EUROPEAN BUSINESS UNIVERSITY OF LUXEMBOURG

ADDRESSING LIMITATIONS OF THE DIGITALIZATION OF THE PRIVATE SECTOR IN BOTSWANA

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List of Abbreviations

BOGA- Botswana Guides Association

BTC- Botswana Telecommunications Corporation

BTO- Botswana Tourism Organisation

DOT- Department of Tourism

EA- Enterprise architecture

HATAB- Hospitality and Tourism Association of Botswana

LEA- Local Enterprise Authority

SPSS- Statistical Package for the Social Sciences

SMMEs- Small and Medium-Sized Enterprises

TOLIS- Tourism Licensing and Information System

Abstract

This thesis contributes to the Government of Botswana's effort to roll out the digital transformation strategy under the Ministry of Communications, Knowledge and Technology. It took a deep dive into the tourism sector to identify challenges that are faced by entrepreneurs in digitizing their products and services for the entrepreneurs. The study utilized both qualitative and quantitative research approaches, with the use of a structured online questionnaire for the target group. About forty (40) companies were invited to participate in the study online, whereas twenty-one (21) managed to participate.

The study determined the level of uptake for e-Governance service in Botswana by the participating tourism companies. It showed that tourism visa, e-tax and company registration are the most used e-Government services. The majority of the participants lamented poor internet connectivity as a bottleneck to the digitalization process. Participants believe that digitalization is part of transforming a business. In order to mitigate the biggest challenge of internet connectivity, companies proposed an improvement in the connectivity by connection of high-speed internet. They also added that the Botswana Telecommunications Corporation (BTC) has to engage private companies and assist them with high quality internet.

The tourism sector would like digitalization of value chain activities from reservations, bookings, checking in and out, procurement and selling of products and services. Additionally, participants noted that the digitalization of regulatory services such as land application and its conversion, culture and lifestyle as well as criminal matters in tourism areas need to be considered as part of the digital transformation.

The thesis experienced some time limitations and covered a sizeable number of participants. Further work could be done in exploring challenges and their mitigations in different sectors of the economy in Botswana. This will align with the digital transformation for Botswana in the era of the Fourth Industrial Revolution (4IR).

Acknowledgements

I would like to thank the support received from my supervisor, Dr. Sid Boubekeur throughout the conceptualization and preparation of the thesis. Special thanks to my MBA 100 (Marketing Management) Lecture, Prof. Dr. Sergiy Spivakovskyy for the guidance and roadmap at the beginning of the thesis.

1. INTRODUCTION

1.1. Background of the Study

1.1.1. Significance of the Study

As part of Botswana's RESET Agenda, the third priority in implementing Botswana's change mandate is Digitilisation. His Excellence Dr. Mokgweetsi E.K. Masisi highlighted that "digitalization has the immense potential to unlock and enable high productivity among our people. The global village runs on the wheels of digitilisation which is quintessential to the delivery of services to the people."

Through its digital transformation strategy, Botswana is taking significant steps to position itself as a leader in the global digital economy by establishing the SmartBots Lab Centre of Excellence. This move aims to support Botswana's competitiveness and socio-economic development in the era of the Fourth Industrial Revolution (4IR). According to the WIPO Global Innovation Index (2022), Botswana ranks as the fourth most innovative economy in Africa, highlighting its potential for growth and development (uneca.org)

According to UNECA (2023), The SmartBots Lab Governance Framework underlines the importance of collaboration with the entrepreneurial innovation ecosystem, including public, private, and community partnerships. These partnerships will drive the successful implementation of SmartBots' priorities, from ideation and incubation to commercialization.

By implementing the SmartBots Lab, UNECA goes on to note that “Botswana aims to achieve several key objectives. These include the development of an innovative ecosystem, protection of Botswana's intellectual property, alignment with national priorities and SDGs, and compliance with relevant regulations. The lab will also facilitate the establishment of sustainable digital investments and the creation of Botswana-based digital enterprises, contributing to economic growth and reducing the need for talented youth to seek opportunities abroad.”

Furthermore, in her budget speech presentation in February 2024, the Minister of Finance Honorable Peggy Serame added that "a development budget of P1.83 billion is proposed to accelerate the implementation of programmes and projects geared towards innovation and digital transformation. This budget will be expended through the Digital Transformation Strategy for Botswana which is spearheaded by SmartBots." The digitalization continues to be a priority sector for the Government of Botswana thus providing an enabling environment in the area.

In Botswana, Tokafala Program which is a partnership between the Government of Botswana, Debswana, De Beers Group and Anglo America have initiated the digital transformation in the tourism sector from 2022. Below is a step by step process of the digitalization process;

- **Clasification of the Target Group**

  a. **User Profile 3:**
     - Literate
     - Tech access: radio and/TV, Smart phone
     - Internet access
     - Access to mobile data and/wifi
     - Suitable Tech: messages/sms, social media, Online learning platforms, video calls

  b. **User Profile 4**
     - Literate
     - Tech access: radio and/TV, Smart phone, Laptop
     - Internet access
     - Access to mobile data and/wifi
     - Suitable Tech: messages/sms, social media, Online learning platforms, video calls

Tokafala delivered a blended approach, combining online and in-person support. It aimed at ultimately fully digitalizing its programme, following a better understanding of what works best for the target segment. E-commerce curriculum was introduced in trainings to support SMMEs to understand and shift to online presence as a new way of doing business.

Below are the findings from the Tokafala digitalisation Assessment report (2022)

- Even highly educated entrepreneurs appreciate the online training
- Record keeping is what most people do manually
- Some that were initially reluctant with digital training ended up getting trained along with family (wife, daughter)
- Entrepreneurs are aware that the world is going digital and they appreciate the upskilling
- Some of them have highly digitized business model, however they lean on family members for this, because they still lack digital skills or have other limitations
- Assignments take time
- Those who lack internet are willing to download TalentLMS app (mobile phone) to access content offline
- Numeracy levels or self-confidence on numeracy skills takes them more time
- Doing the online training at their own pace also prevents overload

1.1.2. Scope of the Study

The focus will be on the Small and Medium-Sized Enterprises (SMMEs) operating in the tourism industry. According to a tourism value chain study conducted by Tokafala programme in 2019, 80% (~425) of citizen owned SMMEs are in Maun any value chain development work would need to take place in this cluster. The study also adds that citizen-owned ventures in Botswana account for more than 70% of enterprises in accommodation, mobile safari and travel agency sectors of which mostly are from Maun.

An assessment of Government existing and planned e-services will be explored in line with preparing SMMEs to do business online. This will assist in aligning with the SmartBots Lab Governance framework which underlines the importance of collaboration with the entrepreneurial innovation ecosystem, including public, private, and community partnerships, as highlighted by UNECA. To this end, the thesis will determine the uptake of the digital and e-governance platforms in enabling the SMMEs toward improving their efficiency.

1.2. Research Objectives and Research Questions

1.2.1. Research Aim

The aim is to identify obstacles and constraints that limit entrepreneurs from the tourism sector to adopt digital practices and determine ways to improve their enablement.

Research Questions

- Research question 1: How useful are the available e-Government services?
- Research question 2: What are the challenges faced by entrepreneurs in digitalization of their products and services?
- Research question 3: What are the mitigations to addressing digitalization challenges?
- Research question 4: What products/services can be digitalized in the tourism sector?

