

**African Tax
Administration Paper 31**

Using Digital Technologies to Improve Tax Collection – the Case of Togo

Dorothy Kang'oro,
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and Ignatius Odongo

October 2023

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Summary

The increasing digitalisation of African economies over the past decade, and the spread of mobile money and digital financial services (DFS), has given both opportunities and challenges to tax administrations in Africa. In theory, the use of digital technologies and expanded use of DFS can provide tax administrations with access to extensive new digitised data, increase transparency, and make the overall taxpayer experience easier. All this can ultimately improve the tax administration's performance. However, studies show that tax administrations face important challenges in how to best develop their capacity to use digitised data, and to re-align operations and skills to new digitalised operating models.

This paper is a policy-oriented qualitative study focusing on Togo. Like several African tax administrations, in 2014 the Office Togolais des Recettes (OTR) embarked on digital transformation. It invested in digital technologies, including e-Services such as Tmoney and Flooz, which were developed with telecom companies and banks. Our paper aims to provide more quantitative and qualitative evidence on enablers and inhibitors to adopting digital technologies and DFS, which will help African tax administrations to fully use their capabilities. We carried out inductive content analysis on qualitative data from key informant interviews and focus group discussions with key stakeholders. We also conducted online surveys of taxpayers from large and medium-sized enterprises. We triangulated the data from online surveys with data from the qualitative methodology to provide an objective analysis of the benefits of implementing digital technologies and DFS. We identified the independent variables and drivers that are critical to achieving OTR's objectives for implementing digital technologies and DFS, and the dependent variables representing outcomes relating to OTR's goals. Using survey data, we developed a regression model assessing the association between the drivers and outcomes, grouping them into key outcomes.

Our findings show that OTR's digital transformation has made it easier for taxpayers to comply through faster and simpler tax declaration and payment. By improving the efficiency and effectiveness of tax revenue collection, processing and utilisation of tax data, and improved taxpayer compliance, the adoption of digital technologies may have improved OTR's mobilisation of domestic resources. The case of Togo shows that OTR faced similar challenges to other African tax administrations, including inadequate funding, lack of skilled information technology (IT) resources, and initial resistance from staff following changes in their way of working due to the use of technology. OTR's approach to addressing these challenges is presented as a key learning outcome for other tax administrations.

Keywords: digital financial services; digital transformation; e-Services; e-Tax; mobile money; tax administration.

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Acronyms

AGI	Adjusted Gross Incomes
ATAF	African Tax Administration Forum
BOA	Bank of Africa
BTCI	Banque Togolaise pour le Commerce et l'Industrie
CFE	Centre for Business Formalities
DAAFI	Demande d'Assistance en Administration des Finances
DAS	Déclaration Annuelle de Salaire
DCF	Direction des contrôles fiscaux
DCIG	Direction des Centres des Impôts de Golfe
DFS	Digital financial services
DGE	Direction des Grandes Entreprises
DITI	Direction de l'informatique et des Technologies de l'Information
DME	Direction des Moyennes Entreprises
DOFR	Direction des Operations Fiscales Régionales
DTRF	Department of Road and Rail Transport
EDM	Expectancy Disconfirmation Model
FGD	Focus group discussion
GDP	Gross domestic product
GESCO	Gestion des comptes de l'office
GUCE	Guichet Unique du Commerce Extérieur
GUDEF	Guichet Unique des Etats Financiers
ICT	Information and Communications Technology
ICTD	International Centre for Tax and Development
ID	Identification
IRTR	Impôt sur le Revenu des Transporteurs Routiers
IT	Information technology
KII	Key informant interview
MAXQDA	Max Weber for Quantitative Data Analyses
NIF	Numéro d'Identifiant Fiscal
NOE	Economic operator number
ONECCA	Ordre National des Experts Comptables et des Comptables Agréés du Togo
OTR	Office Togolais des Recettes
SAS	Statistical Analysis System
SGIO	Système de gestion des impôts de l'office
SIAB	Société Inter Africaine de Banque
STATA	South Texas Art Therapy Association (statistical software package)
UTB	Union Togolais des Banques
VAT	Value added tax
WAEMU	West African Economic and Monetary Union

1 Introduction

The increasing digitalisation of African economies over the past decade, and the spread of mobile money and other digital financial services (DFS), has led to opportunities and challenges for tax administrations in Africa. In theory, the use of digital technologies and DFS can provide tax administrations with access to extensive new digitised data. If this data is used to its full potential it can lead to more efficient tax collection, as the core functions of tax administration – identification, facilitation and enforcement of compliance – can be dramatically strengthened (Okunogbe and Santoro 2022a). Further, the digitalisation of the tax system can significantly improve compliance of taxpayers, by increasing transparency and ease of the overall taxpayer experience. All this combined can ultimately improve the tax administration’s performance.

However, African tax administrations face significant challenges in how to best develop their capacity to use digitised data optimally, and re-align operations and skills to new digitalised operating models. First, tax administrations need to cope with inadequate funding for IT reforms, as well as challenges in the design and development of their digital platforms (Occhiali et al. 2022). Inadequate infrastructure and lack of skills and resources limit the potential of digital reform. Tax administrations grapple with ensuring an enabling environment for taxpayers to adopt technologies – and this is determined by factors beyond the tax administrators’ control, such as availability of stable internet connections and little familiarity with IT (Okunogbe and Santoro 2022b). There are also challenges with how best to link digital tax platforms and data with those of other spheres of government, due to unresolved regulatory and confidentiality issues (Okunogbe and Santoro 2022b).

Like several African tax administrations, the Office Togolais des Recettes (OTR) has embarked on digital transformation. It invested in digital technologies, including e-Services like TMoney and Flooz, which were developed with telecom companies and banks. OTR introduced digital IDs and computerisation of its system early in 2014, although implementation of DFS started in September 2018. OTR believes that digital technologies and DFS have significantly contributed to improved tax compliance, securitisation of tax, and collection of customs revenue. After introducing e-Services and mandating that all large taxpayers file their tax returns online, OTR reports universal compliance since 2021, and that all large enterprises submit their value added tax (VAT) returns via e-Services.¹

While the benefits seem to outweigh the costs, there is evidence that DFS have not yet been fully adopted within targeted sectors. There is some resistance to adopting e-payment, despite early adoption of e-declarations. This suggests that OTR faces challenges in implementing DFS. OTR has not yet undertaken an evidence-based study of the impact of its digital transformation and adoption of DFS.

This paper seeks to determine if OTR has fully used the digital technologies and DFS introduced, and achieved its intended goals. We produce a policy-oriented qualitative study, and do not make any causal claims or undertake a quantitative impact analysis. The main research question that this paper seeks to answer is: how can OTR harness the potential of digital technologies and DFS to improve tax administration? We break this central research question down into four sub-research questions:

1. What has been OTR’s journey of digital transformation when implementing digital technologies and DFS?

¹ Source: OTR data.

2. What benefits has OTR achieved from using digital technologies and DFS?
3. What challenges has OTR faced when introducing and implementing digital technologies and DFS, and how did they seek to address these challenges?
4. What are the key drivers that have enabled OTR's adoption of digital technologies and DFS, and how can these be strengthened?

Our primary data came from key informant interviews (KIIs) and focus group discussions (FGDs) with key stakeholders involved in providing leadership and technical support to introducing digital technologies and DFS at OTR. We carried out inductive content analysis of this qualitative data. We used this to undertake 'journey mapping', documenting the road map that OTR followed. We conducted two online surveys targeting OTR staff and taxpayers – 140 OTR staff responded to the OTR survey, and 162 taxpayers completed the online survey. We triangulated data from online surveys with data from interviews and FGDs to provide an objective analysis of benefits from introducing digital technologies and DFS. We identified two sets of variables during the study – independent variables and drivers critical to achieving OTR's objectives, and dependent variables representing outcomes relating to these goals. Using survey data, we developed a regression model assessing the association between drivers and outcomes, grouping them into key outcomes. The datasets provided by OTR on customs duties, tax declarations and payments were additional sources for quantitative analysis. We received datasets on the type of taxes paid to the Tax and Customs Departments, mode of payment, amount paid, and dates when taxes were declared and paid by large, medium-sized, and small business enterprises from 2018 to 2021. Taxpayer data was anonymised to maintain confidentiality.

Our research refers mostly to DFS, which includes all financial services that rely on digital technologies for their delivery and use by OTR and taxpayers – including e-payment and mobile financial services. In addition to DFS, this paper explores various services accessed and delivered through digital channels, such as the internet, e-declaration, e-payments, mobile financial services, and IT systems used for internal processes.

We present our findings in Section 4, showing how OTR is digitalising its operations and adopting DFS, providing a map of OTR's digital transformation from inception to the current stage of optimising use of DFS and rolling out a new platform, e-Tax. Our findings show that OTR's digital transformation has made taxpayer compliance easier, through faster and simpler tax declaration and payment. The study results suggest that OTR has fully adopted e-declaration by large and medium-sized enterprises through its e-Services digital platform, achieving this by mandating that all declarations for key taxes (VAT, corporation tax and tax on salaries) are made via e-Services. By improving the efficiency and effectiveness of tax revenue collection, processing and utilisation of tax data, and improved taxpayer compliance, the adoption of digital technologies appears to have increased mobilisation of domestic resources.

OTR faced challenges, and administrative and policy barriers, to rolling out digital technologies and DFS. OTR and taxpayers can have poor internet connectivity, especially during peak times. The challenges faced by OTR are similar to those experienced by other African tax administrations when deploying digital technology. These include inadequate funding, lack of skilled IT resources, and an initial resistance from staff due to changes to their way of working from deployment of technology. Like several African administrations, including in Sierra Leone (Occhiali et al. 2022), a key challenge faced by OTR was to interface legacy IT systems (Système de gestion des impôts de l'office (SGIO)) with e-Services and third-party suppliers, such as banks. One of OTR's most significant challenges is the low adoption of DFS payment methods. OTR's solution to overcome these barriers and

challenges include establishing service centres with stable connections, with staff to assist taxpayers who have difficulty accessing digital platforms.

We conclude our findings by considering the key drivers for successful adoption of DFS and achieving OTR's goals and objectives, evidenced by the descriptive analysis of survey data and regression analysis. The drivers that demonstrate statistical significance include ensuring a conducive legal framework, maintaining stakeholder engagement, and holding taxpayer awareness programmes. Another key driver from the taxpayers' perspective was to ensure well-qualified and skilled staff were available to manage tax affairs.

This paper contributes to a small body of literature on adoption of digital technologies and DFS in francophone low-income countries, especially in Africa. Moore (2020) suggests that digital technologies are not put to best use, particularly for management and governance of African tax administrations. A recent study (Okunogbe and Santoro 2022a) on how African countries can improve tax mobilisation using recent technological advancements highlights the importance of an enabling environment, both within and outside the tax authority. Mascagni et al. (2021) study the adoption of electronic billing machines in Ethiopia, and find a positive impact on tax revenue – reporting an increase of at least 12 per cent for income taxes and 48 per cent for VAT. Jouste et al.'s (2021) study in Uganda shows that an e-filing mandate for presumptive tax significantly impacts the number of small business taxpayers who file tax returns and tax revenue collected. Obert et al.'s (2018) study in Zimbabwe indicates a positive impact of e-filing on tax compliance, especially among large businesses. However, the study notes challenges, such as lack of connectivity, technical knowledge and training, and poor infrastructure (lack of power), which impact adoption of e-filing by taxpayers. Findings from a recent study of the impact of the mandate for all income taxpayers in Eswatini to use e-filing indicate that uptake of e-filing significantly improves filing behaviour (Santoro et al. 2022a). However, this positive impact was not observed in an increase in final tax liability, but rather improved accuracy in reporting and paying. While the body of literature on the effect of adoption of DFS by tax administrations in Africa is growing, and literature on the potential impact of these technologies exists (Okunogbe and Santoro 2022a; Santoro et al. 2022b), evidence-based studies for low-income francophone countries are largely unavailable. In addition, the literature indicates a mixed picture of the potential of DFS to impact key outcomes of improving tax compliance, and developing more efficient and better-performing tax administration. This paper aims to provide more quantitative and qualitative evidence on enablers and inhibitors of adoption of digital technologies and DFS, which will help African tax administrations to fully use their capabilities.

This paper also contributes to the debate on policy considerations that promote and enable adoption of digital technologies and DFS to mobilise domestic resources. The findings and recommendations of this research highlight several benefits for OTR and other African countries that are introducing, or would like to introduce, digitalisation of their tax administration. This is especially relevant considering OTR's plans to extend DFS to all taxpayers' segments and the Customs Department. OTR is in the final stages of its next phase of digital transformation, and plans to roll out a new platform, e-Taxe, in 2023. The paper builds on previous studies by the African Tax Administrators Forum (ATAF) and OTR – for example, the recently-published recommendations on policy and practice for efficient acquisition and implementation of ICT systems in Africa (ATAF 2021a, 2021b). ATAF's objective is to help African tax administrators, especially those starting their digital transformation journey, to harness the opportunities presented by digital technologies and DFS. The qualitative study results show the importance of developing policies that promote and encourage key stakeholder and taxpayer engagement through continuous communication of the benefits of digital technologies and DFS, and training. The paper recommends approaches to address challenges faced by a tax administrator with limited

resources. These policies include ensuring proper project planning, allocating sufficient resources (especially tax administrative staff) to developing the solution, management and project governance for successful implementation of digital technologies and DFS.

The rest of the paper proceeds as follows. Section 2 provides the institutional context for the study. Section 3 describes the research methodology and limitations of the study. The results of the study are given in Section 4, and Section 5 concludes.

2 Institutional context

Togo currently ranks sixth among African nations for ease of doing business (World Bank 2018). Togo is a member of several regional trading blocs – the West African Economic and Monetary Union (WAEMU), Economic Community of West African States (ECOWAS) and African Continental Free Trade Agreement (AfCFTA).

Togo's Gross Domestic Product (GDP) is reported as US\$8.33 billion in 2021. This is an estimated increase of 12.7 per cent from 2020.² Togo's tax revenue has seen a sustained increase from 2018 to 2022, with OTR collecting US\$1.2 billion in 2021 (Appendix Figure A1). The increase in tax revenue is noted to track improvements in Togo's tax compliance levels, with the tax-to-GDP ratio increasing by 0.4 percentage points, from 14.6 per cent in 2018 to 15.0 per cent in 2019.

VAT, corporation tax and taxes on salaries and wages are the main contributors to OTR's tax revenue, and these increased from 2018 to 2021 (see Appendix Figure A2). In 2021 VAT and corporation tax contributed 29 per cent of tax revenue, and taxes on salaries and wages 7 per cent. Other key contributors to revenue collection in 2021 are withholding tax on income from movable capital (6 per cent), patents (5 per cent), financial activities tax, other excise duties and penalties on audits, each contributing 3 per cent (Appendix Figure A4).

2.1 Reform and modernisation of OTR

OTR was set up as part of the Togolese government's efforts to accelerate its tax reforms. These were considered essential to improve collection of internal revenue, to fund increasing demand for basic social services (education, health, agriculture, water and sanitation). This was compounded by the unfavourable international economic environment, with the main traditional donors disengaging due to their own financial difficulties.

OTR was created by law on 10 December 2012 (OTR 2012), combining the General Directorates of Customs and Taxes within a single structure. OTR is a public institution with administrative and financial management autonomy. It is responsible for collecting taxes and customs duties on behalf of the state and local authorities.

Togo's tax-to-GDP ratio was approximately 10 per cent in 2012 (OECD 2022). One of the objectives the government assigned to OTR was to mobilise tax revenue and increase the tax rate to 20 per cent of GDP by 2018 – the rate recommended under the WAEMU community standard (World Bank 2018). Like other African countries (such as Kenya and Rwanda), Togo consolidated financial management of the state, taxes and customs under one organisation. Togo's tax-to-GDP ratio increased to approximately 15 per cent in 2018, and was 15.4 per cent by 2020 (OECD 2022).

² See <https://tradingeconomics.com/togo/gdp>.

OTR embarked on digital transformation and investment in digital technologies as part of its modernisation strategy. One of few countries in francophone West Africa, it embarked on deep reform and modernisation of its tax and customs administrations, and offered digital financial services to taxpayers.

3 Research design

3.1 Data used

The primary data sources for qualitative research were KIIs and FGDs. The FGDs used an ethnographic style, with activities, illustrations and interactive discussions (see Appendix E for a sample FGD guide). Seven FGDs were held with OTR directorates, lasting 45 minutes to 1 hour. Appendix Table A1 lists OTR officials and directorates who participated in interviews and FGDs, the date and number of participants.

FGDs and mainly KIIs were also held with representatives from large and medium taxpayers, and stakeholders from various professional and business associations. Interviews and discussions were held with key external stakeholders, with sessions lasting around one hour. Appendix Table A1 also shows these respondents, the date and number of participants.

