 Nations are demanding good services from their governments. Globally, governments are continuously under  
23 pressure to come up with ways of improving services delivery as they owe it to the people, hence the adoption of  
24 e-government in developing nations. This term has been in circulation for decades, but it has gained popularity  
25 in recent years where, digital and transformative government, it is often used as a substitute or replacement for  
26 the term 'egovernment'. E-government is defined by the OECD as "the use of information and communications  
27 technologies (ICTs), and particularly the Internet, to achieve better government" (OECD, 2003). The World Bank  
28 (2001) has defined e-government as "governmentowned or operated systems of information and communications  
29 technologies (ICTs) that transform relations with citizens, the private sector and other government agencies so  
30 as to promote citizen empowerment, improve service delivery, strengthen accountability, increase transparency,  
31 or improve government efficiency".

32 E-Government has gained popularity over the years in some countries especially developing ones. T E-  
33 government has been widely recognized not only by researchers but, also international organizations like World  
34 Bank and UN. The need to adopt a technological approach in service delivery has been widely noted by various  
35 authors. In the public sector, ICT investment primarily manifests itself as Electronic Government (e-Government)  
36 programs (Heeks, 2002). According to (Irani, Love, & Jones, 2008) the world has witnessed numerous e-  
37 Government projects and sub-Saharan Africa is no exception. E-Government projects are a reality for the  
38 African continent as seen with the numerous governments that have expressed strategies outlining plans for  
39 the implementation of a variety of egovernment initiatives. However, even with various strategic plans and  
40 policies, the core challenge remains with the minimal successful implementations of egovernment projects (Heeks,  
41 2006; Irani et al., 2008).

42 According to Saugata (2007) international trends indicate that , the use of e-government system in developing  
43 countries has not penetrated that much. Matimati state that, local authorities in many developing nations have  
44 not yet adapted e-government initiative as compared to those in the developed nations. Local governments in

## 6 C) E-SERVICES/E-CITIZEN

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45 developing countries are encountering multifaceted problems such as lack of infrastructure, lack of skills and  
46 finances.

47 According to Nkwe (2012), Botswana is a developing country with a dedicated agenda towards promoting e-  
48 government because the leaders have understood the importance of e-government to an appreciable extent (Nkwe,  
49 2012). The government of Botswana has over the years developed National Development Plans (NDP). NDP  
50 are national macroeconomic blue prints that contain government strategies planned to be undertaken over the  
51 five years period. The current plan is NDP 11 which stated that emphasises will be placed on the development  
52 of eservices broadband connectivity as well as implementation of e-government projects. Local authorities in  
53 Botswana have started to show some appreciation towards the e-governance system as an opportunity to provide  
54 and transform the relationship between local authorities and citizens. In the context of Government of Botswana  
55 (GoB), Local Authorities(LAs) which are commonly known as councils are devolved institution with statutory  
56 powers to make the decision at a local level (Madala and Phirinyane, 2016). According to Saugata (2007), the  
57 move toward e-government is a positive one especially that it contributes to the achievement of good governance.

### 58 2 a) Problem statement

59 Due to many challenges in service delivery, GoB saw it fit to undertake an e-government programme (GoB, 2012).  
60 Currently, e-government is a key policy debate that has attracted the attention of policy-makers and researchers  
61 in Botswana. The debates around e-government came as a result of complaints from different stakeholders that  
62 e-government is not meeting their expectations, this is despite substantial amount that the government has spent  
63 towards the project. According to Mmeso (2018), the government of Botswana has lost over P1 billion since  
64 the introduction of e-government programme in 2012. This paper seeks to find out challenges faced by local  
65 authorities when delivering services through the Information Communication Technology (ICT). The main aim  
66 of this study is ? to find out challenges of e-government at local authorities ? Provide policy implications b) The  
67 arrangement of the paper is as follows

68 The next section presents, a suggested conceptual e-government adoption model, followed by a methodological  
69 approach, then the significance of the local e-government in Botswana. Next section presents benefits  
70 and challenges of using e-government in local authorities. Lastly, the paper concludes and makes some  
71 recommendations.

## 72 3 II. Overlapping Dominance of E-governance Model

73 Figure 1

74 Source: Heeks 2002 Although the above three are described separately, these three domains of e-governance  
75 are recognized as overlapping as shown in figure ??.