2. METHODOLOGY

The study combined both qualitative and quantitative research methods. It was conducted in Maun, which is the tourism hub for Botswana. The survey targeted a total of 20-30 businesses based in Maun (target population). The target population included Accommodation facilities, mobile safari and travel agencies as well as tourism Suppliers.

The majority of the SMMEs in Maun had a social media presence or are active on various platforms. This facilitated collection of data online. Additionally, participants were identified to participate and randomly selected from the platforms.

The researcher implemented door to door approach, telephonic calls and WhatsApp invitations to participate to the study. A structured online questionnaire was designed for data collection using google forms. In the spirit of digitalization. All surveys were completed online using the using google forms. The form was shared via email and WhatsApp.

2.1. Data collection/generation

The thesis adopted both quantitative and qualitative data.

Under Qualitative data, two types of data were used as follows;

- Nominal data: This will include gender, age, business sector and company size
- Ordinal data: This was used to rank the usage of the e-governance services.

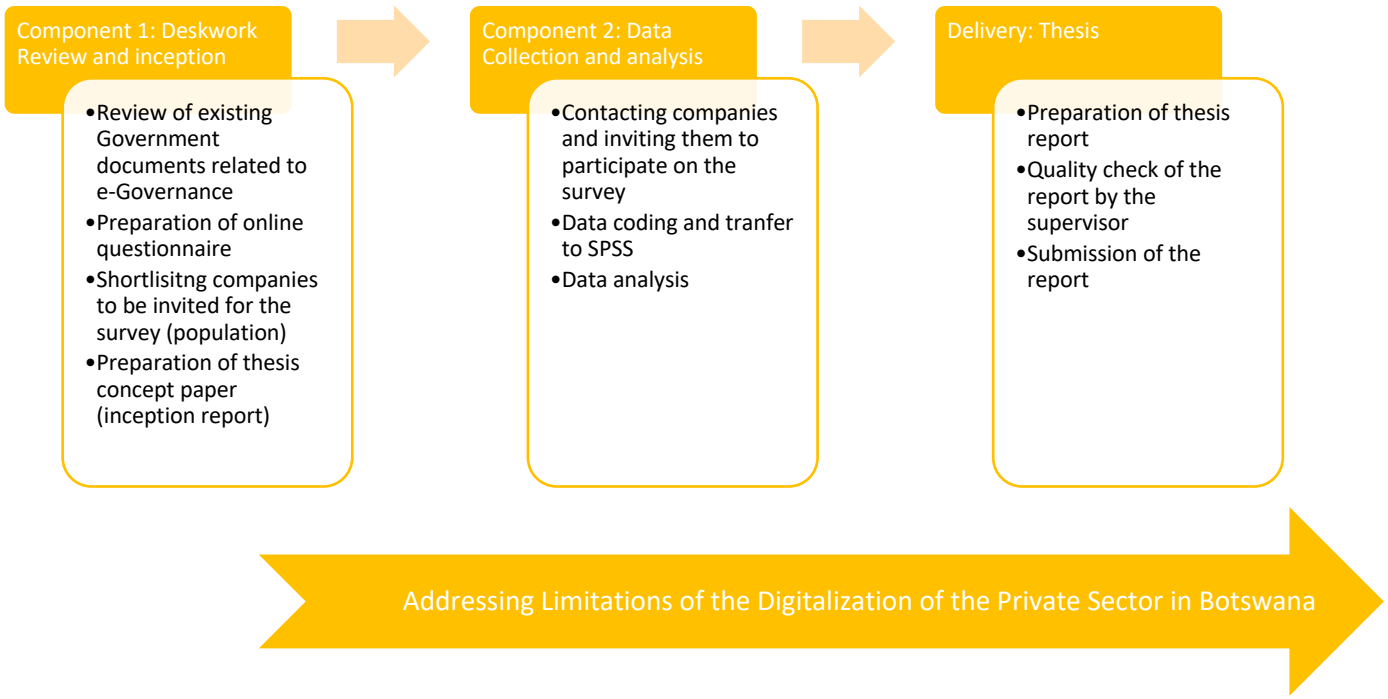
Quantitative data was used to analyze the responses from the participants. The completed survey questionnaire was downloaded from google forms in excel format, and pre coded for easy data entry on the adopted template using SPSS. Descriptive statistics such as frequencies, cross tabulations graphs and tables were used for analysis and report writing.

The study utilized cross tabulations to be able to able to get deeper insights into the analysis by understanding;

- Gender trends in the digital space
- how age responds to the digital transformation
- how different sectors respond to the e-governance services

The figure below summarizes the thesis journey.

Figure 1: Thesis implementation process



3. RESULTS AND DISCUSSION

3.1. Demographic Characteristics

3.1.1. Gender

The majority of participants were females (66.7%) predominantly from the accommodation facilities and travel agencies. Males participation stood at 33.3%, where they scored higher under the mobile safari sector against females.

Figure 2: Participation by Gender

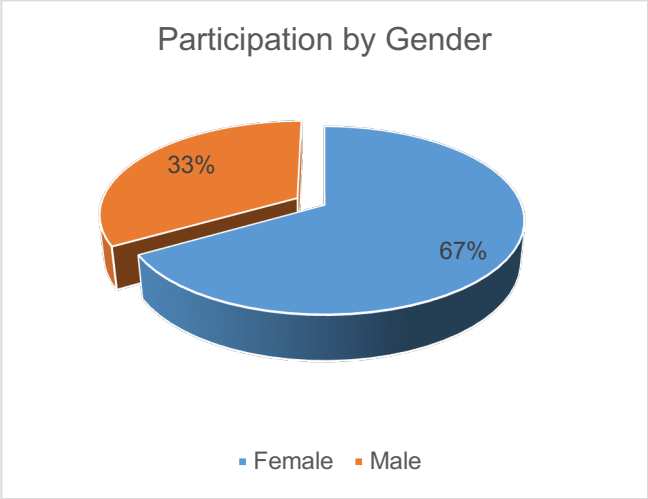


Table 1: Cross tabulation of Gender and Tourism sub-sector

		Tourism sub-sector				
		Accommodation	Mobile safari	Travel agent	Other (specify)	
Gender	Male	3	3	1	0	7
	Female	7	2	4	1	14
Total		10	5	5	1	21

The majority of the interviewed participants believe that e-Government services benefit the tourism sector by offering improved interaction through online services. It is worth noting that

females showed enthusiasm in completing the online survey. Despite being held up during the day, the majority managed to complete the survey in the evenings. Furthermore, 50% of the female participant are more open to technology as they believe that e-Government services benefit the tourism sector via improved interaction through online services. The female participation by sector was predominantly from the accommodation sector. One of the companies was a medium-sized company which employs over 30 staff members.