The data source for quantitative analysis were two online surveys conducted with OTR staff and taxpayers, and secondary datasets provided by OTR on customs duties and taxes paid and declared. OTR datasets included cash journal dates, anonymised taxpayer information, payments, declarations, taxpayer segments, dates of clearances and tax registration for 2018 to 2021. We obtained data on uptake of DFS among different taxpayer segments from 2018 to date, including registration of taxpayers, e-filing, e-declaration and e-payment in the Tax and Customs Departments. OTR also provided data on revenue collection for 2018 to 2021. We received data on taxpayer compliance, specifically relating to the taxpayer declaration default rate, from 2018 to 2021 for corporation tax, VAT and tax on salaries. We also reviewed documents related to the tax administration's strategic approach to adopting digital technologies and DFS. Based on these datasets on uptake of DFS we analysed trends in revenue collection across different taxpayers, tax types and taxpayer segments aligned to OTR structures. In addition, we examined trends in achievement of revenue collection targets and levels of taxpayers' compliance with different taxes before and after implementation of digital technologies and DFS. OTR also provided datasets on customs duties and domestic tax declarations for all directorates, including large, medium-sized and small enterprises.

3.2 Study methodology

Our study adopted a multi-layered, cross-sectional mixed-method design to respond to the main and sub-research questions (Rindfleisch et al. 2008; Stern et al. 2012). The mixed-method design included quantitative and qualitative research methods using a descriptive approach. The descriptive analysis aims to describe and document aspects of OTR's implementation of digital technologies and DFS as they occurred (Polit and Hungler 1999). This includes the processes, similarities and variations across taxpayers, tax categories, economic sectors, and selected digital technologies and DFS.

The quantitative aspect of the study utilised an 'adapted' expectancy disconfirmation model (EDM) to compare expected benefits from implementing digital technologies and DFS,

against actual benefits realised from the perspective of sampled taxpayers. EDM is a robust tool that has become the predominant approach for assessing citizen satisfaction with public services (Oliver 1989; Oliver and DeSarbo 1988). It is based on the theory that citizens compare the performance of a service against their expectations, with satisfaction occurring if perceived performance meets or exceeds expectations (Zhang et al. 2021). To complete the study design and facilitate the required analysis, the study team selected digital technologies and DFS that had been implemented for at least three years to allow for analysis of evidential tax benefits – those selected were e-Services and SydoniaWorld, implemented by the Tax and Customs Departments respectively.

The qualitative aspect adopted an interpretive study design to document and evaluate implementation of selected digital innovations among sampled taxpayers and other stakeholders. This included documentation and analysis of digital innovations implemented by OTR, and benefits realised from the perspective of selected stakeholders – government, taxpayers, tax administrators and other partners. Interviews were held with policymakers, Ministry of Finance officials of the Tax Policy Unit, OTR officials, and selected taxpayers who had adopted digital technologies and DFS.

The study population included tax administrators, taxpayers and partners in tax administration. We purposively selected a stratified sample of respondents from this population based on their familiarity with digital technologies and DFS, and involvement with OTR's processes for adopting these systems (Palys 2008).

3.2.1 Quantitative research methodology

Initially, the sample size for the quantitative research was estimated using the approach for prevalence given by $n = \frac{[z^2 p(1-p)]}{d^2}$ where n is the sample size, z is the z-statistic for level of confidence, p is the expected prevalence, and d is desired precision (Naing et al. 2006). The proportion of taxpayers was confined to large and medium taxpayers, who contribute 92 per cent of total revenue. With a 5 per cent margin of error and 80 per cent power, and 95 per cent confidence interval, a sample of 339 respondents were enrolled in the online survey. These included taxpayers, OTR staff and other stakeholders involved in adoption of digital technologies and DFS.

Two online surveys were developed for the quantitative research methodology, one for OTR staff and the other for taxpayers. All OTR staff were invited to participate in the survey. The taxpayer survey was sent to large and medium-sized enterprises. The demographics of OTR staff and taxpayers who responded to the survey are provided in Appendix Table A2.³

The actual sample size for the OTR staff study was 140 respondents, a response rate of 41 per cent, and 162 for the taxpayers' survey, a response rate of 81 per cent.⁴ The response rates are within the average of 52.3 per cent reported in organisational science research (Anseel et al. 2010), and overall average of 55.6 per cent reported in business and management research (Mellahi and Harris 2016).

Both surveys had a high proportion of 'Don't Know' responses. In our regression modelling, we collapsed the five-point Likert scale into two groups – strongly agree and agree (classified

³ The majority of OTR staff interviewed worked in OTR Departments of Regional Tax Operations (14.3%), Studies and Strategic Planning (13.6%) and Tax Control (13.6%). Most were technical professional agents. The majority had worked for less than 3 years in their department (46.4%), and 40.7% had worked for more than 5 years and 5-10 years.

The majority of participants in the taxpayer survey were 35-44 years old, followed by 25-34 years. Most were male (86.4%). The majority were senior employees in the organisation or in middle management.

⁴ The target response rate was 339 for the OTR survey and 200 for the taxpayer survey.

as 'Yes') versus all the remaining responses (classified as 'No'), to address the low sample size and high proportion of 'Don't Knows'.

Two sets of variables were based on OTR's objectives for implementing digital technologies and DFS. The independent variables were designated drivers or critical factors (Table 3.1). The dependent variables were outcomes or benefits observed by OTR staff and taxpayers. Questions were developed for each variable using a five-point Likert scale.

Table 3.1 Independent and dependant variables identified

Independent variables	Dependent variables
<ul style="list-style-type: none"> • Infrastructure and equipment • Qualified staff • IT and internet connectivity infrastructure • Internet coverage • Conducive legal framework • Institutional framework • External challenges/barriers identified and resolved • Thorough needs assessment • Proper prior planning • Involvement of key stakeholders 	<ul style="list-style-type: none"> • Compliance with tax regulations • Cost of compliance • Tax filing processes • Tax payment processes • Tax registration processes • Quality of taxpayer services • Tax audits • Management of taxpayer appeals, complaints and claims • Reimbursement of tax credits • Tax evasion • OTR's image • Understanding tax and customs procedures and tax management

Frequencies were determined for categorical variables, such as Likert scale item responses, and presented graphically showing count and percentage. Multivariable logistic regression was used to model predictors of selected variables controlling for important covariates. The model assessment was evaluated using the Hosmer-Lemeshow statistic (Pigeon and Heyse 1999). The multivariable logistic regression results were presented graphically using forest plots (Verhagen and Ferreira 2014). Odds ratios at 95 per cent confidence intervals are shown as error bars. A complete model was initially run; this was reduced using the backward selection procedure following discussion within the research team. Statistical analysis was conducted in SAS Enterprise Guide 7.15.

Descriptive statistical analysis was conducted on datasets provided by OTR to identify trends in taxes and customs data between 2018 and 2021. The analysis included trends in customs and tax revenue collection from different taxpayers, tax types and taxpayer segments aligned to OTR structures. In addition, we analysed trends in achievement of revenue collection targets and taxpayer compliance with different taxes before and after implementation of digital technologies and DFS.

3.2.2 Qualitative research methodology

The qualitative research adopted an interpretive study design to document and evaluate implementation of selected digital innovations among sampled taxpayers and other stakeholders. This included documentation and analysis of benefits from implementation of digital innovations from the perspective of different stakeholders – government officials, taxpayers, tax administrators and other partners. Interviews were conducted with policymakers from the Tax Policy Unit of Ministry of Finance, officials from OTR, and selected taxpayers who were using OTR's digital platforms and DFS.

Purposive sampling was used to identify and engage stakeholders who were knowledgeable about the scope of the study. The sample included respondents involved in planning and implementing digital technologies and DFS within OTR (senior managers, middle managers and IT staff). Taxpayers, as key users of DFS (from large and medium taxpayers), and partners (banks, telecommunication companies, software companies, tax agents/practitioners and other key stakeholders) were included in the sample. The total sample was deemed representative of key actors contributing to Togo's effective tax administration. Snowballing techniques were used to reach the desired number of respondents (Atkinson and Flint 2001).

Qualitative data from KIIs and FGDs was analysed using MAXQDA Analytics Pro Software 2022. Data analysis was guided by a coding system developed *a priori* from sub-research questions. All themes were pre-loaded into MAXQDA software before transcripts were uploaded. All FGDs and KIIs were transcribed verbatim after obtaining written consent from participants. A saving convention was used for each transcript to maintain anonymity and be able to link it to respondent category. All transcripts were read twice to obtain the gist of the respondents' perspective before uploading them into MAXQDA. The coding system guided data extraction from transcripts into themes (Holm and Kildevang 1996; Moustakas 1994). All coded statements under each theme were further examined to contextualise their meaning and how they related to the rationale behind the theme (Connolly et al. 2006; Bann 2009). Where appropriate, maxmaps were drawn to summarise key findings for particular themes. Selected verbatim statements from respondents have been included to illustrate their perspective on issues under discussion.

3.3 Study limitations

The survey for OTR and taxpayers may be construed as biased and based on perceptions – as any other population-based survey. Surveys are sometimes criticised as a data collection method for lower reliability and internal validity. One reason is that respondents may not provide accurate, honest answers. Surveys are believed to force respondents to answer questions that they might be ignorant of, have a different understanding of based on personal perception, or are influenced by exogenous factors, such as education, culture, age or status in society (Beiske 2002).

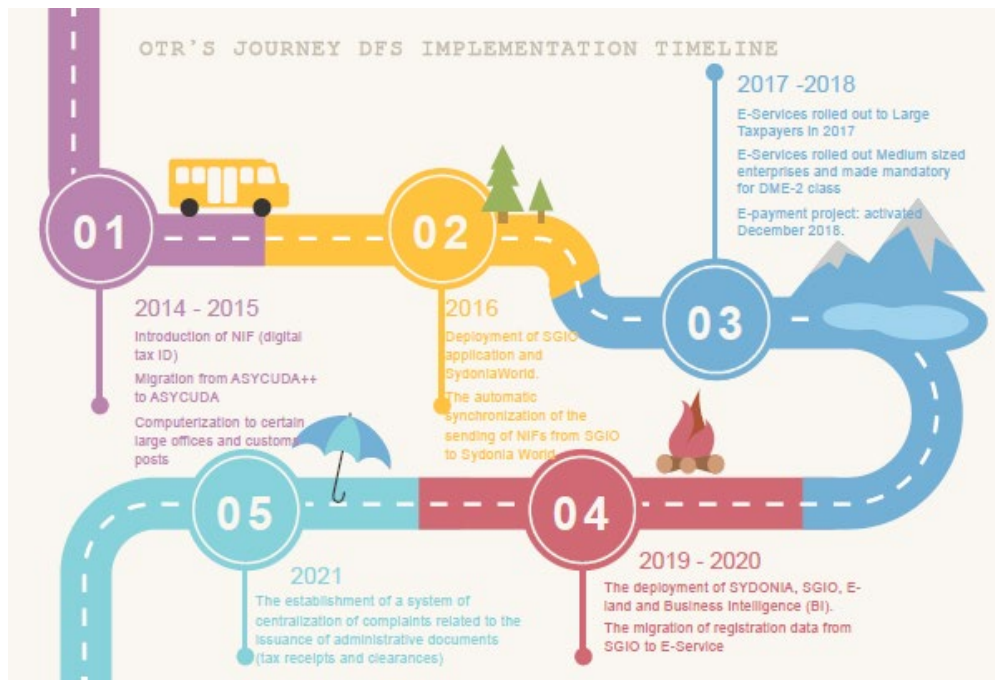
Both surveys were very targeted. The OTR survey was specifically targeted at employees who had participated in some way in implementation of digital technologies and DFS. The research team emphasised this requirement during the introductory meeting. The survey was often completed shortly before or after FGDs or interviews with OTR staff. OTR was asked to identify large and medium size taxpayers and their contacts for the taxpayer survey, and the research team sent the online survey tool to them. This was to ensure that surveys generated as much reliable and valid data as possible.

4 Study results

4.1 OTR's digital transformation

OTR's journey to full deployment of digital technologies and DFS was part of an overall strategy for digital transformation started in 2014, two years after OTR was formed. Figure 4.1 summarises key milestones in OTR's journey.

Figure 4.1 Timeline and key milestones in OTR's journey to implement DFS



Source: Adapted from OTR data.

Most OTR operations were manual before 2014, including filing tax declarations and receiving payments. Taxpayers and OTR experienced lengthy delays, with long queues at OTR offices during the tax filing season – taxpayers often had to stand in queues until 11pm waiting to be served. Paying taxes was a cumbersome, manual process. Taxpayers had to take a large amount of cash to OTR, and especially large and medium-size enterprises had to pay for transport and security. On arrival at OTR's offices taxpayers met a cashier. The cashier did not have a money-counting machine, so paying and receipting was a lengthy process. Cash received had to be kept in a safe for a long time before being taken to the bank, a security risk for OTR. OTR had to transport the cash to the bank, which again required transport and security. Once at the bank, depositing the cash was a lengthy process due to the large amounts. The cash tax collection was only paid into the Treasury's account long after taxpayers had paid, and cashiers often experienced cash shortages. Later OTR asked banks to set up cash deposit counters in OTR offices, hoping this would speed up the payment process. Two banks set up counters at OTR offices. The banks asked OTR to make office space available, and to set up the necessary infrastructure to accept cash deposits.

As a result of the manual filing and tax collection process, OTR reported it was difficult to manage taxpayer records, reconcile taxpayer accounts and follow up taxpayer queries.

Well, I remember when we arrived here at OTR, in 2014, there wasn't really any network infrastructure as such. You will see in the offices, in the divisions, a router with a PC for the cash register and that's it. It was essentially the cash register that was connected.
(OTR official during FGD)

One of the first steps in OTR's digital transformation was to introduce tax ID numbers (Numéros d'Identifiant Fiscal (NIFs)) in 2014.⁵ OTR had issued economic operator numbers

⁵ The NIF is a digital tax ID issued by OTR. It is not issued automatically as part Togo's national citizen ID process. The registration process requires taxpayers to provide ID documents and numbers, as well as a location.

(NOEs) after the introduction of VAT in 1995, but only for taxpayers subject to VAT. They were issued to all economic operators in 2006. A different NOE was issued to Customs and Domestic Tax Departments, with two letters added to complete the tax number. OTR later adopted a single NOE. The NIF, in contrast, was issued to all citizens when it was introduced.

NIFs evolved as the taxpayer base grew. The NIF soon reached saturation, as it was based on six digits. The structure of the NIF restricted taxpayer interaction with OTR to their registered branch, and taxpayers had to pay in the division they were assigned to. The NIF structure later changed to ten digits, which meant that a taxpayer could make payment at an OTR office.

The Customs Department migrated from Sydonia++ to Sydonia in 2014. Later that year OTR developed the interface with the Single Window for Foreign Trade (Guichet).

In 2015 OTR began introducing tools to promote automation and security of operational procedures, started computerisation of certain large offices, customs posts, and revitalised the Customs Selectivity Committee for faster customs formalities.

Before 2015, OTR's Tax Department used Gestion des Comptes de l'Office (GESCO), which focused more on administration of taxes and internal processes. As an OTR official described, GESCO 'was focused on cash receipts, and enabled OTR to issue receipts with limited traceability functions'. At this stage, OTR received payments at its premises or through banks in its premises.

GESCO only allowed taxpayers to declare taxes they were paying at that time. It became necessary for OTR to move to a system that allowed taxpayers to self-assess in advance, and separate payment from declaration time. In 2016 the Système de Gestion des Impôts de l'Office (SGIO) was deployed 'to strengthen the infrastructure with the BLR [Boucle Locale Radio] local loop networks and to interconnect all the sites with the head office'.⁶ SGIO experienced difficulties with extension. Several management modules (secondary establishments, economic operator cards, deployment of SydoniaWorld business application, and development of specific applications (AGI-OTR, DAS) were implemented in 2016. Automatic synchronisation to send NIFs from SGIO to Sydonia World was deployed in 2016. However, large taxpayers increasingly demanded better services. This partly led to the development of a new application, e-Services.⁷ 'The taxpayer interface arrived, so it was built in-house, not by an external service provider.'⁸

E-Services was first rolled out to large taxpayers in 2017. It offered 'declarants the opportunity to send in their declarations themselves'⁹ via the e-Services portal. The objective of launching e-Services was to 'make controls mandatory at all costs'.¹⁰ Initially e-Services only allowed large taxpayers to file their tax declarations online – other taxpayers still had to make payments at OTR branches.¹¹ Later in 2017 OTR improved e-Services functionality, enabling taxpayers to make payments online or with partner banks.

In 2017 OTR developed new modules in SydoniaWorld, including management modules for temporary removals and customs exemptions. Mobile payment of duties and taxes to the

⁶ Quote from OTR official in FGD

⁷ Quote from OTR official in FGD.

⁸ Quote from OTR official in FGD.

⁹ Quote from OTR official in FGD.

¹⁰ Quote from OTR official in FGD.

¹¹ Taxpayers were required to make payment at the OTR head office or branch offices.

Used Vehicle Fleet and Impôt sur le Revenu des Transporteurs Routiers (IRTR) project were launched.¹² New interfaces with banks and mobile companies were developed, including SydoniaWorld-TOGOCEL, OTR-BTCI, UTB Bank, ECOBANK, TOGOCEL and MOOV Africa Telecom.