### 76 4 a) E-Administration

77 E-administration deals with improving the internal workings of the public sector. E-administration includes  
78 cutting process costs, improving the input, managing process performance, planning, monitoring and controlling  
79 the performance of process resources (human, financial and other). E-administration improves processes, it  
80 connects Citizens Building and promote external Interactions with Citizens Customers Communities, Non-Profits  
81 Organisations and Other Agencies. E-administration helps in making strategic connections in government. It  
82 connects arms, agencies and data stores of government to strengthen the capacity to investigate, develop and  
83 implement the strategy and policy that guides government processes. E-administration empowers as it transfers  
84 power, authority and resources for processes from their existing locus to new locations (Heeks, 2006).

### 85 5 b) E-Society

86 E-Society deals more with ensuring that there is a relationship between public agencies, private sector companies,  
87 non-profit and community organizations. As with citizen connections, these initiatives may well incorporate some  
88 processes of e administration. E-society is there to improve the interaction between government and business. E-  
89 society includes, digitizing procurement from and services to business to improve their quality, convenience, and  
90 cost. E-society also ensures that they build the social and economic capacities and capital of local communities  
91 and they build partnerships to strengthen institutional relationships ??Heeks, 2001).

### 92 6 c) E-Services/E-Citizen

93 According to Heeks (2002), e-services/e-citizen deals mainly with the relationship between government and  
94 citizens either as voters/stakeholders from whom the African public sector should derive its legitimacy. These  
95 initiatives they include talking to citizens, giving citizens details of public sector activities. E-service relates  
96 to certain types of accountability like making public servants more accountable for their decisions and actions.  
97 E-service/ e-citizen is about listening to citizens increasing the input of citizens into public sector decisions and  
98 actions. E-service could be flagged as either democratization or participation. E-services improves public services  
99 delivered to members of the public along dimensions such as quality, convenience and cost.

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## 100 7 III. Methodological Approach

101 The paper adopted a qualitative research method. Secondary data sources were used. A critical review of a  
102 collection of existing literature on e-government was established. There after followed a systematic review of  
103 literature. This was with the help of different databases and academic papers, books, newspaper articles, radio,  
104 television discussions and government reports.

## 105 8 a) E-government landscape in Botswana

106 The Government of Botswana (GoB) launched its first-ever E- The Botswana government is making significant  
107 progress in the development of the e-government. The progress is shown by government initiatives and the  
108 development of government documents like the egovernment master plan 2015-2021. The master plan seeks to  
109 innovate service delivery through seamless connectivity between government agencies (G2G), improve access to  
110 information by reducing the digital divide and improving network speed. Before the master plan there was the  
111 2011-2016 National e-Government Strategy which outlined the processes for the modernization of government,  
112 the enhancement of transparency, accountability and good governance; making the government more result  
113 oriented, efficient and customer-centric. The expectation is that E-Government should bring huge benefits to  
114 the society. The strategy states that e-government will try improve relations between government and the  
115 community, as egovernment will allow both the citizen and business community to have access to government  
116 services and information at their comfort, and this can only be possible through the use of ICT's (GoB, 2012).  
117 GoB, has successfully implemented massive projects like the construction of Kgalagadi Optical Fiber Network,  
118 full liberation of the telecommunications sector, establish ICT sector regulatory and institutional framework,  
119 policy and setting up IT hub. The Government of Botswana is moving with the trends of the 21st century  
120 by emphasising Information and Communication Technologies (ICT) as vital in ensuring that optimal service  
121 delivery is achieved.

122 In 2013 GoB stated that priority should be placed on some of ongoing e-Government initiatives that directly  
123 "touch" citizens and have the potential to provide significant, visible improvements in service delivery. These  
124 initiatives included ICT-driven service transformation in the following areas;

125 The National Identity Card -OMANG, Vital Statistics Registration (birth, marriage, death, etc.), Land and  
126 Property Registration Business Registration and Licensing, The Passport Office, Motor Vehicle Registration,  
127 National Statistics, Government Core Services (HR, Finance, Procurement, Project Management & Knowledge  
128 Management).