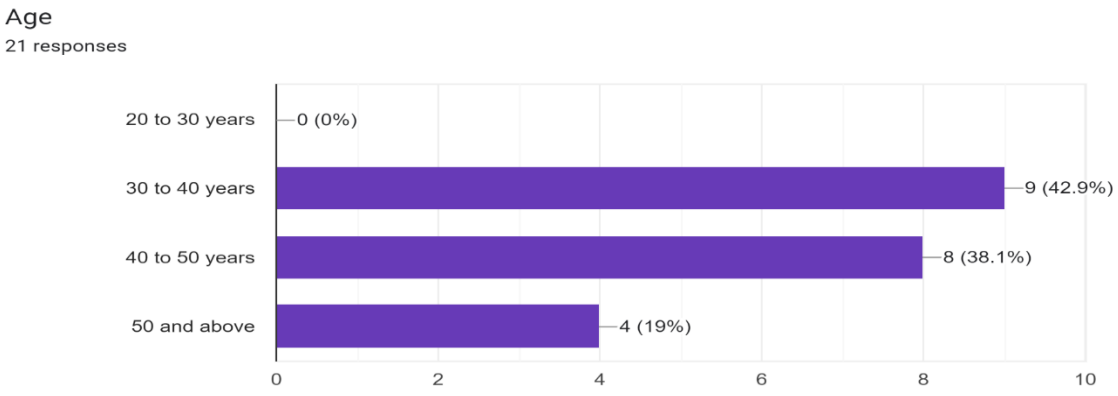
Table 2: Cross tabulation of Gender and benefits of e-Government services

		Meet customer service delivery standards	Secure licences	Improved statistical information	Improved monitoring and compliance	Improved interaction through online services	
Gender	Male	1	2	0	0	4	7
	Female	3	2	1	1	7	14
Total		4	4	1	1	11	21

3.1.2. Age

The survey participants are mostly between 30 to 40 years, followed by 40 to 50 years old. A few participants (19%) were above 50 years

Figure 3: Age of participants



With regards to the benefits of the e-Government services to the tourism industry, the age group 30 to 50 years strongly belief that the services are necessary for an improved interaction through

online services. However, the age group above 50 years noted several benefits amongst them improved statistical information as opposed to the former age group.

Table 3: Cross tabulation of Age and benefits of e-Government services

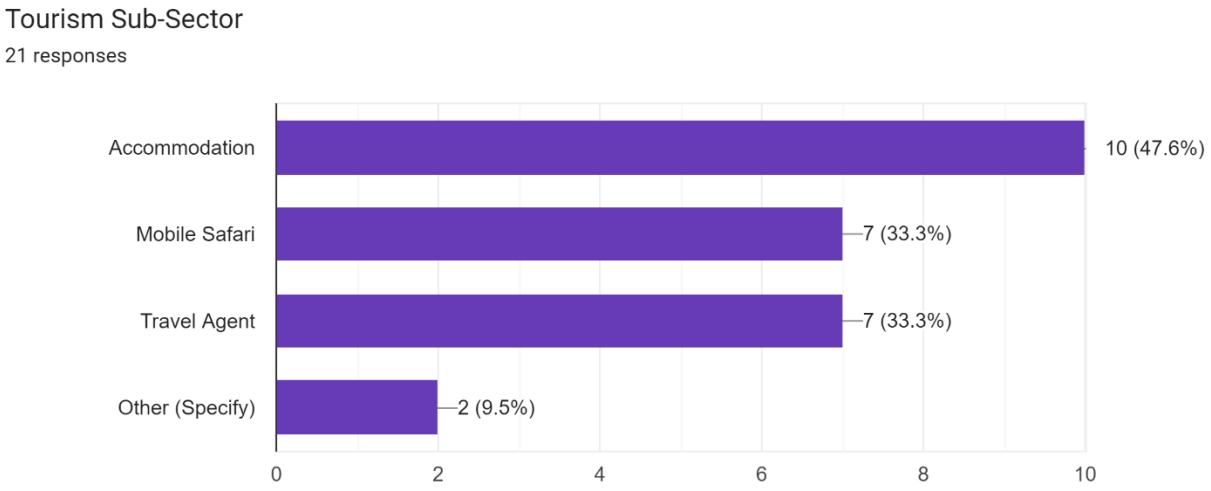
		Meet customer service delivery standards	Secure licences	Improved statistical information	Improved monitoring and compliance	Improved interaction through online services	
Age	30 to 40 years	1	2	0	1	5	9
	40 to 50 years	2	1	0	0	5	8
	50 and above	1	1	1	0	1	4
Total		4	4	1	1	11	21

3.1.3. Tourism Sub-sector

The responses reflected the tourism value chain in Maun. Accommodation facilities led the responses with 47.6% whereas mobile safari and travel agents shared the same weight at 33.3%. Two responses belonged to other sectors being poultry and spa services. Three companies owned more than one product, as their products and services combines both accommodation, travel agency and mobile safari activities.

The table figure below shows the summary of the selected sectors.

Figure 4: Tourism sub-sectors



When asked about the benefits of the e-Government services, accommodation facilities and travel agents referred to improved interaction through online services whilst the mobile safari highlighted securing licences as a key benefit.

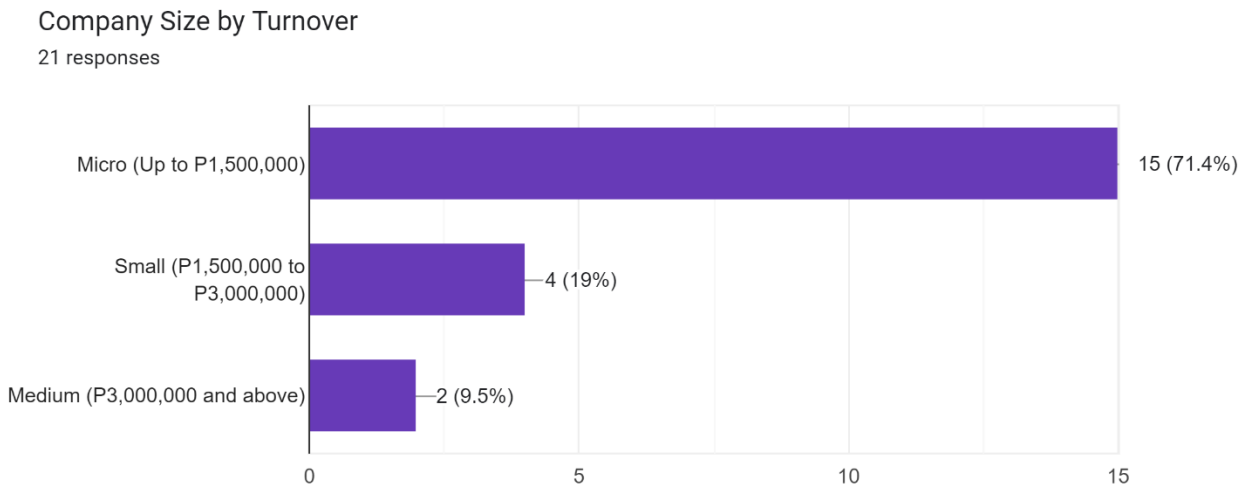
Table 4: Tourism sub-sector vs how do e-Government services benefit the tourism industry?

		Meet customer service delivery standards	Secure licences	Improved statistical information	Improved monitoring and compliance	Improved interaction through online services	
Tourism sub-sector	Accommodation	1	0	1	1	7	10
	Mobile safari	1	3	0	0	1	5
	Travel agent	2	1	0	0	2	5
	Other(specify)	0	0	0	0	1	1
Total		4	4	1	1	11	21

3.1.4. Company Size

The majority of the participants fell in the micro category (71.4%), followed by small (19%) and lastly medium (9.5%). As the tourism sector still recovers from the advent of Covid-19, company growth and turnover remains a challenge which is most likely to have affected companies as illustrated by the graph below.