The e-Services project was formally launched in 2018. At first taxpayers could only submit electronic declarations (e-declarations). The e-Payment project was activated in December 2018, with taxpayers making online payment with OTR banking partners and using mobile money wallets. E-declaration was extended to medium-sized enterprises the same year, with online declaration made mandatory for taxpayers of the DME-CIME2.¹³ Implementing Business Intelligence (BI), and interconnecting SydoniaWorld and SGIO databases for automatic reconciliation of VAT returns, also began.

OTR held training and capacity-building sessions when rolling out e-Services. Recognising that taxpayers may face challenges with infrastructure, OTR set up centres to provide access and assistance for those with no access to internet or equipment.¹⁴

To address technical challenges and support OTR staff, in 2019 permanent technical support was made available at Customs and Domestic Tax Departments, with 720 computers available for agents. SYDONIA, SGIO, e-Land¹⁵ and BI continued to be deployed. The digitalisation of customs and tax procedures continued, with acquisition of the integrated tax system and new equipment to reinforce the data centre.

New modules for Sydonia World, SGIO and e-Services software were developed in 2020, including modules for taxpayer taxation, registration, value control, dynamic selectivity of controls, and management of audits 2020 also saw the migration of registration data from SGIO to e-Services. Importantly, OTR increased the number of banks through which taxpayers could make payment, integrating its online payment platform with NSIA Bank, Bank of Africa (BOA), SUNU Bank, Société Inter Africaine de Banque (SIAB), and the E-POSTE¹⁶ platform. OTR also interconnected its information systems with partners, in particular Lomé Container Terminal, Bollere Transport and Logistics Togo, Système Intégré De Gestion des Finances Publiques (SIGFIP),¹⁷ Centre for Business Formalities (CFE),¹⁸ National Institute for Statistics and Economic and Demographic Studies (INSEED), and Department of Road and Rail Transport (DTRF).¹⁹

Key developments in 2021 aimed to build additional capacity and automate more tax administration activities. These included establishing a system to centralise complaints on issuing administrative documents (tax receipts and clearances), and the legal framework and prerequisites for operationalising Guichet Unique des Etats Financiers (GUDEF). In 2021 implementation of a single window for filing financial statements commenced, and work on electronic document management continued. Significant developments were made to online payment through routing work to commission TMoney's new services. Virtual Private

¹² The IRTR Project aimed to increase use of the service. The OTR received on- and off-site assistance to diagnose factors contributing to low use of the product (need for identification, non-consent to tax).

¹³ DME-CIME2 are medium-sized enterprises, whose turnover is above a certain annual threshold.

¹⁴ FGD DITI held on 25 February 2022.

¹⁵ E-Land (e-Foncier) is an online platform for land in Togo, where requests for transfer of property and payment for these services can be made. In addition, descriptive statements issued, information, photocopies of documents from the archive of land titles and total transfers of land titles must be made via e-Land.

¹⁶ Mobile application E-POSTE TOGO developed by the Post Office of Togo for financial transactions through mobile phones.

¹⁷ Integrated Public Finance Management System to better manage public finances.

¹⁸ Centre de Formalités des Entreprises (CFE) is the business registration centre of Togo in charge of establishing businesses, prescribed under legislation and compliance declarations.

¹⁹ Direction des Transports Routiers et Ferroviaires.

Network tunnels were implemented between OTR and BOA, and OTR and SUNU BANK, as part of online payments.

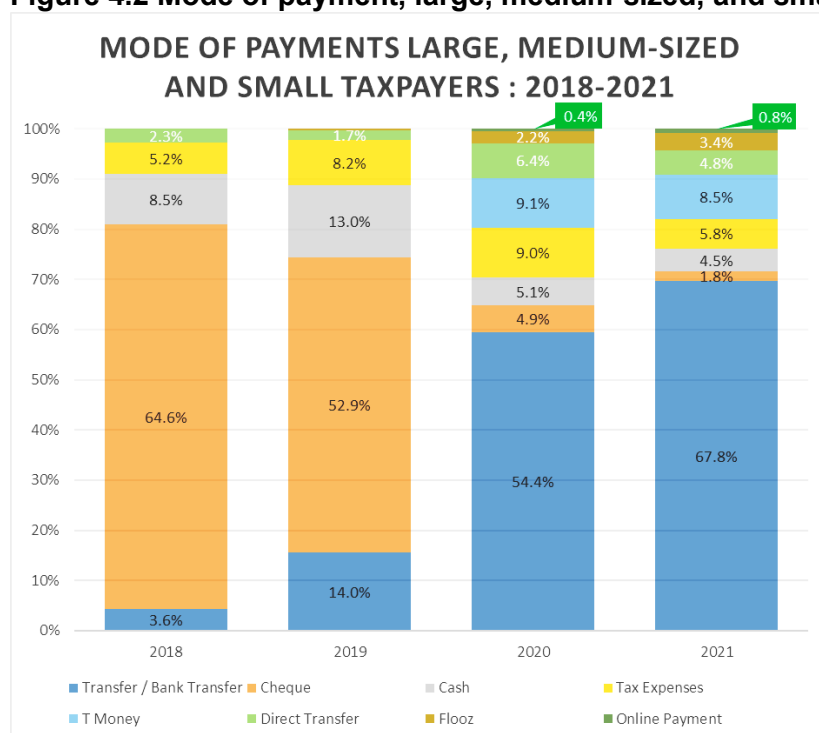
4.2 Achievements²⁰

OTR's key objectives when implementing digital technologies and DFS were to improve tax revenue collection through developing more efficient internal processes, faster and more efficient user-friendly tax collection systems, promoting customer-centric interaction with taxpayers, and enhancing taxpayer compliance. This section presents our findings on whether OTR achieved its objectives. We base our results on analysis of qualitative and quantitative data (survey data and secondary data from OTR).

4.2.1 Adoption of digital technologies and DFS

OTR offers taxpayers several ways to make payment. Taxpayers can use bank transfers,²¹ direct transfers,²² cheques, tax expenses,²³ compensation,²⁴ cash, TMoney and Flooz mobile platforms and online payment modes, as shown in Figure 4.2. TMoney and Flooz mobile payment platforms are operated by Togocom and Moov Africa Togo respectively, and allow consumers to operate an electronic account associated with their telephone number.

Figure 4.2 Mode of payment, large, medium-sized, and small taxpayers – 2018-2021



Source: Adapted from OTR data.

²⁰ Many tables, figures and charts have been omitted for brevity, and are available upon demand. Please contact dorothy@afrilaw.co.za.

²¹ In this paper we distinguish bank and direct transfers from online payments. While both are electronic payments, in Togo bank and direct transfers entail going into a bank and issuing an instruction (on paper) to pay a beneficiary - in this instance OTR. An online payment is an internet payment that does not require any manual intervention, and transactions are 100% digital. A taxpayer using an online platform simply needs to log into their bank app and make online payment directly into OTR's accounts, without visiting or issuing a written instruction to the bank.

²² Direct transfer means that the payment has been made within the same bank - the taxpayer and tax authorities have their accounts in the same bank. Bank transfer or transfer means that the payment has been made from one bank to another through a process of setting off funds due via the central bank.

²³ Tax expenses include payments made in recognition of tax incentives granted to taxpayers.

²⁴ Compensation refers to using tax refunds owed to taxpayers to offset tax liability.

Taxpayers preferred to pay by cheque in 2018 and 2019 – 64.6 per cent of taxes in 2018 and 52.9 per cent in 2019 were paid by cheque. However, during the COVID-19 period, 2020 and 2021, bank transfers were preferred – 54.4 per cent of tax payments in 2020 and 67.8 per cent in 2021. Tax payments in cash steadily declined from 2019. Despite OTR declaring online payment mandatory for large taxpayers in 2018, and medium taxpayers in 2019, the use of online payment is still very low among taxpayers – only 0.4 per cent in 2020 and 0.8 per cent in 2021. TMoney and Flooz mobile platforms are used more frequently by taxpayers, with TMoney comprising 9.1 per cent in 2020, dropping to 8.5 per cent in 2021. Flooz usage is lower than TMoney – 0.3 per cent in 2019, 2.2 per cent in 2020 and 3.4 per cent in 2021. There is a clear taxpayer preference for mobile payment over online platforms.

In 2021, 11.9 per cent of tax payments were paid via Flooz and TMoney's mobile platforms, and only 0.8 per cent of taxes were paid online. Mobile and online platforms were mostly used to pay for registration fees, minimum flat rate legal person tax, corporation tax, patents, withholding at source on fees, withholding taxes on non-resident services, rental taxes, taxes on wages and salaries, housing tax, motor vehicle tax and VAT (Appendix Figure C1).

Large business enterprises are the biggest users of online platforms to pay their taxes, with 209 transactions recorded by the Direction des Grandes Entreprises (DGE), compared to 119 by the Direction des Moyennes Entreprises (DME), and 12 for the small business segment. Overall, medium-sized enterprises are the largest users of mobile platforms. However, a comparison between Flooz and TMoney shows a slight difference. There are slightly less TMoney users from medium-sized enterprises (5,107 transactions) than large enterprises (5,280), but more than the small business sector (450). Medium-sized users are by far the largest for Flooz (2,814 transactions), compared to 704 for the small business sector and 276 for large enterprises. TMoney is used most frequently by taxpayers. This is probably because of TMoney's larger subscriber base (TogoFirst 2022), and small- and medium-sized enterprises preferring mobile platforms.

Evidently the larger business segment prefers online platforms, using them more frequently to pay for VAT, motor vehicle tax, taxes on rentals and withholding taxes, corporate tax, patents and withholding taxes on fees than other segments. This may be because transaction amount limits on online banking platforms are higher than mobile platforms. Large businesses also often have more access to the necessary infrastructure, such as computers and internet fibre connectivity.

With no online payments and very little tax paid via TMoney or Flooz in 2018 and 2019, taxes collected via mobile and online platforms suddenly picked up in 2020 and 2021 (see Appendix Table B1). The taxes collected from large, medium-sized and small enterprises through TMoney and Flooz increased by 3,156 per cent and 806 per cent, respectively, from 2019 to 2020. The rate of increase tapered in 2021, with the amount of taxes paid using TMoney and Flooz increasing by 13 per cent and 86 per cent, respectively. Though the use of online payments is very low, as with mobile payments, taxes collected show many more taxpayers starting to use these methods in 2020. In 2021 the amount of taxes paid increased by 141 per cent. Thus, a small growth trend is observed for online payments from 2018 to 2021. TMoney and Flooz also show a growth trend from 2019 to 2021 (Appendix Table B1). The increased use of online and mobile payment modes in 2020 and 2021 could be due to the COVID-19 pandemic, with taxpayers using these when lock-downs came into effect. The dramatic decline in use of cheques from 52.9 per cent to 4.9 per cent in 2020, and 1.8 per cent in 2021, could also be attributed to the pandemic rather than any strategic push on OTR's part.

Trends in using different modes of payment could be explained by observations from KIIs with OTR, professional accountants and tax advisors' associations. During the KIIs and FGDs it became clear that low uptake of online and mobile payment methods may be due to lack of confidence in the security of these methods, and concern about giving OTR access to their bank accounts. During FGDs, accounting professional and tax advisor associations said their clients were reluctant to use these online methods – they were worried that interfacing their accounts with OTR would mean that OTR would be able to view and access their accounts. OTR observed that a key consideration in choosing a mode of payment was security, and taxpayers considered bank transfers to be more secure. These concerns may explain why taxpayers avoid using online payments, ignoring the OTR mandate.

The OTR survey results show that there was increasing use of DFS. Most OTR respondents agreed that there was increased adoption of e-Services in large (48.8 per cent) and medium-sized enterprises (49.4 per cent). Of those who agreed there was increased use, the majority (60.5 per cent) of them quantified this increase as between 76-100 per cent for large enterprises, while 41.5 per cent viewed the increase in medium-sized enterprises as ranging from 51 per cent to 75 per cent. In large part, this increase is probably due to OTR making e-Services mandatory for large and medium-sized enterprises.

It is important to note that taxpayers can use any mode of payment for all taxes – apart from customs and excise duties, which must be via bank transfer. OTR Customs Department has not yet enabled online payment of customs duties, and taxpayers can only make payment of customs duties via the Guichet Unique. Appendix C Table C2 shows that payment of customs duties is made via cheques and Guichet Unique. Guichet Unique is the primary payment mechanism, accounting for 62 per cent of transactions in 2021. Guichet Unique has certain disadvantages for OTR Customs Department, due to an additional administrative and processing layer in tax payment, and associated costs of the intermediary service provider. It is, however, a system that was developed to facilitate payment in one location from all different stakeholders in customs and clearance of goods, including port handlers and goods inspection enterprises.

4.2.2 Ease of filing and reporting

The taxpayer survey shows that adoption of DFS had a favourable effect on tax declarations, making filing of returns and reporting of taxes much easier. Nearly all participants (over 93 per cent) strongly agreed or agreed that tax filing and tax payment processes have become easier and simpler.

4.2.3 Reduced cost of compliance

The majority of taxpayers who participated in the online survey (68.6 per cent) felt that using digital technologies and DFS reduced the cost of complying with tax regulations, and KIIs and FGDs confirmed these findings. In discussions taxpayers explained that this reduced transport and staff costs, due to not having to hire a specialist to assist with declarations. Removing the need to transport large sums of cash reduced security risks. An official from Moov Telecom said customers considered data costs for online declaration and payment preferable to spending time and resources paying taxes at OTR or bank counters.

4.2.4 Accuracy of filing and paying

During interviews and FGDs, taxpayers and OTR staff agreed that implementation of digital technologies and DFS helped taxpayers to declare and file more accurate tax returns. This is

largely due to the ability to validate and review their tax filings before submitting them online. OTR officials noted that they could cross check taxpayers' declarations with their historical records, and different tax types, giving them the ability to assess and detect variances.

Taxpayers said that validation and checking processes on the e-Services platform also helped identify errors that would not have been picked up during manual filing. Some taxpayers noted that accessing past declarations and payment records improved the quality and accuracy of their declarations and associated payments. An official from the largest taxpayer appreciated that access to historical tax records was a 'sort of modern archiving' that made it easier to extract historical data, including proof of tax payment. They felt this made audits and data processing by tax advisors easier.

However, the online survey shows taxpayers have not seen an improvement or impact from implementation of digital technologies and DFS on reducing tax audits, taxpayer appeals and complaints processes, and reimbursement of tax credits. During discussions, taxpayers thought e-Services could perform additional services to improve the process for reimbursing refunds and credits, and for OTR to respond to queries and complaints. Taxpayers said that they often still had to visit OTR tax centres to engage with OTR when they have more technical issues and queries. Call centres were only considered useful for simple processing queries about filing and payment.

4.2.5 Improved taxpayer compliance

The survey results show a perceived improvement in taxpayer compliance resulting from OTR's digital transformation and use of DFS. The process for declaring and paying taxes is easier and simpler, providing information that enables taxpayers to engage with OTR and increasing taxpayer awareness of their tax obligations and status. The OTR survey shows that the majority of OTR staff surveyed (69 per cent) considered that compliance levels amongst large enterprises improved after adoption of digital technologies and DFS. About 62.2 per cent agreed that medium-sized businesses' compliance with tax regulations improved.

During interviews and discussions, several stakeholders and large taxpayers said their use of DFS made it easier to meet their tax compliance obligations. Taxpayers said they found it easy to use e-Services because all the information required was made available on the platform, with tax agents, videos and tutorials available online to guide and assist. Some found that they could monitor their tax compliance status more effectively, allowing them to avoid missing deadlines and incurring penalties. OTR officials had similar observations. During an FGD a Crowe TG Icaaf Sarl representative noted that digital technologies and DFS facilitated more transparent and sincere declarations: 'At least, even if you don't download, even after five years, you still get the declarations online, you still have the proof there on your account. So I think the data is still available'.

Taxpayers, like representatives, felt the tax declaration and payment process was much more efficient. Using e-Services helps them prepare their tax declarations online much earlier, not having to wait for the tax season to visit OTR. OTR officials from DME shared the same perspective. The process of filing declarations was faster due to queries being answered online or via email.