129 Evidently, GoB has the interest of the nation at heart, even though these services are often interrupted by  
130 power cuts, system failures, no internet connectivity, etc. Despite the challenges, government and private sector  
131 involvement in ICT brought good results in 2016 as Botswana came 5 th in Africa according to the International  
132 Telecommunication Union (ITU), this is ICT Development Index used for measuring the information society  
133 across 175 countries in the world (ICT development index, 2017).

## 134 9 IV. Significance of Local Government for E-government in 135 Botswana

136 According to Madala and Phirinyane (2016), local authorities in Botswana are involved in the rolling out of  
137 e-government programme. The updating of the egovernment portal is done at the parent ministry, Ministry of  
138 Local Government and Rural Development (MLGRD). All local authorities forward their information whenever  
139 there are updates to MLGRD.

140 Botswana has two spheres of governance, the second being local government which is at the forefront of  
141 understanding citizen's needs. Local authorities have a responsibility to ensure that there is an improvement of  
142 service delivery in the districts. The MLGRD has a slogan "batho pele" which simply means people first, this  
143 primarily means local authorities and MLGRD they are at forefront of service provision.

144 The significance of e-government at local level is crucial even though there are financial challenges. However,  
145 despite the challenges one of the local authorities Kweneng District Council in Molepolole, the second largest  
146 village in Botswana has built One Stop Service Center. One stop service centers are a necessity in communities as  
147 they bring all government services to the people in one place. The development of service halls is a demonstration  
148 that local authorities have the potential to provide stability and promote good governance.

149 Improving the local level of e-government is inseparable from achieving the UN Sustainable Development Goals.  
150 The development of electronic services and the increase in the number of people participating in decision-making  
151 will drastically lead to the achievement of the Development Goals. It will assist in making cities sustainable,  
152 improving local communities, making them inclusive safe and resilient.

## 153 10 V. Benefits of E-government in Local Authorities a) In- 154 creased transparency and accountability of local authority

155 Local authorities as services providers to the people have a mandate to ensure that people get the right services.  
156 During the 2016/17 national budget speech, the government of Botswana asked youth to own business so that  
157 they can have a partnership with government. The public and private partnership was in a bid to improve

## 15 C) MISHANDLING OF E-GOVERNMENT FUNDS BY CENTRAL GOVERNMENT

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158 service delivery (GoB, 2016). Government displays tenders publicly on the websites, government gazette, and  
159 newspapers. Despite these, there are always issues of concern for example, corruption in the tender awarding  
160 systems; sometimes others feel same people get tenders etc. The use of ICT can improve transparency levels  
161 especially when the names of those who won tenders are publicly displayed together with the amount the bided  
162 with. Things like uploading of audited local authorities' financial statements, minutes from important meetings  
163 like full council can help in ensuring that communities are well informed. Yong (2005) states e-government has  
164 a benefit of enhancing transparency and increasing accountability of local authority. E-government is important  
165 as it cuts the middle man therefore little or no corruption.

### 166 11 b) Empowerment of citizens through greater access to local 167 authority information and the ability to interact and partic- 168 ipate.

169 In Botswana to some extent members of the community have access to some government documents although it  
170 can be very frustrating because not everything is uploaded and sometimes they will be no recent document on  
171 the websites. Effective use of egovernment system in local authorities and sharing of information with various  
172 stakeholders results in citizen empowerment through easy and enhanced access to local authority information  
173 and the ability to participate in the process of governance (Matimati, 2015). Egovernment gives the society an  
174 opportunity to express their views like in cases where opinions of the people are needed to rate the services of  
175 local authorities. Egovernment also helps in creating a platform where there can be an interaction of politician  
176 and citizens this can allow debates between politicians and citizen despite the distance between the two.

### 177 12 c) Improved and enhanced service delivery

178 According to Bryman (2001), the use of egovernment system provides improved service delivery. Bryman stated  
179 that, using e-government makes things very fast and convenient hence reduces travelling which can be costly to  
180 an ordinary citizen. For instance, development of one-stop service centers at Molepolole is a good example, as it  
181 services people from one roof saving peoples time and money from going to different government offices in search  
182 for assistance.