Figure 5: Company sixe by Turnover



The majority of companies confirmed the benefit of e-Government services as improved interaction through online services, with a 100% score from the medium-sized companies that participated.

Table 5: Company size vs how do e-Government services benefit the tourism industry?

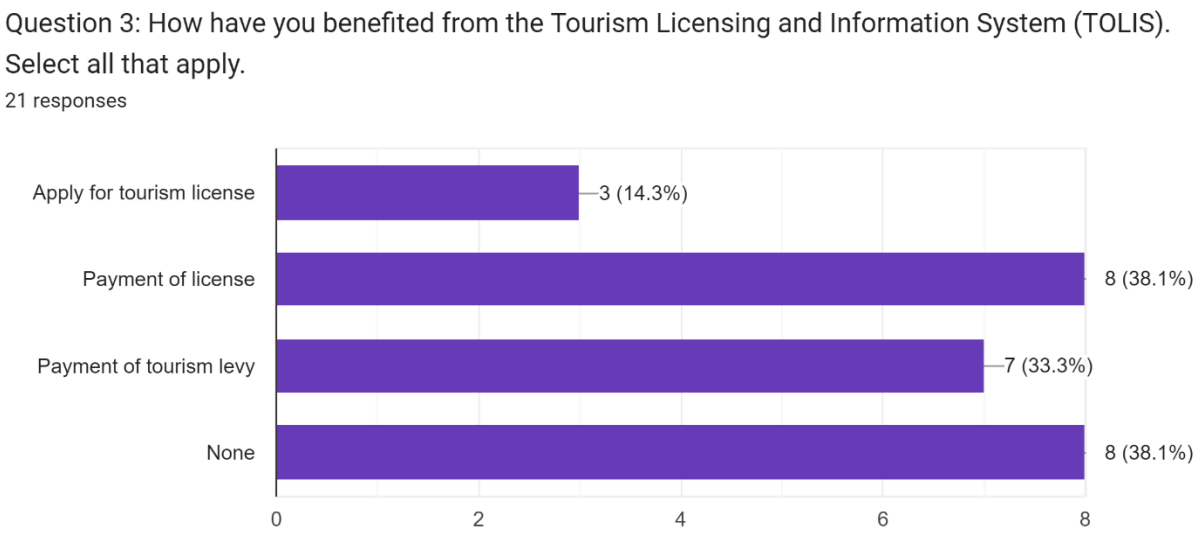
		Meet customer service delivery standards	Secure licences	Improved statistical information	Improved monitoring and compliance	Improved interaction through online services	
Company size (turnover)	Micro (up to P1,500,000)	3	3	1	1	7	15
	Small (P1,500,000 to P3,000,000)	1	1	0	0	2	4
	Medium (P3,000,000 and above)	0	0	0	0	2	2
Total		4	4	1	1	11	21

The graph below shows how the participants have benefited from the Tourism Licensing and Information System (TOLIS). Payment of licenses is the mostly used form of digitalization under the TOLIS.

According to Botswana Daily News (2020), the Minister of Environment, Natural Resources Conservation and Tourism said TOLIS was a significant development in the transformation of the tourism industry. She added that TOLIS also provided online fee payment services for tourism processes, which would help to cut costs for tourism operators.

The graph below shows how companies have benefited from the TOLIS services.

Figure 6: How companies have benefited from TOLIS



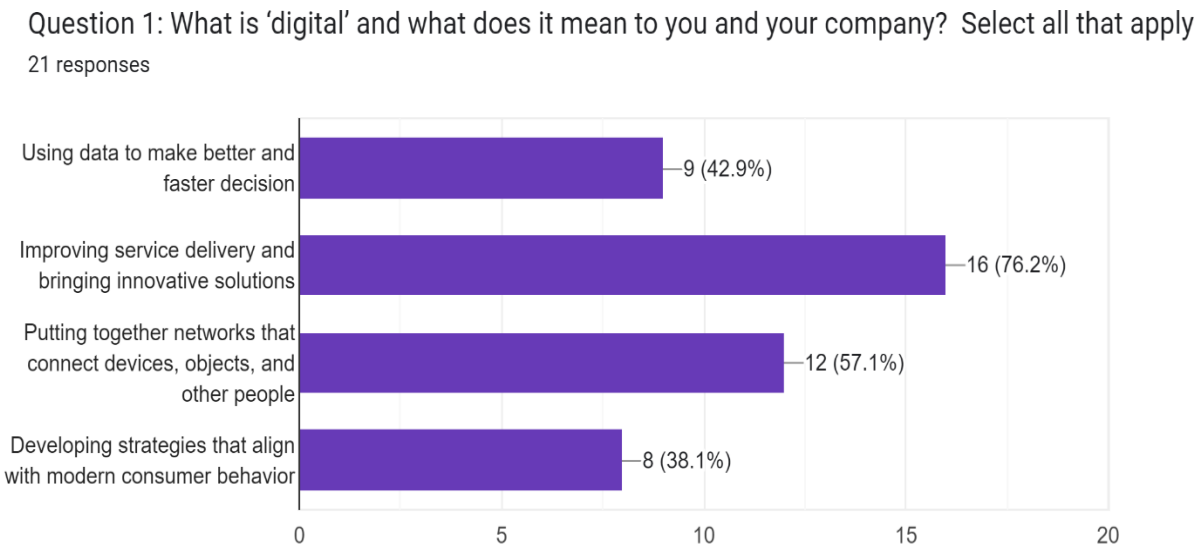
3.2. Usefulness of the available e-Government services

This section seeks to address the research question 1 by establishing the usefulness of the available e-Government services. Firstly, participants were assessed on their understanding of digital in relation to their companies. Secondly they were asked to rank a list of e-Government services provided in the survey. Lastly, this part also went a further mile to unpack the gender and age analysis in terms of the e-Government services usage.

3.2.1. Understanding of Digital and what it means to companies

The majority of the participants (76.2%) highlighted that digital means improving service delivery and bringing innovative solutions to their companies. Secondly, companies (57.1%) agree that putting together networks that connect devices, objects and other people is necessary to attain the digital enablement. It is also worth noting that participants acknowledged that digital means the using of data to make better and faster decision as well as developing strategies that align with modern consumer behavior, ranking at 42.9% and 38.1% respectively.

Figure 7: Understanding of digital and what it means to companies



In interacting with the participants through the survey, one of them added that, *"nowadays consumers want services that are attractive and can be purchased one time without inquiring as it waste time,"* further reiterating the improvement in service delivery.

Improving service delivery and bringing innovative solutions can be linked to enterprise architecture. According to (CIO,2022) Enterprise Architecture (EA) is the process by which organizations standardize and organize IT infrastructure to align with business goals. These strategies support digital transformation, IT growth, and the modernization of IT. The article goes on to note that EA is guided by the organization's business requirements — it helps lay out how information, business, and technology flow together. This has become a priority for businesses that are trying to keep up with new technologies such as the cloud, IoT, machine learning, and other emerging trends that will prompt digital transformation.