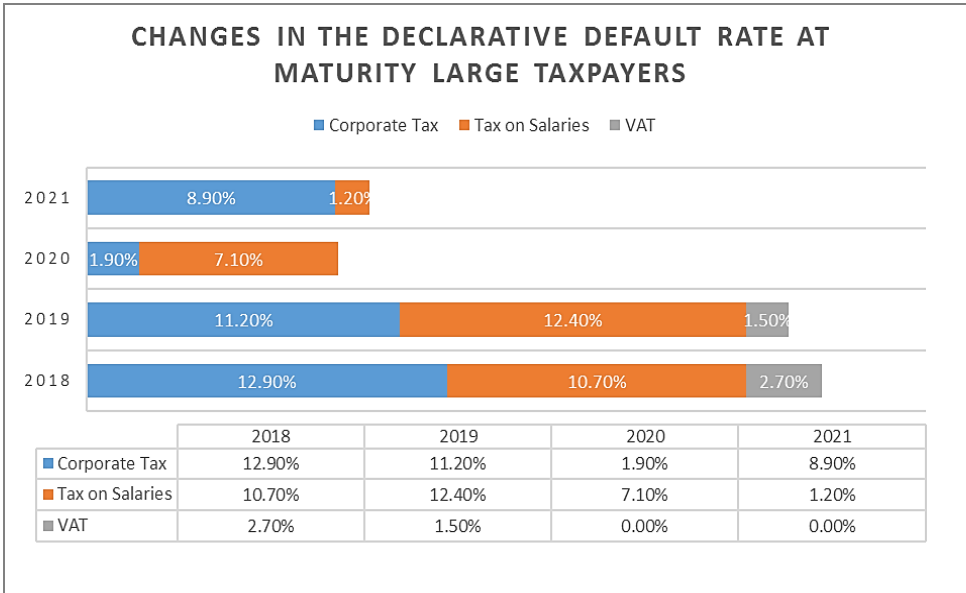
During an FGD with DITI, participants noted that the e-Services platform had improved management and record-keeping of tax data. Taxpayers echoed the same sentiments during various interviews. This shows that e-Services provided taxpayers and tax agents easier and faster access to historical tax data stored in one secure database. Taxpayers had access to

the same information as tax agents, and OTR officials from the DME noted fewer visits to OTR centres to query their tax status. According to OTR increased taxpayer awareness and transparency of tax payments was observed – taxpayers were more aware of taxes paid and arrears due to making payments directly, and not relying on third parties to facilitate payments.

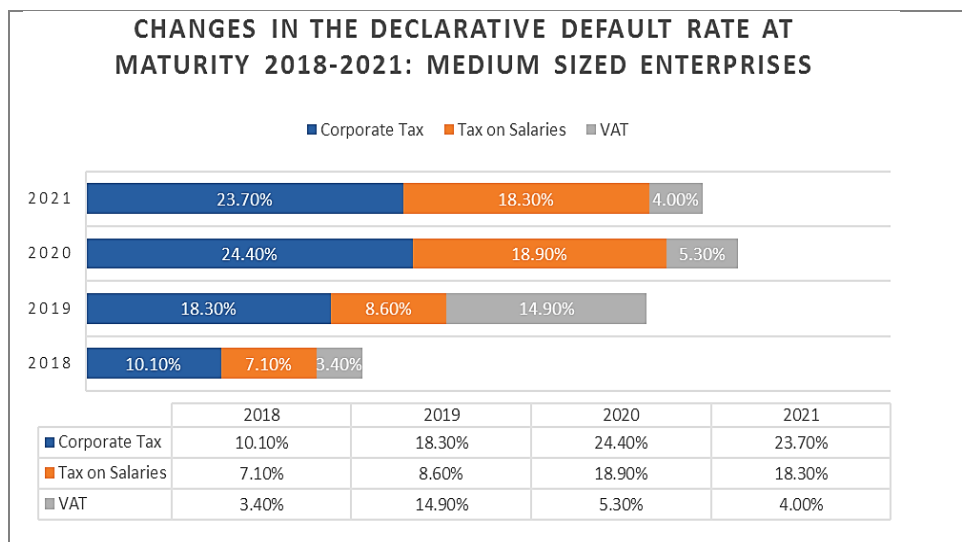
These views align with taxpayer survey, where 89.4 per cent of respondents agreed that compliance with tax regulations was simpler and easier for taxpayers after implementing digital technologies and DFS.

OTR and taxpayer sentiments are not the same on compliance levels. While compliance levels on VAT and taxes on wages and salaries improved among large business enterprises from 2018 to 2021, Figure 4.3 shows different default rates for medium-sized enterprises.²⁵ An increase in default rates is observed in declarations for corporation tax and tax on salaries, suggesting less tax compliance for these tax types. Conversely, VAT sustained a decrease in default rates from 2019 to 2021, almost going down to 0 per cent for large enterprises and 4 per cent for medium-sized enterprises.

Figure 4.3 Changes in declarative default rate at maturity 2018-2021: large and medium-sized enterprises



²⁵ The default rate aims to measure how many registered taxpayers failed to declare or file their returns on time or correctly, as required.



Source: Adapted from OTR.

Interestingly, compliance levels for corporate tax in large business enterprises declined, with the default rate increasing by 7 per cent between 2020 and 2021, indicating more large enterprises failed to declare their corporate taxes as required. The decline in corporate tax may be due to the COVID-19 pandemic, when businesses requested extensions and had other challenges in meeting their compliance obligations.

While it is not evident why taxpayers are highly compliant with VAT declarations, comments from KIIs and FGDs suggest this may be because of increased transparency and audit capabilities after digitalising the declaration and payment processes.

4.2.6 Improved taxpayer registration

Despite the taxpayer registration process not being fully digitised, most taxpayer respondents (67.3 per cent) felt that OTR's registration processes had improved after implementation of digital tax IDs.²⁶ During FGDs taxpayers noted the process for engaging with OTR had become easier. OTR DITI officials noted in discussions that once a taxpayer was registered and had a digital tax ID, they could access the e-Services portal without having to visit OTR's offices.²⁷

4.2.7 More effective and efficient tax collection and administrative processes

Discussions and interviews with OTR officials from the DME and DCF showed they considered that adoption of digital technologies and DFS resulted in faster processing times, providing data and information collected through one channel. Their use eliminated the need to re-enter data on taxpayers making manual declarations, and enabled automation of certain administrative processes. This removed some of the earlier bureaucracy, where tax agents had to cross-check and verify data before processing it.

²⁶ OTR's tax registration process is not fully digitalised. On registration a new taxpayer still has to obtain a form from OTR's offices, or download and fill it manually. Once completed, an OTR agent puts the information on the form into a template on the OTR platform and, after validation, the platform issues an NIF (taxpayer digital ID) and certificate for registration simultaneously.

²⁷ OTR data shows more taxpayer registrations for Golfe Tax Centres (small business enterprises), which registered the greatest number of new taxpayers (27,953). This may explain the increase in taxpayer registrations from 2018 to 2021. The Regional Tax Operations Directorate showed an even greater increase, with taxpayers increasing by 351%. However, there are less taxpayer registrations of large and medium-sized enterprises, with large enterprises registering no new taxpayers in 2021.

Taxpayers and stakeholders noted similar improvements. Tax advisors and professional associations, such as Ordre National des Experts Comptables et des Comptables Agréés du Togo (ONECCA), observed that their clients improved their OTR tax declaration processes. Union Togolais des Banques (UTB) representatives of large taxpayers believed the use of digital technologies and DFS had created a more efficient tax declaration and payment system, saving them time.

Discussion participants from DME noted that data could be analysed faster and easier, reducing the need to wait for audits before taking corrective measures. Availability of this data made it possible to monitor taxpayer declarations and ensure compliance through more frequent engagement with taxpayers.

I also think that for the administration, it is that we have the data available. If we have the data available, we can use it for analysis for research and even tax audits. Since the data is available, we go faster. While in the old system, you had physical slips and we were sometimes blamed for delays.
(OTR official from DME)

The Directorate of Fiscal Control noted tax agents observed that taxpayer audits were undertaken more efficiently. In OTR's view the reduced need to collect large amounts of data manually, and using less tax agents, increased efficiency.

It only takes one click and the extraction is done. In fact, the processing is in Excel so that it is accessible to everyone does the installation in Excel format and we do the processing. We cross-check with the returns on your taxpayer's return and identify the first discrepancies that may arise.
(OTR official during FGD with DCF)

They also observed that there was less risk of error, and faster data analysis, cross-checking and identification of discrepancies. The use of digital technologies, DFS and resulting process automation meant that taxpayer fraud and evasion could be detected more easily. However, OTR survey results show that OTR staff had not observed a reduction in tax audits – only 23.8 per cent of respondents agreed/strongly agreed that tax audits had reduced since implementing digital technologies, DFS and tax IDs; 60.7 per cent said they did not know.

Discussions and interviews with OTR highlight improved efficiency and effectiveness of the tax collection process, notably in VAT collection and administration. During discussions, OTR officials from the DCF observed that when digital technologies and DFS were adopted, there was more information available to OTR on suppliers of their VAT-registered taxpayers. Supplier details and invoices were now readily accessible on the e-Services platform, allowing auditors to better monitor declaration of suppliers. Previously, it would have been necessary to have a VAT audit and visit the taxpayer's business premises to collect data – which would sometimes not be available. Alternatively, supplier details would be gathered through annual tax declarations. OTR believed this data could lead to improved management of the VAT refund system. During one interview, a medium-sized enterprise pointed out that the efficiencies had increased their competitiveness, reducing time spent on tax preparation processes, and allowing them to undertake more strategic business tasks.

The OTR survey results further indicate that OTR staff observed improvements in various administrative functions. Almost half (47.7 per cent) of respondents agreed that the management of taxpayer appeals, complaints and claims improved after implementation of

digital technologies and DFS, and 42.9 per cent of OTR respondents agreed that OTR improved tax and customs query resolution processes.²⁸

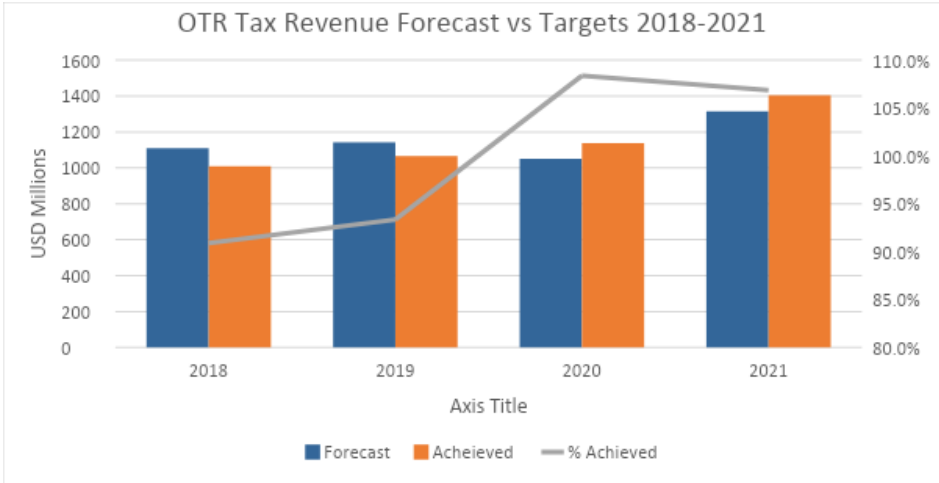
You can't control without information. This is the first step it takes to process the information. Without information, there is no tax audit. So, at this level, with online services, we have benefited greatly from a collection of information at the level of disputes.
(OTR official during FGD with DCF)

Overall, the surveys, KIIs and FGDs show that OTR and taxpayers noted improvements in the quality of taxpayer services. An official of a medium-sized enterprise said that the 'freedom' created an enabling business environment and improved service levels. The OTR survey supports this conclusion – 56.1 per cent of respondents agreed the relationship between OTR and stakeholders had improved after adopting digital technologies and DFS. A significant proportion of respondents (42.7 per cent) indicated they did not know, inferring they had not noted any improvement, and 1.2 per cent disagreed.

4.2.8 Improvement in revenue collection

OTR revenue increased from 2018 to 2021, only dipping slightly in 2021 (see Figure 4.4). The decline in 2021 may be attributed to macroeconomic factors, such as a slowdown in economic activity arising from the COVID-19 pandemic.

Figure 4.4 OTR tax revenue forecast vs. targets 2018-2021



Source: Adapted from OTR data.

Between 2018 and 2021, OTR experienced tax revenue growth from large, medium-sized and small enterprises in the Golfe Centre (see Appendix Figure C2). The large enterprise department observed an 18 per cent increase in tax collection. In interviews and discussions, OTR's officials partially attributed the growth in tax revenue observed from 2018 to 2021 to their adoption of digital technologies and DFS, the e-Services platform for domestic tax, and SydoniaWorld for customs. In an FDG with the Directorate of Research and Planning, it was noted that the reliable database results now provide real-time information, allowing the tax administration to react and intervene in a timely manner, especially in the case of defaulters.

²⁸ Charts and figures are omitted for brevity and are available upon demand.

OTR officials from DCF said these capabilities allowed OTR to exceed its tax revenue forecasts in 2020 and 2021, even during the COVID crisis.²⁹

OTR survey results show that since adopting digital technologies and DFS:

- 70.8 per cent of OTR staff respondents agreed/strongly agreed that payment of taxes by large enterprises has improved
- 71.4 per cent of the respondents agreed/strongly agreed that payment of taxes by medium-sized corporations has improved
- 76.5 per cent of OTR respondents agreed that mobilisation of tax and customs revenue has increased
- 78.9 per cent agreed that OTR has been achieving its tax and customs revenue mobilisation objectives.

Customs duties are declared online via SydoniaWorld, but there is currently no online or mobile payment system for customs duties. The data shows there has been a recent increase in payment of customs duties across different taxpayer segments – resulting in an overall increase in customs revenue collection of 77 per cent over the four years. According to OTR's Department of Customs, the increase in customs revenue is attributed to reduced cost in processing imports, less manual processes and need for physical meetings, reduced opportunities for tax leakages, faster processing of files, and securing goods through 'home visits'.³⁰

4.3 Challenges

OTR faced administrative, policy, internal and external challenges when adopting digital technologies and DFS. Up to 64.5 per cent of the respondents in the OTR survey, and 49.5 per cent of taxpayer participants, indicated that OTR faced significant barriers. A large proportion of taxpayers (45.5 per cent) indicated they did not know, suggesting they were not aware of any challenges.

4.3.1 Administrative and policy barriers

OTR tried to put in place a conducive legal and institutional framework to facilitate adoption of digital technologies and DFS – 42.6 per cent of taxpayer respondents thought a conducive legal framework had been put in place. While 44.5 per cent agreed that an effective institutional framework for DFS is in place, the majority of taxpayer respondents (49.7 per cent) did not know. OTR Legal and IT Directorates indicated that they took an early strategic decision to put in place a legislative framework to allow OTR to collect taxes using DFS platforms, and OTR reviewed legislation to ensure the legality and enforceability of DFS platforms. The review indicated that no provisions would bar implementation; however, as a governance protocol, taxpayers were required to confirm they accepted using the digital platforms.

Taxpayers and OTR, however, both felt that the administrative policy decision not to engage with taxpayers and key stakeholders before the roll-out of DFS resulted in missed opportunities, and DFS platforms did not address some users' needs. Interviews and FGDs with professional associations such as ONECCA revealed that forms and procedures for making certain declarations created challenges for taxpayers. A policy of engaging with

²⁹ According to OTR data, revenue collection from large enterprises exceeded forecasts and targets from 2018 to 2021. OTR reports surpassed targets by 114.5% in 2021.

³⁰ Like tax revenue, the main contributors to customs duties are large enterprises (58.9 %) and medium-sized enterprises (26.7%). The small enterprise sector contributes 10.22% of total customs duties collected.

taxpayers and key stakeholders before implementation would have given them an opportunity to highlight their needs. Several taxpayers noted during interviews and discussions that they would have wanted more functions, such as obtaining tax receipts, clearances or statements on the platforms. More notably, taxpayers and OTR staff would have wanted taxpayers to have the ability to declare their annual results on the platform.

The policy decision to have separate access points for e-payments and e-declaration, rather than a single point, was considered a challenge. OTR staff noted a single platform would have been preferable, but the constraints of interfacing with banks made that difficult.

The administrative policies of various third-party suppliers, especially banks, had presented hurdles to optimal performance for e-payments. In discussions, participants from Direction de l'informatique et des Technologies de l'Information (DITI) said that dealing with different banks, each with different governance protocols, presented a challenge during the set-up of DFS. Initially, the banking platforms and OTR interfaces faced some teething problems, such as double deductions of tax payments – taxpayers had to claim a tax credit for the tax overpayment, as automatic reversals were not possible.

Integration of the platforms to cater for all national, municipal, and local taxes, and to allocate these taxes, was a concern for large enterprises in discussions with DGE. OTR officials noted that it was essential to accurately collect and trace local taxes on behalf of municipalities, but OTR's platforms were not fully capable of doing this.

4.3.2 Internet connectivity

A key challenge OTR staff and taxpayers faced was no or poor internet connectivity. To address this, OTR provided taxpayers having difficulty accessing the e-Services platform with computer and internet rooms at their branches and head offices – they could then make their declarations and payment. OTR staff are available to help taxpayers resolve any queries and issues. Service providers, such as banks like UTB, also provide taxpayers having connectivity issues with facilities to make online payments.

4.3.3 Lack of information and reluctance to take up digital technologies and DFS

Some taxpayers surveyed and interviewed indicated they initially were reluctant to take up e-Services. They did not understand why it was introduced. Several taxpayers and stakeholders said they had not been consulted prior to roll-out of DFS. During the taxpayer survey, 43.4 per cent of respondents considered that a thorough needs assessment was conducted before implementation of DFS, while 50.7 per cent did not know, indicating they were unaware of any needs assessment; 40 per cent thought OTR implemented proper planning prior to DFS, with the majority (52.7 per cent) unaware. While OTR did not involve stakeholders before deployment of e-Services or SydoniaWorld, they ran a communication and awareness programme later. From 2018 OTR ran several training sessions for taxpayers. The taxpayer survey results suggest that OTR addressed this challenge sufficiently. Of taxpayer respondents, 57.5 per cent agreed that OTR has significantly involved key stakeholders.