### 183 13 VI. challenges of e-government in local authorities a) Poor 184 infrastructure

185 Botswana is sparsely populated. There are sixteen local authorities across the country. Unfortunately, even  
186 though the government is trying to stretch to the communities, some areas are far, and there are no resources like  
187 electricity as a result internet is poor which makes even cell phone connectivity impossible. Often people complain  
188 of service delivery in government institutions as it has become a common norm that the government systems are  
189 down most of the time especially during the days where there are many people. Continuous system failure is a  
190 clear indication of poor infrastructure, where there is low network connectivity the internet is poor. Developing  
191 countries often have a poor IT infrastructure, which constitutes a further obstacle for the implementation  
192 of e-government (Tap scott, 1996). Developing countries may not have consistent and reliable electricity,  
193 telecommunications, and Internet access ??Jaeger & Thompson, 2004). The Botswana 2018/19 national budget  
194 proposed a development budget of P461 million for the ICT sector, IT experts in the telecommunication sector  
195 complained of little money allocated to this sector. Arguments were that, money was way too little to do  
196 any significant improvements to ICT infrastructure to keep up with the current international pace (Botswana  
197 Guardian, 2018).

### 198 14 b) Low internet penetration

199 According to Internet World Statistics (2015), Botswana's internet penetration as of 2015 stood at 28.40%. A  
200 report entitled "The Affordability Report" reveals that Botswana is ranked among the highest on the most  
201 expensive basic broadband connection on the African continent (Sunday Standard, 2019). Sunday Standard  
202 (2015) stated that, Botswana has one of the lowest average internet connection speeds in the world. Consumers  
203 have been promised cheap and affordable internet, but still, things have not changed, despite the fact that there  
204 is generally high demand for internet in the country (Sunday Standard, 2015).

### 205 15 c) Mishandling of e-government funds by central government

206 In April 2008, the Auditor General issued a qualified audit opinion on the government's main bank accounts  
207 with the Bank of Botswana, transactions running into billions of pula could not be accounted for. Reports of the  
208 missing e-government money add to P600 million to billions that in 2018 were reported to be missing (Sunday  
209 standard, 2018). E-government projects in developing countries are usually driven by individual government  
210 departments that frequently depend upon central government and aid from donors for funding. Once this  
211 financing ceases, there is often insufficient funding to continue the project. ??Schware & Deane, 2003). Sometimes

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212 government departments misuse money, issues of corruption start arising, in the end, it affects the delivery of  
213 service. Corruption affects local authorities as they are highly depended on central government for money.

## 214 **16 d) Shortage of finances in local authorities**

215 In Botswana, local authorities are empowered by the Local Government Act of 2012 to come up with ways  
216 of generating money rather than just relying on central government. Local authorities in Botswana remain  
217 challenged due to lack of finances which have crippled their ability to give better services to the people. According  
218 to Hamilton (2000), local authorities greatest challenge is that of shortage of finances. (Shackleton & Dawson,  
219 2007), stated that local authorities often lack independent decision-making powers in the area of egovernment  
220 and tend to heavily rely on funding from central government to implement new initiatives.

## 221 **17 f) Lack of trust**

222 According to Pheko (2009), it is unfortunate for Botswana that, with so many interventions to encourage e-  
223 government there are still issues of lack of trust. People do not trust the government nor anyone with their  
224 information. Pheko (2009), said this is as a result of lack of promotional and awareness campaigns of egovernment.

## 225 **18 g) Lack of e-government policy**

226 Already there is the Maitlamo policy which was created to regulate the ICT industry in general. The policy  
227 coordinate e-government from the center within the Maitlamo policy framework. The policy is a general ICT  
228 policy which does not adequately presents the framework for e-government at a local level as more emphasis is  
229 on the central government.

## 230 **19 VII. Conclusions**

231 According to (Shackleton & Dawson, 2007) the implementation of e-government has remained problematic and  
232 constrained in developing countries. The significance of the local government sector for egovernment in Botswana,  
233 undoubtedly faces various challenges in delivering services including poor infrastructure; Botswana is sparsely  
234 populated. There are still some areas which do not have electricity hence no internet, this is very challenging  
235 for an ordinary citizen who is in need of government services and they are far from resources. Low internet  
236 penetration is worrisome in the country; this is despite high usage of mobile phones in Botswana. Internet is  
237 also reported to be very expensive in Botswana. Local authorities do not have financial autonomy as a result  
238 it is always challenging for them to attend their priorities like local e-government. There are issues of lack of  
239 trust which could be attributable to that African culture people tend to be secretive about their personal details  
240 especially when they are not informed. However, the research identified a number of areas that needs to be looked  
241 into with regard to the use of e-government by local authorities in order to improve service delivery.