In the article, CIO goes on to outline the benefits of EA as follows;

- Allowing more open collaboration between IT and business units
- Giving business the ability to prioritize investments
- Making it easier to evaluate existing architecture against long-term goals
- Establishing processes to evaluate and procure technology

- Giving comprehensive view of IT architecture to all business units outside of IT
- Providing a benchmarking framework to compare results against other organizations or standards

To further understand the usage of the e-government services, six (6) services were ranked with the view to appreciate the extent of their usage.

a. Usage of Tourism Visa

Figure 8: Usage of VISA

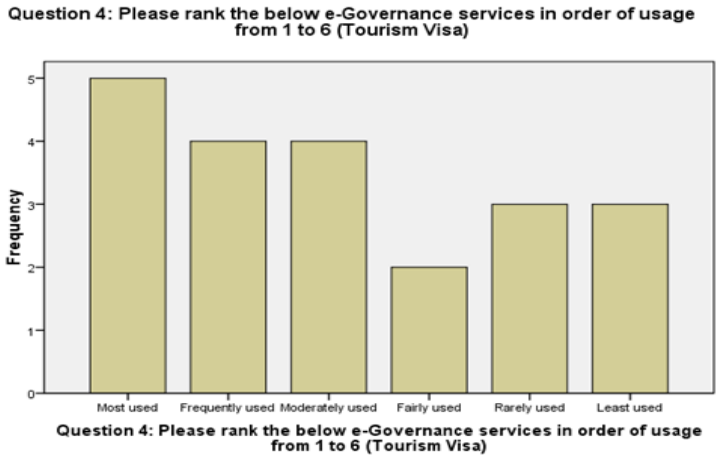


Figure 6: Usage of VISA

	Frequency	Percentage
Most used	5	23.1
Frequently used	4	19.0
Moderately used	4	19.0
Fairly used	2	9.5
Rarely used	3	14.3
Least used	3	14.3
Total	21	100

When ranking the usage of tourism visa, the majority (61.1%) indicated a positive response on utilising the services. According to Government of Botswana, visa services takes seven (7) to fourteen (14) days after the date of application for the service to be completed and or one (1) day if it is Visa on arrival. This table below indicates the visa usage by both players scored highly.

Table 7: Ranking of Tourism Visa

		Most used	Frequently used	Moderately used	Fairly used	Rarely used	Least used	
Tourism sub-sector	Accommodation	1	1	3	1	2	2	10
	Mobile safari	2	2	1	0	0	0	5
	Travel agent	1	1	0	1	1	1	5
	Other(specify)	1	0	0	0	0	0	1
Total		5	4	4	2	3	3	21

The tourism visa is issued to people who intend to visit Botswana for recreational purposes, or for other short-term non work related purposes. This visa allows entry into Botswana for up to one (1) month and is extendable on justification. The applicant must not engage in any employment while on a tourism visa, or else the visa will be rendered invalid (https://www.gov.bw/).

b. Tourism Licensing and Information System (TOLIS)

The participants indicated frequent use of the Tourism Licensing and Information System (TOLIS). This is normal as they use the system to make payments in the form of licenses renewals and bed levy, under the accommodation section.

Figure 9: Usage of TOLIS

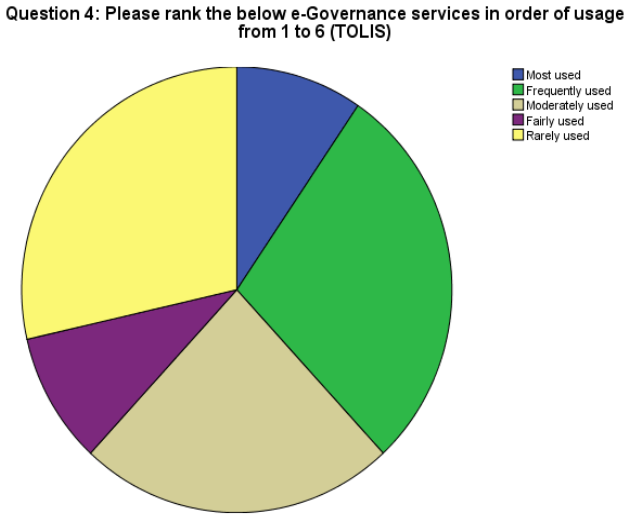


Table 8: Usage of TOLIS

	Frequency	Percentage
Most used	2	9.5
Frequently used	6	28.6
Moderately used	5	23.8
Fairly used	2	9.5
Rarely used	6	28.6
Total	21	100.0

c. E-Tax

E-Tax demonstrated a good usage with 57.1%. However, some participants (42.9%) still continue to use the traditional method of physical tax submission to the Botswana Unified Revenue Services (BURS).

Figure 10: Usage of e-Tax

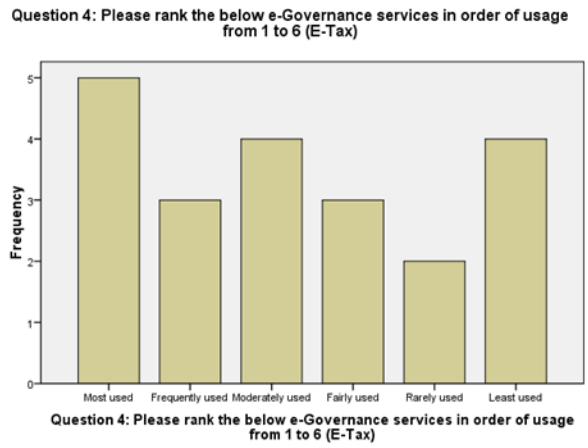


Table 9: Usage of e-Tax

	Frequency	Percentage
Most used	5	23.8
Frequently used	3	14.3
Moderately used	4	19.0
Fairly used	3	14.3
Rarely used	2	9.5
Least used	4	19.0
Total	21	100.0

d. Land Application

The majority of participants do not use, or are unaware of any land application services, expect for downloading forms online.

One of the participants owning a guest house indicated that land allocation, change of and use, upgrading from domestic to commercial business and licensing needs to be digitized services.