4.3.4 Limited staff resources

Some OTR staff explained during KIIs and FGDs that one main challenge was lack of qualified staff in the project management development team. Others pointed to limited staff resources for development of digital technologies and DFS solutions, which led to delays in development of the project. The Directorate of ITC team, tasked with developing e-Services,

had to undertake their day-to-day tasks at the same time. It was felt that needs of the business units would have been better considered if they had been able to have full-time staff on the e-Services project development team.

4.3.5 Low uptake of online and mobile payments

One challenge OTR felt they continued to face was low use of online and mobile payment methods. OTR observed that taxpayers lacked confidence in the security of these methods, and were not confident about granting OTR access to their bank accounts.

4.3.6 Addressing the challenges

OTR staff considered the key external challenges and barriers that hindered implementation of digital technologies, DFS and digital IDs were effectively addressed and managed. Most, 44.8 per cent, agreed that these key challenges had been addressed. Taxpayers shared the view that key external challenges had been addressed, with 49.5 per cent of them agreeing. Up to 40.6 per cent of OTR staff reported not knowing whether these challenges had been addressed, suggesting that they may not have observed a change and continued to experience some issues. With taxpayers, a similar large proportion of 45.5 per cent indicated that they did not know. This again suggests that perhaps taxpayers had either not observed any changes to their issues, or were unaware that OTR was tasked to undertake this. OTR DITI staff mentioned during discussions that OTR was engaging with banks to enhance security features on online platforms, and was trying to interconnect its online platforms with more banks.

4.4 Key drivers of digital technologies and DFS adoption

4.4.1 Key drivers from descriptive analysis from OTR and taxpayer survey data

The survey data indicated that OTR and taxpayers successfully established certain elements that supported implementation and adoption of digital technologies and DFS and digital IDs. This section highlights some of these drivers.

Togo has invested a lot in IT infrastructure. So, I said at the beginning we only have radio, but wireless networks' local loop radio. But it was coupled with specialised links. But the telecom operator has changed technology, so we have now switched to Networks, as we call it fibre or fibre optics. So, we moved to fibre optic networks. Currently, the government has also developed an e-Government Network to link the administrations.

(OTR official during FGD)

4.4.2 Investment in adequate infrastructure (internet, database, servers, computers)

At the macro level, online survey results indicated that taxpayers and OTR staff believed that Togo's ICT infrastructure was sufficient to support adoption of digital technologies and DFS. Approximately 63.9 per cent of taxpayers strongly agreed or agreed that Togo had put in place sufficient IT to support DFS services; 43.9 per cent agreed or strongly agreed that Togo's internet coverage was sufficient for DFS and OTR tax services. The data suggests that some taxpayers experience inadequate internet coverage. However, 30.6 per cent disagreed and 23.6 per cent stated they did not know, suggesting that connectivity issues remain. Many noted that during peak tax filing season and close to deadlines they are unable to access DFS platforms, especially when filing declarations.

During an FGD with DITI, OTR staff indicated that OTR must ensure availability of a stable power supply, installing emergency generators at its premises. OTR paid special attention to ensuring security of data and servers at data centres, installing required specialised firewall and security features. OTR invested heavily in developing its infrastructure, acquiring latest generation servers for data storage and security, computer equipment and materials to ensure that all staff had a computer with connectivity and fibre optic capacity. OTR also invested in premises to host personnel, materials and equipment for modernisation and transformation of administration. This entailed buying electricity generators to ensure power availability during a power cut. Thus, OTR went from using an average of one computer for five staff, to one laptop and one connection for each staff member,³¹ and from one simple server to multiple last-generation servers. The digital transformation enabled OTR to implement data automation and enhance data security procedures. OTR says it has reduced paper use by up to 60 per cent, and provides services without limitations on time (open 24/7) or space.³²

4.4.3 Qualified staff

The OTR and taxpayers survey data indicate that OTR and taxpayer enterprises have adequately qualified staff to adopt and use digital technologies and DFS. Most taxpayer respondents (94.4 per cent) indicated that their company had set up adequate infrastructure and equipment to support use of DFS, and agreed their company had qualified staff to benefit effectively from DFS services.

4.4.4 Stakeholder engagement, taxpayer awareness and change management

The taxpayer survey showed that taxpayers (57.5 per cent) felt that OTR had involved key stakeholders during implementation of DFS. A significant proportion (30.1 per cent) indicated they did not know, while 11.1 per cent disagreed. In FGDs, OTR staff highlighted that a conscious effort was made to 'raise awareness among our partners and taxpayers'. Taxpayer education and awareness sessions were organised for groups of taxpayers. OTR considered these programmes were an essential part of the change management process.³³

4.4.5 Key drivers of OTR'S successful adoption of e-Services and SydoniaWorld from regression analysis

Key outcomes representing OTR's objectives for implementing digital technologies and DFS and digital IDs were selected for regression analysis from OTR and taxpayer survey data. The key outcomes include the adoption of digital technologies and DFS, increased revenue mobilisation, improved tax compliance, improved efficiency and effectiveness of tax revenue collection, and improved taxpayer and stakeholder relations. These outcomes were designated as independent variables. The logistic regression model sought to establish key drivers and dependent variables critical for realising these outcomes. Univariate logistic regression models were first fitted, and significant variables were considered for inclusion into a full model, reduced using backward selection procedure to arrive at the final model.

Regarding adoption of digital technologies and DFS, while there was a good model fit between drivers contributing to Model 1 (increased use of e-Services among large enterprises) and Model 2 (increased use of e-Services among medium-sized enterprises), owing to a significant Hosmer-Lemeshow statistic there was a moderate change in their effect on the two models. A thorough needs assessment by OTR was seen to have a greater

³¹ FGD with Directorate of Research and Planning, held on 4 March 2022.

³² Comments by Senior Official of Directorate of IT, OTR during Interview, held on 24 February 2022.

³³ FGD with the DITI held on 25 February 2022.

effect on the two models, although with slightly more significance on model 2 than model 1 (β coefficient of 1.40 compared to 1.223). For adoption of SydoniaWorld, OTR's implementation of appropriate change management processes was the key driver statistically significant for medium-sized enterprises.³⁴

Table 4.1 Regression analysis results OTR survey - the adoption of e-Services by OTR

Model 1: Increased use of e-Services among large enterprises		Model 2: Increased use of e-Services among medium-sized enterprises	
Variables (Model 1)	β Est (SE)	Variables (Model 2)	β Est (SE)
A legal framework has been put in place to facilitate the implementation of DFS and tax IDs: Yes vs No	0.794 (0.517)	Key external challenges/barriers that have hindered the implementation of DFS and Tax IDs have been effectively addressed / managed	0.736 (0.562)
An effective institutional framework bringing together all key players has been put in place to support the implementation of DFS and tax IDs in the country: Yes vs No	-0.605 (0.572)	OTR conducted a thorough needs assessment prior to the implementation of DFS and Tax IDs	1.40 (0.518)**
OTR conducted a thorough needs assessment prior to the implementation of DFS and Tax IDs: Yes vs No	1.223 (0.583)*	OTR staff have been properly trained on the new requirements when implementing DFS and Tax IDs	-0.475 (0.542)
OTR staff have been properly trained on the new requirements when implementing DFS and Tax IDs: Yes vs No	-0.422 (0.486)	OTR's organisational structure has been aligned to support the implementation of DFS and tax IDs	0.334 (0.592)
<i>Number of participants</i>	86	<i>Number of participants</i>	83
<i>-2 Log Likelihood fit statistics</i>	108.2	<i>-2 Log Likelihood fit statistics</i>	103.8
<i>Hosmer Lemeshow statistic p-value</i>	0.115	<i>Hosmer Lemeshow statistic p-value</i>	0.281
<i>p-value: ≤ 0.05; ≤ 0.01; ≤ 0.001;</i>	<i>*, **, ***;</i>		

On the second outcome, increased revenue mobilisation, the OTR survey data regression analysis revealed that there was not a good model fit with identified drivers, with a Hosmer-Lemeshow statistic p-value of <0.0001.

To realise the third outcome, improved tax compliance, the key driver found to be statistically significant, especially among medium-sized taxpayers (Model 8), was effectively addressing key external challenges hindering implementation of DFS and tax IDs (β coefficient 1.81), followed by adequate investment in infrastructure, such as internet, database and servers (β coefficient 1.60). From taxpayer survey data, having the necessary qualified staff to implement DFS services effectively was seen to contribute more to making taxpayer compliance simpler and easier (Model 1) (β coefficient 2.34) than significant involvement of key stakeholders by OTR (β coefficient 1.735).

Table 4.2 Taxpayer survey regression analysis results for improved tax compliance

Model 8: Improved tax compliance medium-sized enterprises		Model 1: Taxpayers compliance simpler and easier	
Variables (Model 8)	β Est (SE)	Variables (Model 1)	β Est (SE)
Adequate infrastructure (internet, database, servers, etc.) has been put in place	1.60 (0.763)*	Necessary qualified staff	2.34 (0.783)**
Key external challenges/barriers that have hindered the implementation of DFS and Tax IDs have been effectively addressed / managed	1.81 (0.721)*	OTR significantly involved key stakeholders	1.735 (0.686)*

³⁴ Tables summarising the regression analysis results are omitted for brevity and available upon demand.

An effective institutional framework bringing together all key players has been put in place to support the implementation of DFS and tax IDs in the country	0.455 (0.676)	
OTR staff have been properly trained on the new requirements when implementing DFS and Tax IDs	-1.079 (0.667)	
OTR has significantly involved key stakeholders, in particular taxpayers, professional tax, and customs associations during the implementation of DFS and Tax IDs	1.02 (0.648)	
<i>Number of participants</i>	82	150
<i>-2 Log Likelihood fit statistics</i>	80	81.9
<i>Hosmer Lemeshow statistic</i>	0.843	0.703
<i>p-value: ≤0.05; ≤0.01; ≤0.001;</i>	*, **, ***, , , ,	

Based on OTR survey data, the fourth outcome, improved efficiency and effectiveness of tax revenue collection (Models 9, 10 and 13), had several drivers that could have contributed, although at less significant levels. Alignment of OTR's organisational structure to support implementation of DFS and tax IDs was seen as a significant driver towards increased tax revenue from both large and medium-sized taxpayers (β coefficients 1.579 and 1.741).

Table 4.3 OTR survey regression analysis results for improved efficiency and effectiveness of tax revenue collection

Model 9: Improved tax payment in large enterprises		Model 10: Improved payment of taxes by medium-sized businesses		Model 13: Achieving revenue mobilisation objectives	
Variables (Model 9)	β Est (SE)	Variables (Model 10)	β Est (SE)	Variables (Model 13)	β Est (SE)
A legal framework has been put in place to facilitate the implementation of DFS and tax IDs	1.32 (0.601)*	Adequate infrastructure (internet, database, servers, etc.) has been put in place	1.518 (0.692)*	Adequate infrastructure (internet, database, servers, etc.) has been put in place	2.112 (0.652)**
Key external challenges/barriers that have hindered the implementation of DFS and Tax IDs have been effectively addressed/managed	1.55 (0.782)*	Key external challenges/barriers that have hindered the implementation of DFS and Tax IDs have been effectively addressed/managed	1.584 (0.815)	OTR has significantly involved key stakeholders, in particular taxpayers, professional tax, and customs associations during the implementation of DFS and Tax IDs.	1.541 (0.667)*
OTR staff have been properly trained on the new requirements when implementing DFS and Tax IDs	-0.943 (0.764)	OTR staff have been properly trained on the new requirements when implementing DFS and Tax IDs.	-1.187 (0.756)		
OTR's organisational structure has been aligned to support the implementation of DFS and tax IDs	1.579 (0.761)*	OTR's organisational structure has been aligned to support the implementation of DFS and tax IDs.	1.741 (0.781)*		
<i>Number of participants</i>	82	<i>Number of participants</i>	84		85
<i>-2 Log Likelihood fit statistics</i>	74.5	<i>-2 Log Likelihood fit statistics</i>	73.5		66.4
<i>Hosmer Lemeshow statistic</i>	0.175	<i>Hosmer Lemeshow statistic p-value</i>	0.815		0.883
<i>p-value: ≤0.05; ≤0.01; ≤0.001;</i>	*, **, ***;				

Similarly, addressing key external challenges/barriers that hindered implementation of DFS, and putting in place a supportive legal framework, were seen as key drivers for increasing tax payment among large taxpayers (β coefficients 1.55 and 1.32). Additionally, investing in key infrastructure such as internet, database and servers was deemed to have contributed to increased tax collection among medium-sized taxpayers (β coefficient 1.518). Two drivers were deemed to have contributed to OTR's achievement of tax and customs revenue mobilisation objectives (Model 13) – OTR's investment in adequate infrastructure, particularly internet, database and servers (β coefficient 2.112), and its involvement of key stakeholders in implementing DFS and digital IDs (β coefficient 1.541).

Finally, data from both OTR and taxpayer surveys reveal some important drivers that could have contributed to the fifth outcome, improved taxpayer and stakeholder relations (Models 18 and 19). From the OTR survey, addressing and managing key barriers that hindered implementation of DFS and digital IDs was deemed to have contributed significantly to this outcome (β coefficient of 1.985), followed by having a conducive legal framework (β coefficient of 1.370). The same drivers from OTR survey data also applied to the taxpayer survey data. The only difference was the coefficients with a lower significance (β coefficient of 1.444 and 1.318, respectively).

Table 4.4 OTR and taxpayer survey regression analysis results for improved taxpayer and stakeholder relations

Model 18: Relations between OTR and other key stakeholders have improved since implementation of DFS and tax IDs		Model 19: Taxpayers have a better understanding of taxes, duties and levies and their management since the implementation of DFS and tax identifiers	
Variables (Model 18)	β Est (SE)	Variables (Model 19)	β Est (SE)
A legal framework has been put in place to facilitate the implementation of DFS and tax IDs: Yes vs No	1.370 (0.567)*	A legal framework has been put in place to facilitate the implementation of DFS and tax IDs: Yes vs No	1.318 (0.549)*
Key external challenges/barriers that have hindered the implementation of DFS and tax IDs have been effectively addressed / managed: Yes vs No	1.985 (0.576)**	Key external challenges/barriers that have hindered the implementation of DFS and tax IDs have been effectively addressed / managed: Yes vs No	1.444 (0.611)*
OTR has implemented proper planning prior to the implementation of DFS and Tax IDs: Yes vs No	0.853 (0.563)	OTR's organisational structure has been aligned to support the implementation of DFS and tax IDs: Yes vs No	1.137 (0.598)
<i>Number of participants</i>	<i>81</i>	<i>Number of participants</i>	<i>84</i>
<i>-2 Log Likelihood fit statistics</i>	<i>80.4</i>	<i>-2 Log Likelihood fit statistics</i>	<i>83.5</i>
<i>Hosmer Lemeshow statistic</i>	<i>0.335</i>	<i>Hosmer Lemeshow statistic</i>	<i>0.636</i>
<i>p-value: ≤ 0.05; ≤ 0.01; ≤ 0.001;</i>	<i>*, **, ***;</i>		

5 Conclusion

OTR's journey of digital transformation offers key insights into the experience of an African tax administrator from a low-income country, as they roll out digital technologies and DFS in the hope of increasing mobilisation of domestic resources. OTR adopted a digital technology platform (e-Services) that was developed internally. In the next phase OTR has chosen to roll out an externally-sourced platform, e-Tax. It appears that the lack of staff experienced in phase 1 is the primary driver for this change. The challenge of customising the e-Tax

platform to OTR operations has already been observed, with OTR staff noting delays in approval of these change requests.

The adoption of e-Services and SydoniaWorld was successful overall, due to a number of factors corroborated by the study results. Factors supporting digital transformation of OTR at the macro level include having adequate internet connectivity and technology infrastructure in Togo. At OTR level, the study showed the policy decision to make it mandatory for large and medium-sized enterprises to file their tax declarations using e-Services for the Tax Department and all customs processes was a key strategic policy that ensured taxpayer adoption. Also, the policy decision to ensure adequate infrastructure, such as stable power supplies, and internet connectivity through service centres in areas of low connectivity, played a critical role. OTR considered its engagement with stakeholders to raise tax awareness and facilitate change management a key lever – the data suggests that taxpayers felt that the timing and frequency of this could be improved. The survey data also indicated that taxpayers successfully established adequate infrastructure and equipment within their own organisation to support implementation and adoption of digital technologies, DFS and digital IDs, and ensured their company had qualified staff to benefit effectively. The key driver of OTR'S successful adoption of e-Services and SydoniaWorld shown to have significant effect from the regression analysis was the thorough needs assessment OTR conducted before rolling out digital technologies.