## 242 **20 VIII. Way Forward**

243 1. There is need to build ICT infrastructure that will allow linkage and use of e-government by all local authorities  
244 in order to improve service delivery to the people. Things like electricity and internet should be prioritized so  
245 that there can be internet connectivity at local communities.

## 246 **21 e) Language implications**

247 There is a challenge in ensuring that government caters appropriately to its citizens preferably in a language of  
248 their choice for service delivery. For instance, most of the local authorities' website information is only presented  
249 in English. Language barrier is problematic especially for those who do not know English. Studies indicate that  
250 there are benefits of ensuring that e-government services in the language of citizens' choice.

251 2. There should be provision of funds to support the infrastructure developments such as electricity, internet,  
252 service halls and budget should be availed for training of human resource in local authorities to allow smooth  
253 daily usage between service providers and service users. Budget should also cater for public education campaigns  
254 to make communities informed about e-government as it can help to reduce resistance. 3. There is need to have  
255 a standalone policy for egovernment. 4. The design of e-government systems should be localized. This will help  
256 to avoid a situation where a consultant gets a system from their home country and try make it applicable in a  
257 totally different environment.

## 258 **22 Disclaimer**

259 The views expressed in this paper are solely of the author and do not reflect the views of Botswana Institute for  
260 Development Policy Analysis (BIDPA), where the author is employed. Therefore, all errors and omission remain  
261 that of the author.

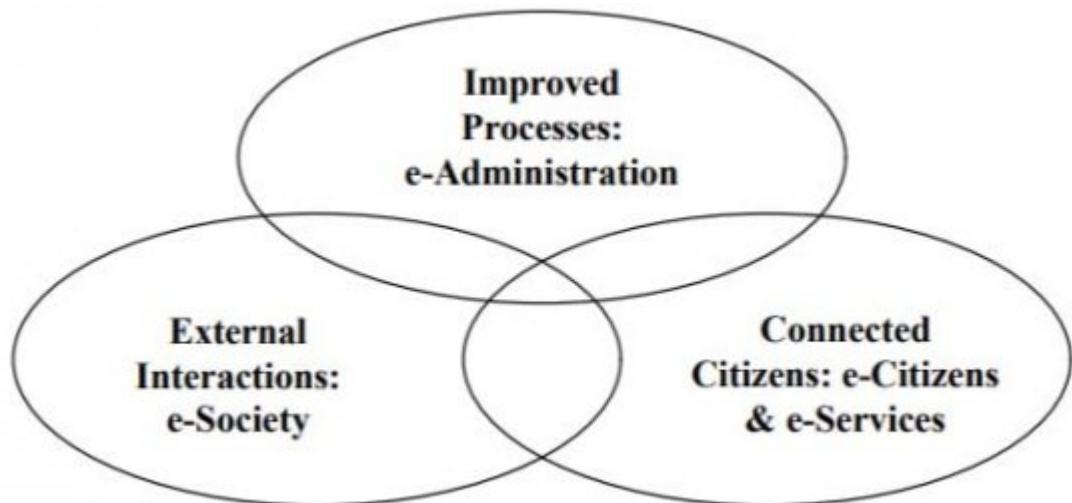


Figure 1:

under sustainable economic development there is Information and Communications Technology (ICT) which says it will leverage information communication technology (ICT) as the main contributor to economic growth and employment whilst also enabling an efficient private and public sector (GoB, 2016). The development of ICT is in line with the 2030 Agenda for Sustainable Development sees the importance of technological innovation and contains specific references needed for high quality, timely, reliable and disaggregated data, including on Earth observation and geospatial information. Many of the Agenda's Sustainable Development Goals have targets that are directly or indirectly related to e-government assessment indicators, like what makes improvements in local e-government assessment operate as a catalyst for the achievement of the SDGs.

Figure 2:

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