Figure 11: Usage of Land application

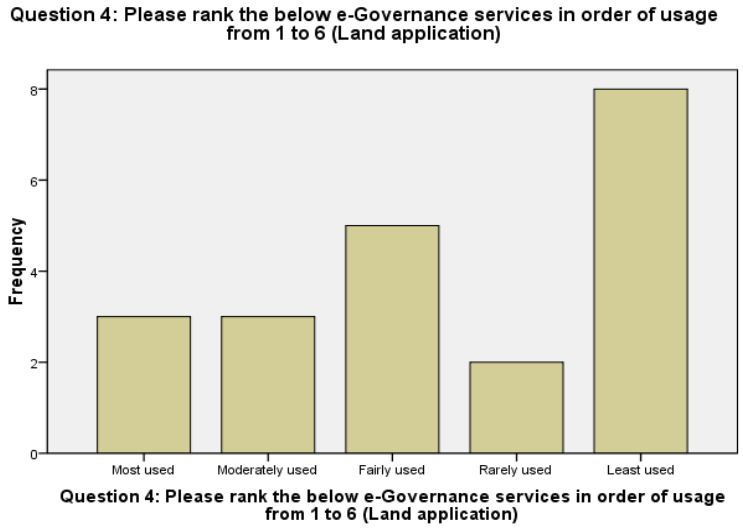


Table 10: Usage of Land application

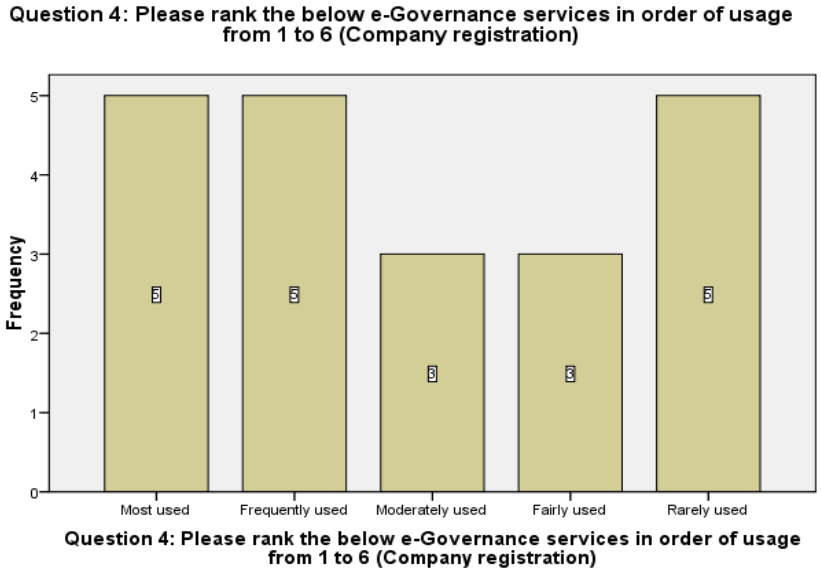
	Frequency	Percentage
Most used	3	14.3
Moderately used	3	14.3
Fairly used	5	23.8
Rarely used	2	9.5
Least used	8	38.1
Total	21	100.0

e. Company Registration

There is a mixed balance on the responses regarding company registration service suggesting that participants register companies both online and physical. This is also largely related to completion of annual returns on the Companies and Intellectual Property Authority (CIPA).

The below figure demonstrates the usage;

Figure 12: Usage of Company registration



f. E-Procurement

Amongst the list of services, e-Procurement is the least used by the participants. The tourism market is made up of international clients were tendering is not needed. On the other hand, handful opportunities are availed by the Government in application for tourism land for commercial use or lease over a certain period.

The figure below shows the usage of e-procurement services.

Figure 13: Usage of e-governance

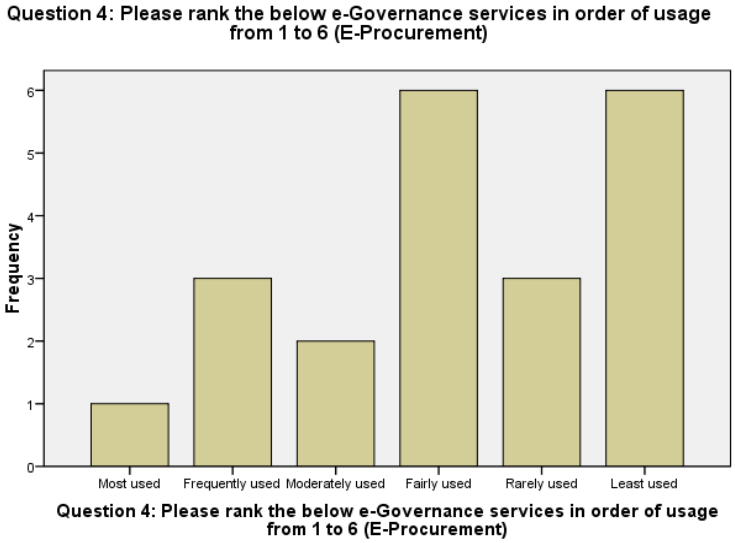


Table 11: Usage of e-Governance

	Frequency	**Percentage**
Most used	1	4.8
Frequently used	3	14.3
Moderately used	2	9.5
Fairly used	6	28.6
Rarely used	3	14.3
Least used	6	28.6
Total	21	100

3.2.2. Gender and Age Analysis

The analysis on this section covered cross tabulations to determine the gender and age usage of the e-government services. This analysis should assist the Government and SmartBots in the digital transformation to understands the needs of the customers based on the demographics.

a. Usage of Tourism Visa

Table 12: Gender analysis vs usage of Tourism Visa

		Most used	**Frequently used**	**Moderately used**	**Fairly used**	**Rarely used**	**Least used**	
Gender	Male	2	3	1	0	1	0	7
	Female	3	1	3	2	2	3	14
Total		5	4	4	2	3	3	21

The above table shows that female participants tend to use the tourism visa more as compared to their male counterparts. Furthermore, the age group utilising the visa service the most is the 30 to 40 years as per the table below.

Table 13: Age vs Tourism Visa

		Most used	Frequently used	Moderately used	Fairly used	Rarely used	Least used	
Age	30 to 40 years	3	1	2	0	1	2	9
	40 to 50 years	2	2	0	1	2	1	8
	50 and above	0	1	2	1	0	0	4
Total		5	4	4	2	3	3	21

b. Usage of TOLIS

Table 14: Gender vs usage of TOLIS

		Most used	Frequently used	Moderately used	Fairly used	Rarely used	
Gender	Male	0	3	2	0	2	7
	Female	2	3	3	2	4	14
Total		2	6	5	2	6	21

There is a balance on the usage of TOLIS services between both male and female participants. However, the majority of participants from ages 30 to 50 years rarely use the services.

Table 14: Age vs usage of TOLIS

		Most used	Frequently used	Moderately used	Fairly used	Rarely used	
Age	30 to 40 years	0	4	0	1	4	9
	40 to 50 years	1	1	4	0	2	8
	50 and above	1	1	1	1	0	4
Total		2	6	5	2	6	21

c. Usage of e-Tax

Table 15: Gender vs usage of e-Tax

		Most used	Frequently used	Moderately used	Fairly used	Rarely used	Least used	
Gender	Male	3	1	1	1	0	1	7
	Female	2	2	3	2	2	3	14
Total		5	3	4	3	2	4	21

Females showed a higher usage of e-Tax services compared to their male counterparts. This could depict the business prudence practices adopted by female owned businesses in relation to being compliant to the tax requirements.

d. Usage of Land Application

Table 16: Gender vs Land application

		Most used	Moderately used	Fairly used	Rarely used	Least used	
Gender	Male	1	0	3	1	2	7
	Female	2	3	2	1	6	14
Total		3	3	5	2	8	21

Land application services were lowly scored by both males and females.

Table 17: Age vs Land application

		Most used	Frequently used	Moderately used	Fairly used	Rarely used	Least used	
Age	30 to 40 years	3	0	3	3	0	0	9
	40 to 50 years	0	3	1	0	2	2	8
	50 and above	2	0	0	0	0	2	4
Total		5	3	4	3	2	4	21

Table 18: Age vs Land application

		Most used	Moderately used	Fairly used	Rarely used	Least used	
Age	30 to 40 years	0	2	4	1	2	9
	40 to 50 years	2	1	0	0	5	8
	50 and above	1	0	1	1	1	4
Total		3	3	5	2	8	21

e. Usage of Company Registration

Table 19: Gender vs Company registration

		Most used	Frequently used	Moderately used	Fairly used	Rarely used	
Gender	Male	1	0	2	1	3	7
	Female	4	5	1	2	2	14
Total		5	5	3	3	5	21

Females are more conversant with online company registration services as compared to their male counterparts. The 30 to 50 years are the most active in the company registration, depicting that this is the age group focused on setting up start-ups.