As observed with several African tax administrators, the digital transformation of OTR is perceived to have made it easier for taxpayers to declare and submit their tax declarations. Taxpayers found that OTR's digitalisation of processes enabled them to declare and file more accurate tax returns, with reduced errors, due to easier and automated validation and reduced processing times. Taxpayers and OTR observed that simplified digitalised processes reduced the cost of compliance, as transport, security and cost of tax specialists decreased.

Consequently, OTR perceived an improvement in taxpayer compliance levels, attributing this to improved data management and record-keeping of tax data on the e-Services platform. The results also show that taxpayers and other stakeholders considered digital technologies and DFS had a role in increasing taxpayer compliance by making it easier, simpler and less costly, especially within large and medium enterprises. It is likely that, given the enthusiasm of small enterprises to adopt digital technologies and DFS even without a clear mandate from OTR, this will serve to enhance taxpayer compliance further. However, certain taxpayers were more compliant when it came to VAT. The almost full compliance achieved on VAT declarations may be because of increased transparency and audit capabilities from digitalising the declarative and payments processes.

To a certain extent the findings support OTR's view that digital transformation of its organisation and use of digital technologies and DFS resulted in more effective and efficient tax collection and administrative processes. OTR and taxpayers found OTR was more efficient due to faster processing, resulting from data and information being collected through one channel, automation of certain administrative processes, and no need for data cross-checking and verification in certain instances. As with tax compliance, OTR highlighted that improved efficiency and effectiveness in the tax collection process was most notable in VAT collection and administration. However, these greater efficiencies have not reduced tax audits, appeals or refund claims. Because processes were not fully digitalised, taxpayers did not perceive an improvement when there is still reliance on tools and processes that were not automated or fully digitalised.

Overall, it is apparent from the surveys, KIIs and FGDs that OTR and taxpayers noted improvements in the quality of taxpayer services. As noted by an official of a medium-sized enterprise, the freedom created an enabling business environment and improved service levels. The OTR survey supports this conclusion, pointing to improvements in the relationship between OTR and stakeholders after adoption of digital technologies and DFS – 56.1 per cent of the respondents agreed that relations between OTR and other key stakeholders have improved. Providing OTR with more efficient and effective tax declaration and payment methods is seen to have improved the tax collection system.

The study results suggest that OTR's decision to undertake digital transformation and eventually introduce DFS may have affected tax revenue collection. OTR's growth in tax revenue during the study period may have been driven partly by increased collection stemming from improved taxpayer compliance and a more efficient and effective tax revenue collection method, as well as other benefits observed. The data suggests that revenue growth is more likely because of digitalisation of processes and technologies, and not DFS.

OTR continues to face a challenge with getting taxpayers to use DFS, especially for payment of taxes. Despite the availability of online and mobile payment platforms, there is still some reluctance to use these. Taxpayers prefer to use traditional bank transfers and cheques when making payment, despite having declared and filed their taxes online. The Customs Department is yet to provide facilities for online payment. There is an apparent preference for mobile over online payments. Large enterprises are the largest users of online payments, because of access to required infrastructure, computers and connectivity, and their increased use of online banking facilities. As a result, despite the successes of OTR in adopting DFS, it still faces a challenge in achieving full adoption by taxpayers.

The challenges faced by OTR are similar to those experienced by tax administrators when deploying digital technology, such as an initial resistance from staff due to changes in their way of working following deployment of technology. To overcome this, OTR changed to a more targeted awareness and communication strategy to foster increased acceptance and awareness of the benefits that use of DFS would give to both OTR staff and taxpayers.

Like several African administrators, a lack of skilled IT resources and finance is a hurdle when deploying digital technologies. A key challenge faced by OTR was caused by interfacing legacy IT systems (SGIO) with e-Services, and interfacing with third-party suppliers, such as banks (Moore 2020). To address these limitations, OTR staff had to develop templates and tools overlaying the current e-Services system to augment capabilities. An example of this is the project management and data analysis tool developed by the Directorate of Fiscal Control to capture data from e-Services, and make it available in real time to audit team members with OTR. OTR is addressing some challenges noted in current DFS and digital ID platforms when developing the e-Tax system – this will have more modules, including risk management, tax clearances and issuing of tax receipts.

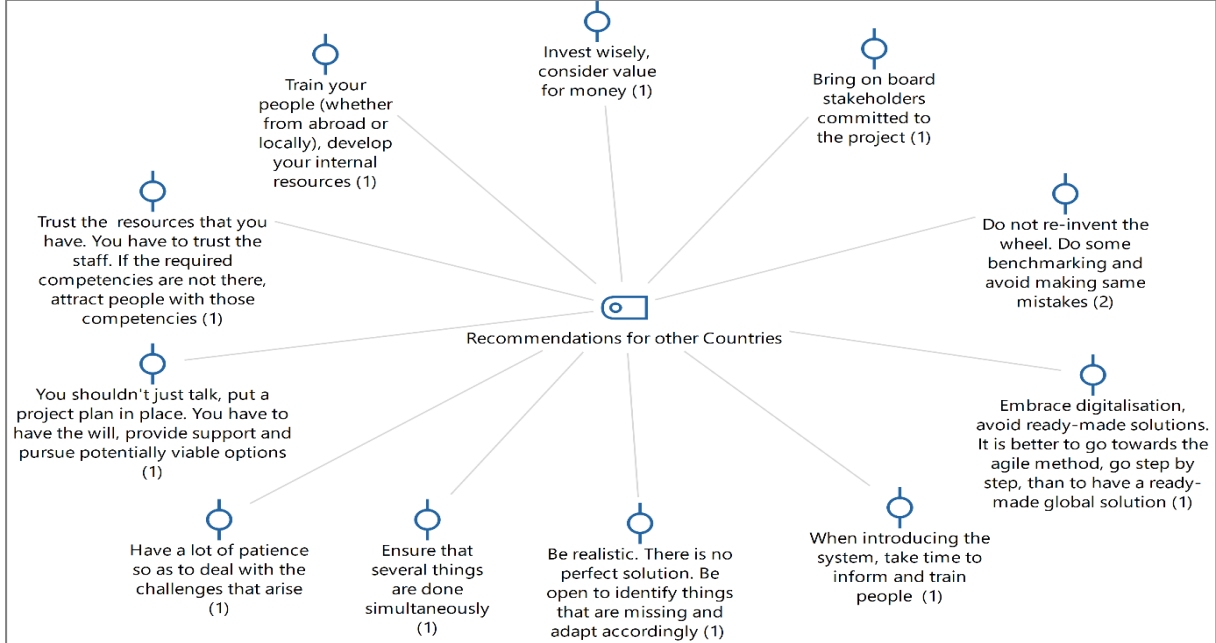
While it is clear taxpayers have benefited from OTR's digital transformation, during interviews and FGDs stakeholders and taxpayers made recommendations on policies and strategies they thought would help OTR deliver better DFS. It was evident that taxpayers and OTR wished to perform as many interactions as possible – if not all – on OTR's online platforms. Several taxpayers thought that OTR needed to build capabilities for the system to allow taxpayers to register and obtain an NIF (digital ID) without having to submit a paper form at an OTR office. A fully digital registration system would make tax registration easier and simpler. It is noted that e-Tax will fully automate and digitise the tax registration process.

Taxpayers recommended that OTR enhance e-Services to have the capability to issue tax receipts immediately on payments being processed. Other taxpayers felt that where there are double or over-payments, OTR should provide an online solution to request reversal of these payments instantly. Given the lack of full adoption of online and mobile e-payment methods, these recommendations on issuing automated and digital fiscal receipts would help improve the perception of security and create confidence. In addition, the clear preference for Flooz and TMoney mobile payment methods by small and medium-sized enterprises suggests that OTR should continue to enhance these platforms. Appendix Figure F1 summarises key suggestions for improvements noted during interviews and FGDs.

A common theme noted during interviews and FGDs was the need for key stakeholder involvement in staff and taxpayers’ deployment, communication and training. Other key factors include political will from key stakeholders, proper project planning, management, and project governance for successful implementation of DFS and digital IDs. Key external informants noted that for successful implementation of digital technologies, DFS and digital IDs, a tax administrator needs faster engagement with taxpayers and to be more accessible.

Countries looking to implement digital technologies, DFS and digital IDs, must develop a policy that ensures availability of internal resources and skilled staff. A common theme most OTR staff stressed was the need to develop internal resources and train staff to ensure that necessary competencies and skills were available within the tax administration. Like taxpayers, OTR staff also stressed to need to ‘win over’ key stakeholders. Figure 5.1 summarises some key recommendations for tax administrators looking to implement digital technologies and DFS.

Figure 5.1 Recommendations for countries looking to implement DFS



Source: OTR and taxpayer surveys

The recommendations for improvement augment the key drivers of DFS deployment identified in the regression analysis. For OTR to sustain the outcomes of implementing digital technologies and DFS, it must continue to invest in drivers that have demonstrated statistical significance, such as ensuring a conducive legal framework and maintaining stakeholder engagement and taxpayer awareness programmes. Additionally, taxpayers must ensure they have well-qualified and skilled staff to manage their tax affairs.

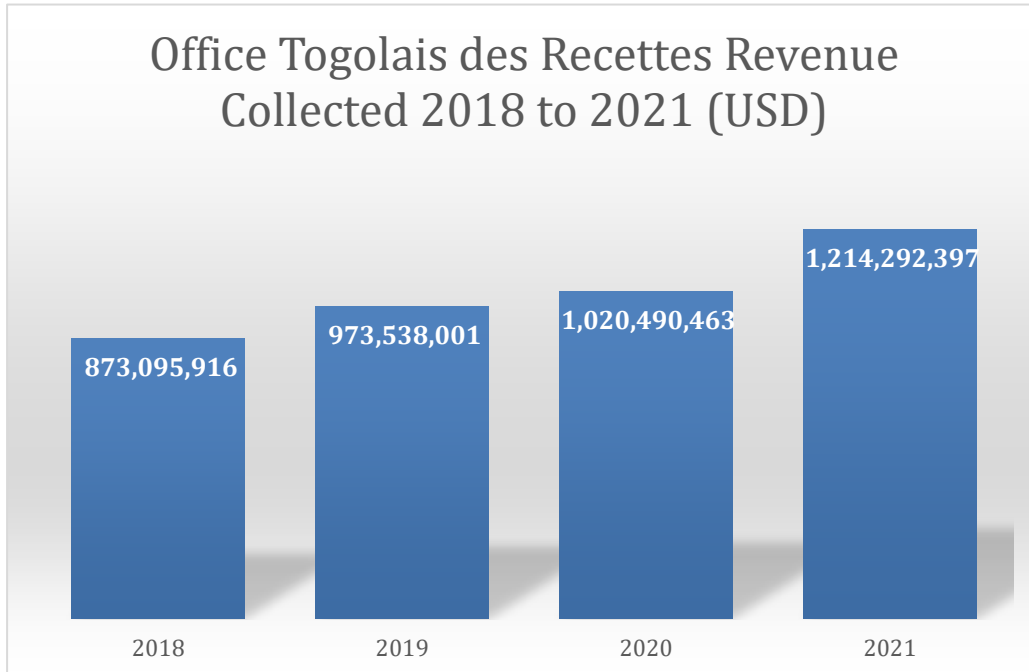
Ultimately, tax administrations need to consider their unique situation when deploying digital technologies and DFS and developing their policies, and whether to develop digital solutions in-house or use externally sourced solutions, OTR key informants noted that a critical aspect for a tax administration are the financial resources and staff they have available when making the policy decision. OTR's strategic choice to develop its digital technologies and DFS solutions in-house may have played a role in ensuring the successful roll-out of DFS tools and software application, as some staff felt it allowed them to ensure solutions were customised to OTR's and Togo's environment. Interestingly, in the next phase OTR has chosen to outsource development of e-Taxe, the system that will replace e-Services for tax collection.

The study experienced certain limitations. The survey for OTR and taxpayers may be construed as biased as it is based on perceptions, like other population-based surveys. In this research, both surveys were very targeted and arranged to be completed shortly before or after FGDs or interviews. This was to ensure that surveys generated as much reliable and valid data as possible.

Appendices

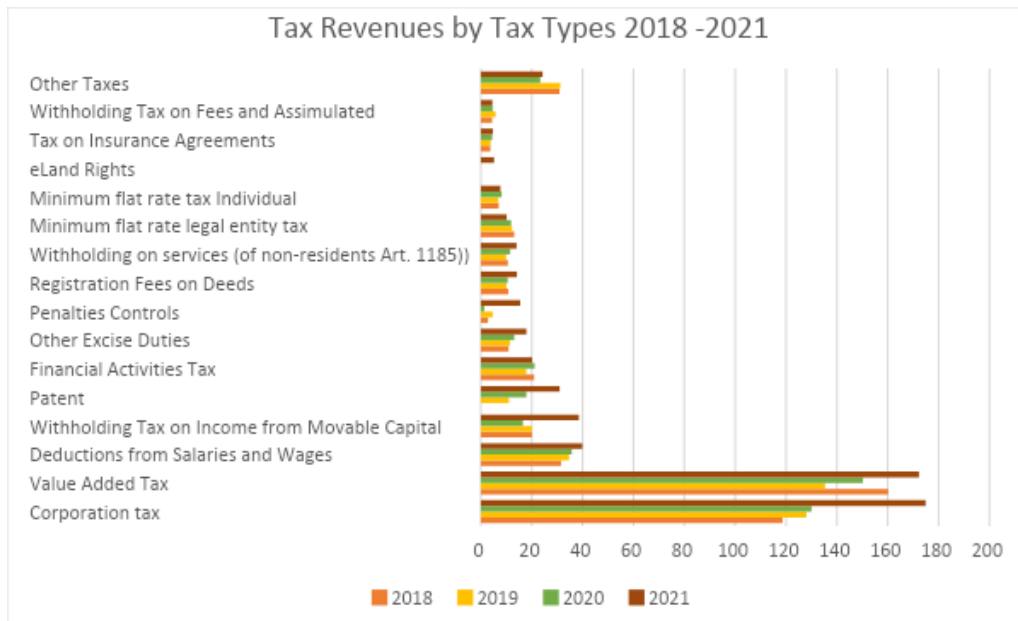
Appendix A

Figure A1 OTR's revenue collection 2018-2021



Source: Adapted from OTR data.

Figure A2 Tax revenue by tax types 2018 to 2021



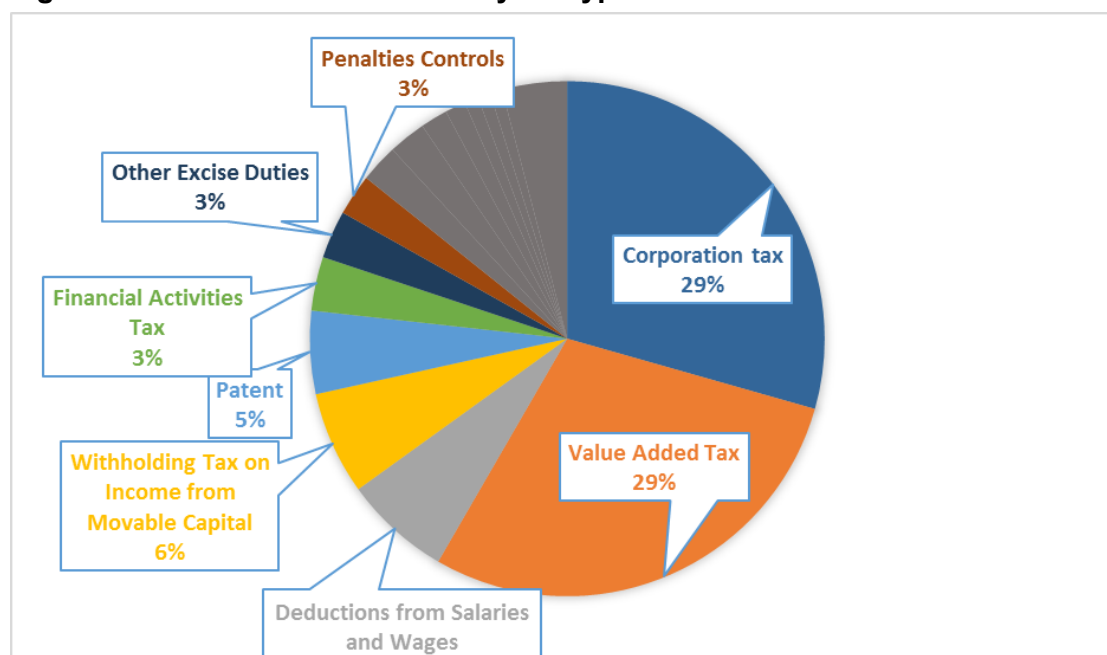
Source: Adapted from OTR data.