Table 20: Age vs Company registration

		Most used	Frequently used	Moderately used	Fairly used	Rarely used	
Age	30 to 40 years	3	2	2	0	2	9
	40 to 50 years	2	2	1	2	1	8
	50 and above	0	1	0	1	2	4
Total		5	5	3	3	5	21

f. Usage of e-Procurement

Table 21: Gender vs e-Procurement

		Most used	Frequently used	Moderately used	Fairly used	Rarely used	Least used	
Gender	Male	0	0	1	2	0	4	7
	Female	1	3	1	4	3	2	14
Total		1	3	2	6	3	6	21

The e-Procurement services were less used, either due to lack of knowledge on their availability or preference do things physically. The Government issues out tenders which are mostly delivered in physical form or shared via email.

Table 22: Age vs e-Procurement

		Most used	Frequently used	Moderately used	Fairly used	Rarely used	Least used	
Age	30 to 40 years	0	2	0	1	1	5	9
	40 to 50 years	1	0	1	5	1	0	8
	50 and above	0	1	1	0	1	1	4
Total		1	3	2	6	3	6	21

The age group comprising the youth does not use the e-procurement services, whereas the 40 to 50 years' group fairly use the services. This leaves a lot to research on why youth do not explore the online procurement services.

3.3. Challenges Identified and Mitigations

Table 23: Challenges and mitigations

	Challenge	Mitigation
1	Poor network infrastructure (Internet)	Provision of high quality Internet - usage of high speed quality fibre internet Botswana Telecommunications Corporation to engage private companies
2	High costs of digitization: an expensive process for small businesses	Government should help in distributing and connect SMMES as the internet is expensive to connect or connecting at a leased contractor
3	High competition: inability to share information as this can be used by competitors e.g. pricing strategy on websites	Botswana Tourism Organisation (BTO) should help SMME just like assisting them to do marketing outside the country
4	Internet security (fraud, phishing)	More improved systems and 24hrs cyber team
5	Government relies on paperwork	Offer training and seminars on digitalization education to Government employees
6	Delayed payments from the Government system (payment of suppliers)	Putting up more payment merchant gateways that are user friendly and connected to banking systems
7	Lack of integrated of personal data base for all residents, suppliers and service providers	Digitalization of Government process, regulations, systems integration of data base for all
8	Lack of skilled personnel	Partnerships with other SMME'S Training programs to offer training to business owners. For example, via agencies like LEA & Tokafala
9	Lack of equipment and funds	Set-up dedicated funds for the Tourism industry. i.e. to have easy access to funds so as to enable small businesses to leverage on getting necessary equipment digitalization.
10	Physical interactions with the customers to receive services	Digitizing the booking, check-inn and out process

One of the participants remarked "The major challenge is in receiving payment digitally for my products and services. Existing payment gateways charge high commission and take long to release the money to business account hence creating shortage of cash flow".

3.4.Suggested Services to be Digitalization under the Tourism Sector

- Marketing and easy online visa payment
- Tour itinerary, quotations and General indemnity forms
- Reservation /booking of accommodation or flights or selling all products and services under tourism
- licensing application and payments
- Park booking and payments
- Culture and lifestyle
- Transportation availability, accommodation availability
- Reporting of any nuisance, crimes or matters of urgency to the Police
- Grading
- Bookings, check-ins and enquiries
- Land allocation, change of and use, upgrading from domestic to commercial business
- District, town and city council services, water utilities and power supply services, property development, transportation, grading of facilities,
- DEA, Fire Department requirements, health department requirements for hotels, town planning, physical planning, architectural requirements
- Procurement of products and services

4. CONCLUSIONS

The conclusions suggested are obtained from the findings and analysis of the results. They focused on the main themes and results of the thesis.

4.1. **Demographic Insights:**

The study has shown that females are more receptive to technology as compared to their male counterparts. This is evidenced by their appetite to participate in the survey with a 67% compared to 33% male participation. During the survey, women were able to participate in the evenings when they were free from their daily chores. It is worth noting that women as pillars of most families in Africa, understand the need to capacitate themselves in order to grow their businesses. Furthermore, the study revealed that women are able to submit their tax returns or annual returns online, demonstrating their effectiveness and responsibility when it comes to business compliance.

The majority of the participants (81%) are between 30 to 50 years. This is a generation of entrepreneurs with experience and access to investment capital. The participants concurred that digitalization leads to improved interaction through online services.

4.2. Usefulness of e-Government Services:

Tourism visa, e-Tax and company registration are the most used e-Government services. E-Tax and company registration services provide convenience as they are usually linked to the legal status of businesses at national level. Whereas, tourism visa enables the international market to visit Botswana, and is a necessity for operations. Land application was lowly ranked whilst participants lamented the delay in upgrading from domestic to commercial businesses.

4.3. Challenges Identified:

Most of the participants lamented poor internet connectivity as a bottleneck to the digitalization process. Some participants still use both physical and online means to assist their customers. One of the companies echoed *"we can only advertise our services online (using our website and social*

media pages). To receive our service, the customer needs to come here physically." Additionally, some participants feel that digitizing payments comes along with extra delays. This was supported by one of the participant who added that, "the major challenge is in receiving payment digitally for my products and services. Existing payment gateways charge high commission and take long to release the money to business account hence creating shortage of cash flow

4.4. Mitigations Proposed

Participants believe that digitalization is part of transforming a business. In order to mitigate the biggest challenge of internet connectivity, companies proposed an improvement of connectivity by connection of high-speed internet. They also added that the Botswana Telecommunications Corporation (BTC) has to engage private companies and assist them with high quality internet. Secondly, the participants highlighted lack of skilled manpower as a barrier and suggested that training courses should be offered to industry players. Some added that service providers need to follow up government initiatives and leverage on them.

4.5. Products and Services for Digitalization:

The tourism sector would like digitalization of the available products and services in order to enhance service delivery. These includes value chain activities from reservations, bookings, checking in and out, procurement and selling of products and services. One of the participants added, *"Payment of Game Reserve and National Park Fees - if available it could fasten the process of entering the park with guests. Sometimes the process takes rather too long."*

Additionally, participants noted the digitalization of regulatory services such as land application and its conversion, culture and lifestyle as well as criminal matters in tourism areas.

5. RECOMMENDATIONS

The below recommendations are extracted from the study and a proposal on how they can be tackled is provided below

5.1. **Inclusion of more women entrepreneurs in digitalization projects:** This task is recommended for Tokafala program. Since the program has already pilot digitalization in their curriculum, it is expected that as the process is replicated to other sectors, more women inclusion should be considered. The study has demonstrated that women are more responsive to e-learning and can be flexible for future interventions.

5.2. **Park Bookings and Fees:** The Department of Tourism as the custodian of tourism licenses and regulations is best places to facilitate for the digitalization of park bookings and fees. This can be done in collaboration with the Hospitality and Tourism Association of Botswana (HATAB). HATAB conducts an annual conference to gather tourism industry views from different players. The annual conference is the right platform to share the resolutions and recommendations for the digital transformation.

5.3. **Land Application and Allocation:** The Department of Tourism can work with the Ministry of Land Management, Water and Sanitations Services to allow for interaction online in applying for land and issuance of the land certificates. This can go a long way in decreasing the queues experienced at the Land Board offices.

5.4. Partnerships between Government and private sector in training of operators on digital enablement initiatives: The Government can partner with training SMME training institutions such as LEA and Tokafala to deliver digitalization training to the private sector. This can be done in collaboration with SmartBots Labs which will facilitate the establishment of sustainable digital investments and the creation of Botswana-based digital enterprises.

5.5. Set-up of dedicated fund under tourism to facilitate innovative and digital projects: This fund can focus on companies who want to implement Enterprise Architecture. Partnerships can be made with the Botswana Digital & Innovation Hub to set up the fund and the Botswana Tourism Organisation in selecting viable projects.

5.6. Improve Internet Connectivity: The private sector can conduct consultations with internet service providers such as Botswana Telecommunications Corporation, Mascom and Orange to determine the appropriate bandwidth needed to run different sizes of businesses. These consultations can also be aligned with SmartBots in their plans to connect internet in public areas.

UNECA (2023) noted that "Botswana envisions the SmartBots Lab as a transformative platform that harnesses digital innovation for sustainable development, empowering individuals, and society. The lab will host entrepreneurs who create innovative products and services aligned with the SDGs, focusing on thematic areas such as mining, Indigenous knowledge, biotech, ICT, and clean tech. The implementation roadmap for the SmartBots Lab spans from 2023 and beyond and will include activities such as socialization, procurement, infrastructure build-out, stakeholder workshops, staffing, marketing, and expansion to all districts."

The article goes on to highlight that "with the establishment of the SmartBots Lab, Botswana is poised to become a leading hub for frontier technologies and a gateway to Africa's digital transformation. By embracing digital innovation and fostering a culture of entrepreneurship, Botswana aims to drive economic growth, create new opportunities for its citizens, and contribute to the achievement of national and global development goals."

5.7. Conduct a study on the digitalization of the needs of the private sector (Government priority areas): The current study was limited due to resources and timeframe. As the Government moves to digitalize priority sectors, studies need to be conducted to identify the critical path and proposing an action plan. Tokafala as an experienced organization, can take a lead in the studies.

5.8. Digitalization of Pre-Travel Documents: (Tour itinerary, quotations and General indemnity forms): This process can be facilitated by the tourism sector associations such as HATAB and Botswana Guide Associations (BOGA). These are membership based organizations focusing on the tourism sector. HATAB exists to promote, encourage and police excellence in hospitality and tourism in Botswana while BOGA promotes the development of the locally based tour and safari industry in Botswana providing employment opportunities for the local people.

5.9. Digitalization of Land allocation, change of and use, upgrading from domestic to commercial business: It is common with accommodation facilities to upgrade their facilities as they implement growth strategies. The facilities are lamenting the delay in the land upgrade process. It is recommended that the Department of Tourism in collaboration with Land Boards digitalise the services to facilitate the change of land use. This will enable businesses to capture clients at the right time.

5.10. Raising awareness of internet connectivity to the private sector (awareness campaigns): Educational and sensitisation campaigns on internet hotspots or public areas are needed to assist the private sector to leverage on those. This will assist to cut down on the cost of production. In Maun, the below figure shows the connected public areas.

Figure 14: Connected Public Areas in Maun

Source: BWGovernment

The above figure shows connected public areas in Maun, mostly clinics.

The table below summarizes the above recommendations with the suggested implementing agency. The recommendations can be implemented with the 2024 development budget of P1.83 billion, which has been proposed to accelerate the implementation of programs and projects geared towards innovation and digital transformation.

Table 24: Recommendations

	Recommendations	Responsibility
1	Women inclusion in digitalization projects	Tokafala
2	Digitalization of park bookings and fees	DOT and HATAB
3	Develop or improve land application/allocation and its conversion services online	DOT
4	Partnerships between Government and private sector in training of operators on digital enablement initiatives	Government, Tokafala and LEA
5	Set-up of dedicated fund under tourism to facilitate innovative and digital projects	BTO and BDIH
6	Improve internet connectivity	SmartBots, BTC, Mascom, Orange
7	Conduct a study on the digitalization of the needs of the private sector (Government priority areas)	Tokafala
8	Tour itinerary, quotations and General indemnity forms	HATAB and BOGA
9	Digitalization of Land allocation, change of and use, upgrading from domestic to commercial business	DOT and Land Boards
10	Raising awareness of internet connectivity to the private sector (awareness campaigns)	SmartBots

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Appendices

Survey-Addressing Limitations of the Digitalization of the Private Sector in Botswana

Gooday. My name is Nnyaladzi Malaki Monyamane, I am currently enrolled with the European Business University and studying Masters of Business Administration. I am inviting you to participate in the survey that I am carrying out which seeks to address Limitations of the digitalization of the Private sector in Botswana. The main focus is to determine challenges faced by the SMMEs in tourism sector in digitalising their products and services. The survey will take you approximately 5 minutes to complete the questionnaire.

Your participation in this study is completely voluntary. Should you feel uncomfortable answering any question you can skip it or withdraw from the survey at any point. Your answers will be used for this research only and will strictly be confidential. Your participation in this research will be highly appreciated.

* Indicates required question

Applicant's Name (optional)

Your answer

Company Name(Optional)

Your answer

Gender

Male
Female

Age

20 to 30 years
30 to 40 years
40 to 50 years
50 and above

Tourism Sub-Sector

Accommodation
Mobile Safari
Travel Agent
Other (Specify)

Company Size by Turnover

Micro (Up to P1,500,000)
Small (P1,500,000 to P3,000,000)
Medium (P3,000,000 and above)
Other:

Question 1: What is 'digital' and what does it mean to you and your company? Select all that apply

Using data to make better and faster decision
Improving service delivery and bringing innovative solutions
Putting together networks that connect devices, objects, and other people
Developing strategies that align with modern consumer behavior
Other:

Question 2: According to you, how do e-Government services benefit the tourism industry? Select one

Meet customer service delivery standards
Secure licences
Improved statistical information
Improved monitoring and compliance
Improved interaction through online services
Other:

Question 3: How have you benefited from the Tourism Licensing and Information System (TOLIS). Select all that apply.

Apply for tourism license
Payment of license
Payment of tourism levy
None

Question 4: Please rank the below e-Governance services in order of usage from 1 to 6 (where 1 is the most used and 6 is the least used). Please note this question requires one response per row and column. Do not repeat the same number more than once. *

Tourism visa application
Tourism licensing and Information System
E-tax
Land application
Company registration
E-procurement
Tourism visa application
Tourism licensing and Information System
E-tax
Land application
Company registration
E-procurement

Question 5: What is the major challenge in digitalising your products and services?

Your answer

Question 6: How can the above challenge be addressed?

Your answer

Question 7: What services need digitalization under the tourism sector?

Your answer

THANK YOU FOR PARTICIPATION IN THE SURVEY!