Figure A3 Tax revenue per tax types 2028 TO 2021- trend analysis

TYPE OF TAX	2018	2019	2020	2021	
Corporation tax	65 959 016 507	74 998 636 344	74 823 521 029	97 020 834 912	
Value Added Tax	89 038 657 756	79 279 750 744	86 434 205 693	95 573 994 473	
Deductions from Salaries and Wages	17 518 467 294	20 304 823 822	20 562 250 551	22 137 544 921	
Withholding Tax on Income from Movable Capital	11 175 507 323	11 751 391 688	9 514 122 907	21 375 492 569	
Patent	0	6 448 238 739	10 296 399 982	17 180 840 001	
Financial Activities Tax	11 650 342 076	10 456 503 564	12 166 835 374	11 180 027 195	
Other Excise Duties	6 049 787 888	6 676 214 183	7 542 343 827	9 927 352 825	
Penalties Controls	1 562 000 955	2 729 051 413	754 688 567	8 572 849 313	
Registration Fees on Deeds	6 001 554 707	5 895 397 632	6 067 929 524	7 864 424 359	
Withholding on services (of non-residents Art. 1185))	5 902 402 395	5 828 886 413	6 628 324 118	7 792 181 343	
Minimum flat rate legal entity tax	7 286 627 684	7 182 350 217	6 826 750 915	5 633 093 546	
Minimum flat rate tax Individual	3 907 901 958	3 994 390 129	4 704 375 146	4 269 252 444	
eland Rights	0	326 000	0	2 884 710 109	
Tax on Insurance Agreements	2 074 598 719	2 243 735 929	2 567 925 931	2 638 378 181	
Withholding Tax on Fees and Assimilated	2 461 827 082	3 404 265 126	2 668 979 759	2 517 465 767	
Other Taxes	17 179 474 868	18 296 761 816	13 441 657 378	13 472 401 111	

Source: Adapted from OTR data.

Figure A4 Tax revenue collection by tax type in 2021



Source: Adapted from OTR data.

Table A1 OTR and external stakeholders interviewed and participated in FGD

Key internal stakeholder description			
Ref no	Description	Date held	No of participants present
1.	Interview with the Director Directorate of Information Communication and Technology - DITI	24 February 2022	4
2.	FGD Directorate of Information Communication and Technology - DITI	25 February 2022	8
3.	FGD with the Directorate of Large Enterprises	1 March 2022	8
4.	FGD Directorate of Medium-Sized Enterprises	28 February 2022	9
5.	FGD with the Directorate of Fiscal Control (DCF)	1 March 2022	9
6.	FGD with the Directorate for Golf Tax Centres (DCIG) [Small taxpayers]	28 February 2022	8
7.	Interview with Commissioner of Customs	4 March 2022	6
8.	FGD with the Directorate of Legislation and Disputes	1 March 2022	6
9.	FGD with the Directorate of Planning and Research (DEPS)	4 March 2022	13
Key external stakeholder description			
1.	Accounting associations (ONECCA)	22 March 2022	3
2.	Bar association Ordre des Avocats du Togo	30 March 2022	3
3.	Customs Agents Associations Union Professionnelle des Agréés en Douane du Togo (UPRAD-TOGO)	3 March 2022	6
4.	Tax Advisors Associations Association des Fiscalistes du Togo	2 March 2022	7
5.	Chamber of Commerce and Industry Chamber of Commerce and Industry (CCIT)	11 April 2022	4
6.	Manufacturers and industry associations Conseil National Du Patronat Du Togo (CNP –Togo)	18 March 2022	4
7.	Large Taxpayer Association in Togo Association des Grandes Entreprises du Togo (AGET)	15 March 2022	4
8.	Ministry of Finance and Budget Tax Policy and Planning Unit (TPU)	2 March 2022	9
9.	Large Business Taxpayers operating in the Service, Agriculture, Industry, Banking, Insurance, and Mining sectors		
	• CIMTOGO	• 30 March 2022	3
	• UTB	• 18 March 2022	3
	• Moov Africa Togo	• 29 March 2022	3
	• Banque Atlantique	• 23 March 2022	3
10.	Medium-sized enterprises taxpayers		
	• ICAAF	4 April 2022	4
	• MAUBIN	31 March 2022	3
11.	Third-Party Suppliers, Banks:		
	• Banque Atlantique	• 23 March 2022	3
	• UTB	• 18 March 2022	3
12.	Mobile payment solution providers: Moov Africa Togo	29 March 2022	3

Source: OTR, stakeholder and taxpayer FGDs.

Table A2 Descriptive summary of OTR and taxpayer respondents**Descriptive summary of OTR respondents (n=140)**

Characteristics	No.	%
Level of current position:		
Director	4	2.86%
Head of Division	13	9.29%
Middle Management	3	2.14%
Section Head / Senior Officer	22	15.71%
Support Agent	18	12.86%
Technical Professional Agent	80	57.14%
Departments represented:		
Department of Regional Tax Operations	20	14.29%
Department of Studies and Strategic Planning	19	13.57%
Tax Control Department	19	13.57%
Department of Computing and Information Technology	15	10.71%
Department of Medium-Sized Enterprises	13	9.29%
Department of Tax Legislation and Litigation	8	5.71%
Department of Large Companies	7	5.00%
Directorate for the Fight and Prevention of Corruption	6	4.29%
Directorate of Cadastre, Land Conservation and Registration	6	4.29%
Human Resources and Vocational Training Department	5	3.57%
Directorate of Gulfe Tax Centres	4	2.86%
Directorate of Logistics Administration	4	2.86%
Internal Audit and Quality Assurance Department	4	2.86%
Not filled	3	2.14%
Directorate of Communication and Services to Users	2	1.43%
Directorate of Customs Operations of Lomé-Port	1	0.71%
Finance Department	1	0.71%
Gulf Customs Operations Directorate	1	0.71%
Management of the Tax and Customs Training Institute	1	0.71%
Person Responsible for Public Procurement	1	0.71%
Length of time worked in OTR:		
35 years and above	17	12.14%
5 - 10 years	2	1.43%
More than 5 years	55	39.29%
Under 5 years	1	0.71%
Under 3 years	65	46.43%
Role played in the implementation of DFS:		
Conceptualisation and planning of the project	2	1.43%
Former	1	0.71%
None	85	60.71%
Other roles	7	5.00%
Project management	2	1.43%
Business analysis	1	0.71%
Running in a user service	26	18.57%

Descriptive summary of OTR respondents (n=140)

Characteristics	No.	%
Solution/systems design	12	8.57%

Descriptive summary of taxpayer respondents (n=162)

Characteristics	No.	%
Gender:		
Male	140	86.42%
Female	22	13.58%
Age:		
25-34	48	29.63%
35-44	67	41.36%
45-54	34	20.99%
55-64	11	6.79%
Over 65	2	1.23%
Industry / Sector:		
Other (mostly services)	69	42.59%
Trade	49	30.25%
Industry /Manufacturing	14	8.64%
Professional Association of Tax Practitioners	11	6.79%
Bank / Financial services	8	4.94%
Assurance	5	3.09%
Association of Customs Professionals	2	1.23%
Telecommunications	2	1.23%
Agricultural business	1	0.62%
Agriculture	1	0.62%
Level of current position:		
Senior management	68	41.98%
Middle management	62	38.27%
Performer	22	13.58%
Supervisor	9	5.56%
Supervisor, Executing	1	0.62%
Strategy / Tax policy advisor	4	2.86%

Source: OTR and taxpayer surveys.

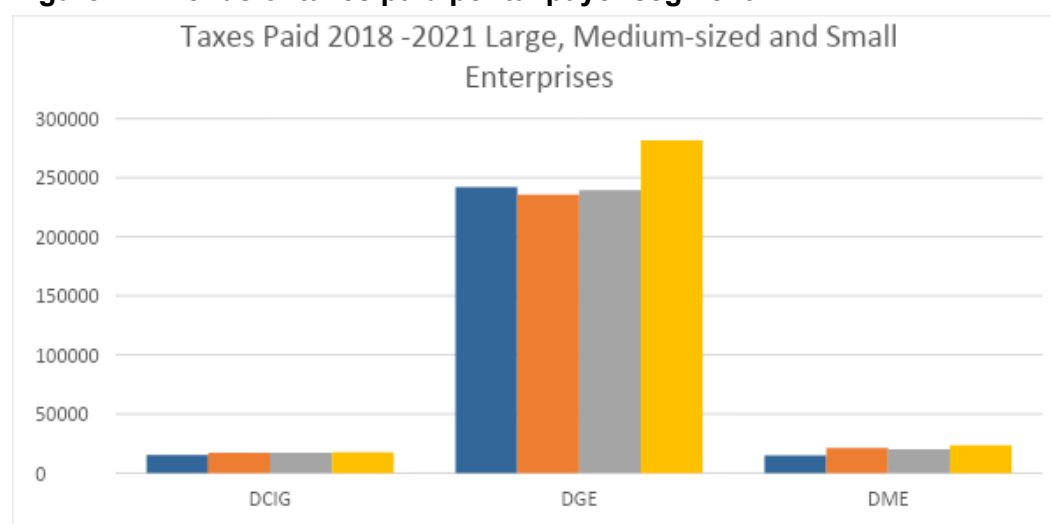
Appendix B

Table B1 Mode of payment for taxes paid in US\$ 2018-2021 for large, medium-sized, and small taxpayers³⁵

Tax Collection by Mode of Payments in US\$, 2018 to 2021 for Large, Medium-sized and Small Taxpayers					
Mode of Payment	2018	2019	2020	2021	Trend
Transfer / Bank Transfer	17 700 848	65 629 505	261 829 939	394 164 347	
Cheque	316 570 716	247 836 780	23 619 993	10 667 041	
Species	41 774 564	60 981 552	24 573 364	25 932 002	
Tax Expenses	25 469 551	38 196 890	43 209 325	33 502 566	
T Money	-	1 351 350	44 002 768	49 520 108	
Direct Transfer	11 425 447	8 046 834	30 687 557	27 746 616	
Clearance	15 474 356	13 994 054	18 677 364	13 411 056	
Compensation	47 139 111	12 147 986	5 284	-	
Treasury Check	14 444 120	8 333 249	11 549 236	1 781 990	
Flooz	-	1 179 850	10 685 346	19 845 902	
Promissory Note	-	10 551 842	10 255 449	-	
Online Payment	-	-	1 860 356	4 485 508	
Others	27	298	560	-	
Total	489 998 714	468 249 893	480 955 984	581 057 137	

Source: Adapted from OTR data.

Figure B1 Trends of taxes paid per taxpayer segment



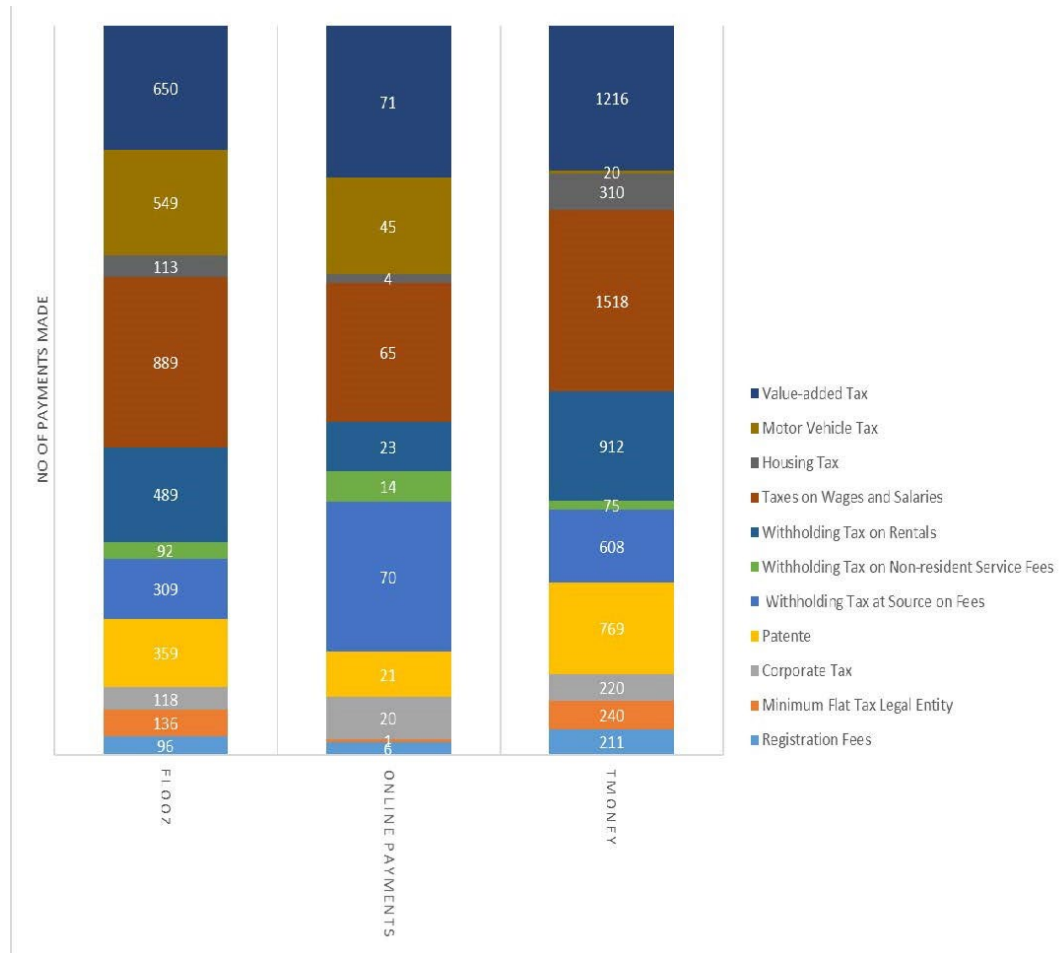
Source: Adapted from OTR data.

³⁵ Small taxpayers are those registered with the Directorate of Golf Tax Centres (DGIG). Others include: 'Unknown' and 'DAAFI' (recovery of taxes on behalf of DGID Senegal).

Appendix C

Figure C1 Taxes paid using mobile and online payment modes in 2021

Taxes paid using mobile and online payment modes in 2021



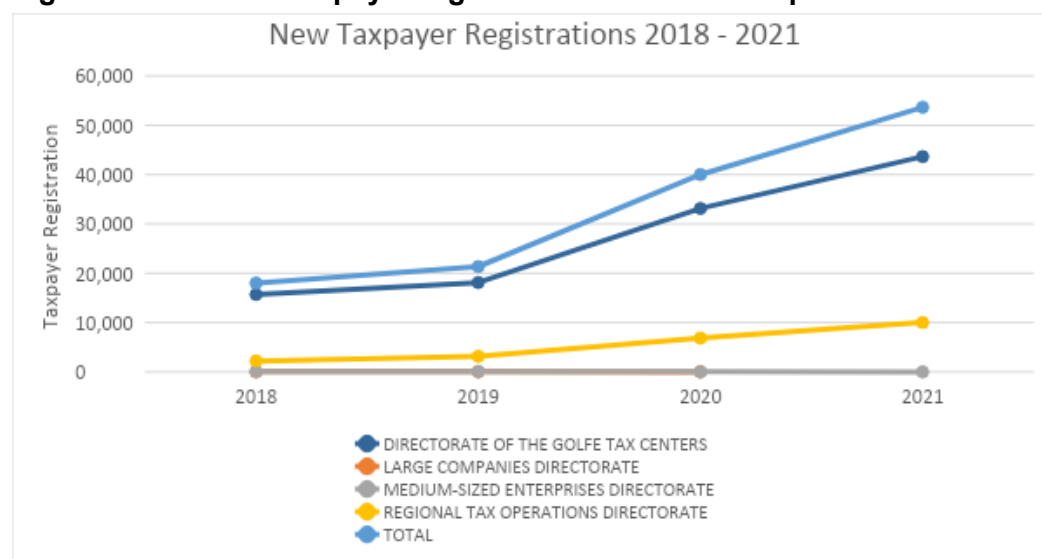
Source: Adapted from OTR data.

Table C1 New taxpayer registrations per directorate 2018-2021

DIRECTORATE	2018	2019	2020	2021	Trend
DIRECTORATE OF THE GOLFE TAX CENTERS	15 691	18 109	33 142	43 644	
LARGE COMPANIES DIRECTORATE	14	14	5		
MEDIUM-SIZED ENTERPRISES DIRECTORATE	86	75	22	2	
REGIONAL TAX OPERATIONS DIRECTORATE	2 216	3 153	6 839	10 002	
TOTAL	18 007	21 351	40 008	53 648	

Source: Adapted from OTR data.

Figure C2 OTR new taxpayer registrations 2018 to 2021 per directorate



Source: Adapted from OTR data.

Table C2 Proportion of payments in Customs department made using OTR modes of payment (yearly)

Mode of Payment	The proportion of Payments Made using the Mode of Payment (Yearly)			
	2018	2019	2020	2021
Promissory note	0.00%	0.00%	0.00%	0.03%
Cheque	30.55%	30.62%	32.21%	32.46%
Bank cheque (issued by bank or similar financial institution)	0.01%	0.00%	0.00%	0.03%
Private cheque certified by bank	0.00%	0.00%	0.00%	0.00%
Individual cheque signed by bank	0.00%	0.00%	0.00%	0.00%
Species	5.51%	4.98%	4.73%	5.30%
Bank letter	0.00%	0.00%	0.00%	0.17%
Certified bank letter	0.00%	0.00%	0.00%	0.00%
Guichet payment	63.93%	64.39%	63.05%	62.00%
Payment on bank account	0.00%	0.00%	0.01%	0.00%
UTB payment	0.00%	0.00%	0.00%	0.00%

Source: Adapted from OTR data.

Appendix D

Table D1 OTR survey regression analysis for improved tax compliance

Improved tax compliance		
Variables (Model 7 and 8)	Model 7: Improved compliance Large enterprises	Model 8: Improved compliance Medium-sized enterprises
	<u>β Est (SE)</u>	<u>β Est (SE)</u>
Adequate infrastructure (internet, database, servers, etc.)	2.02 (0.739)**	1.60 (0.763)*
OTR staff have been properly trained	-0.122 (0.536)	-1.079 (0.667)
OTR Significantly involved key stakeholders	1.164 (0.522)	1.02 (0.648)
Key external challenges effectively addressed		1.81 (0.721)*
An effective institutional framework		0.455 (0.676)
<i>Number of participants</i>	82	82
<i>-2 Log Likelihood fit statistics</i>	91.6	80
<i>Hosmer Lemeshow statistic p-value</i>	0.859	0.843
<i>p-value: ≤0.05; ≤0.01; ≤0.001;</i>	<i>*, **, ***;</i>	

Table D2 Taxpayer survey regression analysis results for improved tax compliance

Improved tax compliance			
Drivers - Variables (Model 1, 2 and 3)	Model 1: Taxpayers compliance simpler and easier	Model 2: Reduced cost of compliance	Model 3: Improved new taxpayers' registration
	<u>β Est (SE)</u>	<u>β Est (SE)</u>	<u>β Est (SE)</u>
Necessary qualified staff	2.34 (0.783)**		0.656 (0.752)
OTR significantly involved key stakeholders	1.735 (0.686)*	1.199 (0.415)**	
Adequate Internet coverage in Togo		-0.398 (0.480)	0.944 (0.409)*
A conducive legal framework		1.232 (0.487)*	
Adequate infrastructure in Togo.		0.492 (0.468)	
Thorough needs assessment			1.231 (0.410)**
<i>Number of participants</i>	150	148	147
<i>-2 Log Likelihood fit statistics</i>	81.9	157.6	166
<i>Hosmer Lemeshow statistic</i>	0.703	0.835	0.888
<i>p-value: ≤0.05; ≤0.01; ≤0.001;</i>	<i>*, **, ***;</i>		

Table D3 Improved tax compliance – taxpayer registration

Variables (Model 11)	Model 11: Increased registration of new taxpayers
	<u>Est (SE)</u>
A legal framework	1.999 (0.570)*
Adequate infrastructure (internet, database, servers)	1.197 (0.710)
OTR implemented proper planning.	-0.573 (0.669)
Appropriate change management processes.	1.444 (0.654)*
<hr/>	
<i>Number of participants</i>	85
<i>-2 Log Likelihood fit statistics</i>	86.7
<i>Hosmer Lemeshow statistic p-value</i>	0.958
<i>p-value: ≤0.05; ≤0.01; ≤0.001;</i>	*, **, ***, , , ,

Table D4 Improved efficiency and effectiveness of tax revenue collection

Variables (Model 5 and 6)	Model 5: Reduced tax audits	Model 6: Improved management of taxpayer appeals, complaints and claims
	Est (SE)	Est (SE)
Taxpayer Enterprise has adequate infrastructure and equipment (internet, computers)	0.163 (0.853)	
A conducive legal framework	0.251 (0.461)	0.095 (0.509)
IT and internet connectivity infrastructure in Togo		0.629 (0.486)
Adequate Internet coverage in Togo		0.778 (0.445)
An effective institutional framework bringing together all key players	-0.501 (0.547)	-0.215 (0.503)
Adequate infrastructure in Togo	1.256 (0.520)*	
Key external challenges/barriers effectively addressed.	0.191 (0.439)	
OTR has implemented proper planning		1.158 (0.394)**
<hr/>		
<i>Number of participants</i>	152	146
<i>-2 Log Likelihood fit statistics</i>	185.7	172.6
<i>Hosmer Lemeshow statistic</i>	0.924	0.205
<i>p-value: ≤0.05; ≤0.01; ≤0.001;</i>	*, **, ***, , , ,	

Table D5 OTR survey regression analysis - improved taxpayer and stakeholder relations

Improved taxpayer and stakeholder relations: stakeholder engagement and taxpayer awareness

Variables (Model 17, 18 and 19)	Model 17: Improved OTHER key stakeholder engagement Est (SE)	Model 18: Improved key stakeholder engagement Est (SE)	Model 19: Increased taxpayers' awareness Est (SE)
A legal framework		1.370 (0.567)*	1.318 (0.549)*
Key external challenges effectively addressed		1.985 (0.576)**	1.444 (0.611)*
OTR's organisational structure aligned	1.682 (0.604)**		1.137 (0.598)
OTR has implemented proper planning prior	1.233 (0.545)*	0.853 (0.563)	
OTR staff have been properly trained	-0.526 (0.599)		
<hr/>			
<i>Number of participants</i>	82	81	84
<i>-2 Log Likelihood fit statistics</i>	91.4	80.4	83.5
<i>Hosmer Lemeshow statistic</i>	0.778	0.335	0.636
<hr/>			
<i>p-value: ≤0.05; ≤0.01; ≤0.001;</i>		*, **, ***, , , ,	

Appendix E

Focus group discussion guide with the Customs and Excise Duty Department

Background for focus group facilitator

The focus group discussion will adopt an ethnographic style interlaced with activities, illustrations, and interactive discussions in order to understand the processes involved in implementing DFS and digital IDs at OTR.

The research objectives have been carefully embedded in the activities and probing questions.

The aim is to create a relaxed and trusting environment. This is why we play games using an informal language tone. There should be no formal tools like flip charts and ground rules.

The focus group discussion will be facilitated in French with officials from the Customs and Excise Duty Department.

Note to the Interviewer: Please use the Information Sheet to explain more about the research and ask the respondents to sign the Consent Form.

Who will attend the focus group discussions?

A focus group discussion will be run with 8 - 10 participants from the Customs and Excise Duty Department, who have been involved in the implementation of DFS and digital IDs at OTR.

Discussion approach

This discussion aims to understand how the process of implementing DFS and digital IDs at OTR unfolded. Discussions will include what was done, why it was done, when it was done, who was involved, the challenges that were faced, how they were solved, and where the process stands today. Participants will also reflect, looking back, whether the implementation of DFS and digital IDs has achieved its objectives, and if not, where, and why. This more

profound understanding of the implementation processes will allow us to make appropriate recommendations for OTR and tax administrations from other countries that will learn from OTR's experiences.

The focus group process

As participants arrive, greet them, and ask them to fill in the attendance register. The register should include sex, current position, number of years in the current position, and the role played in the implementation of DFS and digital IDs. There will be no identifying features such as the names of the participants.

Prior to commencing the focus group discussion

- You will likely run the group discussion at the location agreed upon with the DITI
- Make sure each participant has been taken through the consent process and has signed a consent form
- Organise the drawing materials needed for the discussion
- Set up the room with seats in a circle to allow enough space for participants to engage freely in a relaxed atmosphere

Introductions

Play a game to learn everyone's names (how they prefer to be called during the discussion). Even though some participants may be older, an appropriate game will relax everyone. You can request each participant to write their preferred name on a sticker and stick it visibly on their shirt/blouse/dress.

Now introduce yourself and explain the purpose of the discussion as below.

Introduce the research and the purpose of the discussion

'Thank you very much for taking the time to discuss with us today.

My name is *[insert name]*, and I will be leading this discussion group'.

I am part of the team contracted by the Institute of Development Studies (IDS, UK) to undertake research on **Leveraging DFS and Digital IDs for Improved Tax Collection in the Togo Revenue Authority (OTR)** under funding from the Bill & Melinda Gates Foundation. The research is part of IDS' projects to generate new knowledge and evidence to support governments in developing countries in harnessing the potential for DFS and digital IDs in strengthening tax administration.

Like several tax administrations across Africa, OTR embarked on digital transformation, investing in digital technologies from September 2018 to improve tax compliance, securitisation of tax and customs revenues collection, and other e-Services through different platforms.

Consequently, this research seeks to document OTR's journey in adopting and implementing DFS and digital IDs. The research will document achievements, challenges and lessons learnt during the implementation processes of DFS and digital IDs. The findings and recommendations from this research will assist tax administrations in other countries facing similar challenges.

More importantly, the research project undertaken collaboratively with the OTR will help build synergy in deepening understanding of the country's tax administration and facilitate the transfer of skills within OTR. This will enable OTR to incorporate and harness the potential of DFS and digital IDs in its tax administration more effectively.

Explanation of the process

The focus group discussion will take about one and a half to two hours. We will start with an activity, and then we will discuss the accompanying questions. We do not all have to agree with each other. Everyone has different ideas, so feel free to share your ideas – we can learn from everyone present. There are no right or wrong answers – what we are interested in is your own experience and point of view.

1. Introduce the voice recorder

Show the voice recorder and make sure everyone knows how it works for recording speeches. You may need to explain again [*refer to the consent discussion previously held*] that we will not use names or other identifiers when writing the transcript and the final report. Emphasise that we will not share any identifying information with their managers or anyone else at OTR.

Ask the group if they have any questions before you start and address them before the discussion commences.

Note: There are many topics included in this discussion. Do not spend too much time on each section. You do not need to get a response from each participant to each question – aim to get a discussion going around the topic, and once you feel you have some detail and have asked all the probing questions, move on to the next activity.

Pair up the participants in twos. Explain that participants in their pairs will carry out each activity and answer the accompanying questions. Inform the participants that you will collect all the drawings at the end of the focus group discussion as they will be necessary for the final report.

Explain that you will give them some time to implement the activity and answer the accompanying questions. After they have completed the activity, you will ask them to explain the answers they came up with to the audience.

After the first two pairs have explained their answers, only ask the remaining pairs to explain what the first two groups did not cover. That way, you save time by avoiding repeating what has already been explained.

Activity 1: Understanding the situation at OTR (particularly with Customs and Excise Duty) before DFS and digital IDs were implemented

Ask each pair to draw a picture of the situation at OTR (particularly in Customs and Excise Duty) before DFS and digital IDs were implemented.

Ask them to discuss and document the following:

- What was happening at the time in dealing with large taxpayers?
- What administrative and operational challenges did OTR face in dealing with Customs and Excise Duty before implementing DFS and digital IDs

- What infrastructure challenges existed at the time?
- Why did OTR decide to implement DFS and digital IDs?
- What were the objectives of implementing DFS and digital IDs, particularly with Customs and Excise Duty?

Activity 2: Plotting the implementation journey of DFS and digital IDs with Customs and Excise Duty

Ask the participants in their pairs to list all the activities they were involved in during the implementation of DFS and digital IDs.

After listing all the activities, participants should:

- Re-arrange the activities in sequence in accordance with the ones that were done first, followed by the ones that were done next, and end with the ones that were done last
- Indicate the timeline as to when each activity was implemented from start to finish
- Indicate who within OTR was involved in implementing each activity (indicate the units/departments, not individual persons). If external parties were involved, please add them as well
- Draw a timeline to indicate when each activity was implemented and how long it took to complete it

Activity 3: Identifying the challenges/obstacles faced during the implementation of DFS and digital IDs with Customs and Excise Duty

Based on the activities identified in the previous activity, ask the participants to identify the challenges faced during the implementation of these activities with Customs and Excise Duty.

Participants should indicate how each challenge/obstacle was addressed

Activity 4: Changes that have been realised since the implementation of DFS and digital IDs with Customs and Excise Duty

In their pairs, ask the participants to identify the changes that have been observed since the implementation of DFS and digital IDs with Customs and Excise Duty.

Note: changes could include uptake of DFS and digital IDs, impact on customs and excise duty collections, efficiencies and effectiveness, taxpayer compliance: metrics, and improvement in taxpayer services

Ask the participants to identify:

- The changes/improvements that have taken place
- Where those changes have taken place
- How significant those changes have been in dealing with large taxpayers

Ask the participants to reflect on whether, looking back, the objectives of implementing DFS and digital IDs have been realised, particularly with Customs and Excise Duty.

If the objectives have not been achieved, which ones have not been achieved and why? What needed to be done differently or better in order for the objectives to be achieved?

Activity 5: How the Customs and Excise Duty Department is utilising the data generated following the implementation of DFS and digital IDs

In their pairs, ask the participants to list the data generated following the implementation of DFS and digital IDs with Customs and Excise Duty.

Ask the participants to:

- List the data that is now generated
- Who receives the data that is generated?
- How often the data is generated
- What the data is used for
- Has the new data changed the way the team works?
- Any specific benefits from the use of the data generated

Activity 6: What organisational/department restructuring, and reorganisation were required and necessitated by the implementation of SydoniaWorld?

In their pairs, ask the participants to outline how the implementation of DFS and digital IDs has affected the department/unit's structure and organisation.

Ask participants:

- Whether domestic tax department needed to restructure/reorganise its operations
- What was entailed in this restructuring, and how was the restructuring done?
- What was the impact on their jobs/roles?
- Were there challenges they faced as a result of the restructuring?

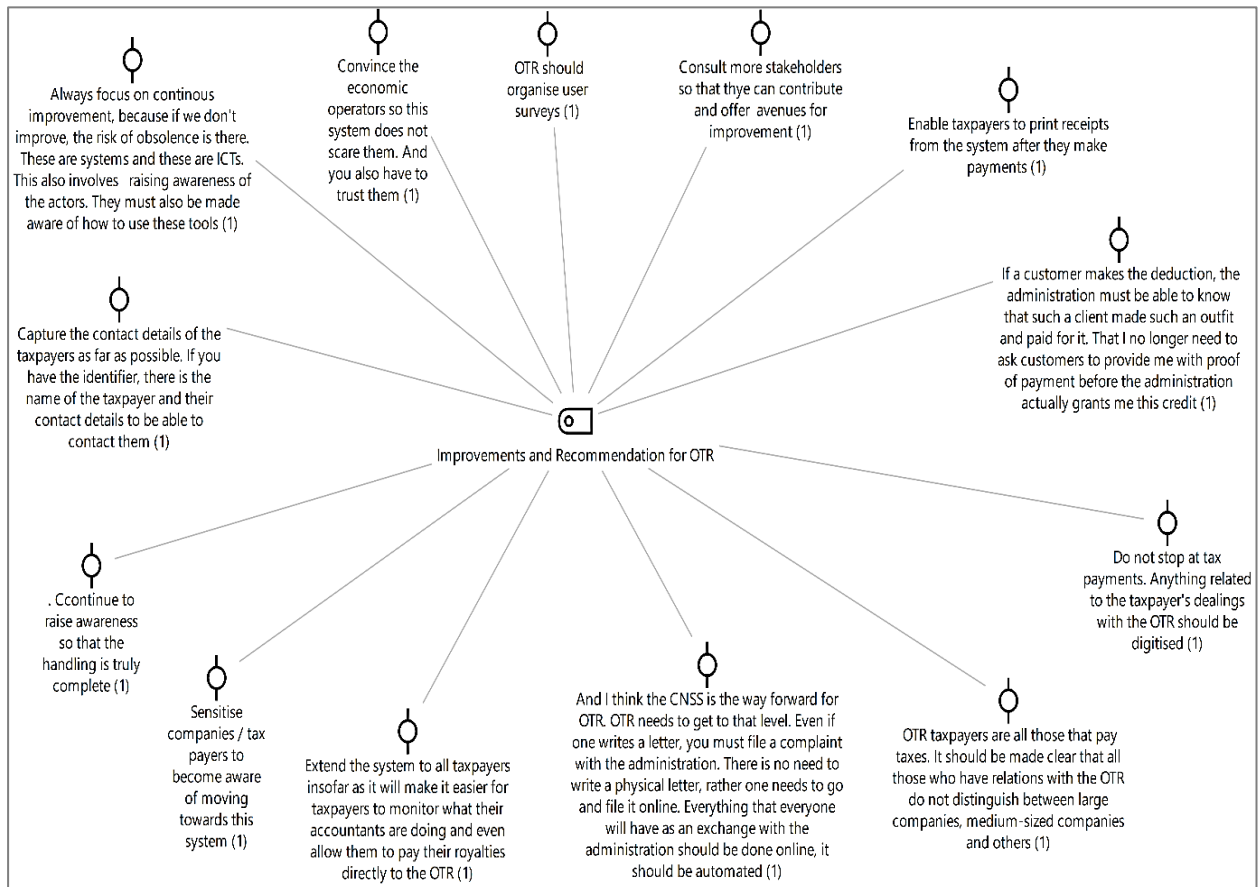
Activity 7: What in your view are key enabling factors that are pre-requisites for any tax administration undertaking a similar project and looking to implement DFS and digital IDs?

At the end of the focus group discussion, collect all the drawings from the participants.

Thank the participants for participating in the focus group discussion!

Appendix F

Figure F1 Suggestions for improvements and recommendations for OTR



Source: Adapted from OTR and taxpayer surveys.

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