

# E-Governance, Digitized Tax Procedures and SME's Business Process Performance in Cameroon

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## Abstract

Today, the challenge of e-governance in relation to tax services remains a serious issue in sub-Saharan Africa. Although implementation projects continue to emerge, it is important to assess whether the digitization of tax procedures is really delivering the expected benefits. This study aims to examine the influence of the use of digitized tax procedures (UDT) on business process performance (BPP), highlighting the role of dynamic capabilities (DC). We analyze a sample of 143 Cameroonian SMEs using the higher order PLS-SEM methodology. The results show that the DC exhibited by SMEs positively influence UDT procedures, as well as the BPP associated to this digitization. Also, the UDT has a positive impact on BPP, and significantly mediates the indirect relation between this performance and the dynamic capabilities of SMEs. By recognizing the value of e-governance in the delivery of digitized tax services, we motivate more effective implementation of this service by governments in these countries. Future e-governance projects for tax services will need to take into account the innovative and technological capacities of each country, as well as the realities of African public services.

## Keywords

E-Governance, Tax Service, Performance, Dynamic Capabilities

## 1. Introduction

The dematerialization of government services is a process made possible by the emergence of information and communication technologies (ICT) (Bannister & Connolly, 2012; Oliveira et al., 2020). The phenomenon has spread around the globe at varying rates. In its report on e-governance, the UN (2020) reports that

143 of the 162 countries surveyed have an online income tax filing system, while 130 of the 162 have a VAT filing system. Many countries offer far more than these two services to date, which is ample evidence of the desire to popularize digitized tax services. This is undoubtedly due to their recognized benefits. Although e-governance is well established in several Northern countries, the trend is different in the South. In sub-Saharan Africa, the phenomenon is still in its infancy and focuses on very specific aspects of public service management, such as the dematerialization of tax administration services (Froehlich et al., 2020; Akpan-Obong et al., 2023). Tax services are an essential part of government service delivery, as all citizens engaged in revenue-generating activities are potentially subject to them. In this context, and after several years of gradual implementation of the dematerialization of tax procedures in sub-Saharan Africa, we need to assess its impact. Few studies of this kind have been carried out in the context of sub-Saharan Africa in general and Cameroon in particular. On the other hand, existing studies have focused on the impact of such e-governance services on the tax administration itself and its agents (Alibraheem & Abdul Jabbar, 2016; Masunga et al., 2020; Otekunrin et al., 2021). There is still a need in the literature to find out what impact the use of e-governance is having on the business processes of sub-Saharan African companies. To fill this gap, we focus on taxpayers, especially small and medium enterprises, which are the main taxpayers. The objective of this study is to assess the impact of the digitization of tax procedures on the performance of business processes. In terms of digitization, we study the influence of dynamic capabilities on digitized tax procedures, as they relate to both the technological and operational aspects of tax management in a commercial context. We examine performance from the point of view of the Balanced Scorecard redefined by Dumas et al. (2013). To this end, this study answers the following research question: Do dynamic capabilities and the use of digitized tax procedures positively influence the business process performance of Cameroonian Small and Medium Enterprises (SMEs)? In doing so, we bring together the theory of dynamic capabilities (Teece et al., 1997) and measures of business process performance by Dumas et al. (2013).

This study highlights the efficiency gains resulting from the digitization of tax procedures in Africa, and more specifically in Cameroon. We also show that this digitization promotes greater operational efficiency. The results of the study could inspire a culture of continuous innovation within SMEs. Managers could be encouraged to explore other areas where technology can be used to improve business process performance. In addition, governments could be more committed to investing in e-governance technologies.

The paper is organized as follows. Section 2 is dedicated to the literature review. We outline the concept of e-governance and relate it to digitized tax procedures. Section 3 presents the research model and hypothesis development. Section 4 describes the methodology used, followed by the presentation of the results in section 5. Section 6 discusses the results obtained. Section 7 presents the research contributions.

## 2. Literature Review: E-Governance and Digitized Tax Procedures

Electronic governance (e-governance) is the application of information and communication technologies (ICT) to deliver government services to citizens, organizations and government (Gupta & Jana, 2003; Iyer & Rao, 2017). This concept also refers to the use of ICT in government work processes (Bannister & Connolly, 2012). More precisely, e-government can be defined as the use of ICT to offer citizens and businesses the opportunity to interact, conduct and maintain business relations with the government using different electronic media such as smartphones, fax, smart cards, self-service kiosks, e-mail, internet and electronic data interchange (EDI) (Almarabeh & AbuAli, 2010). Nkohkwo and Islam (2013) succinctly point out that e-governance involves the automation or computerization of existing paper-based procedures, which will lead to new styles of leadership, new ways of debating and deciding strategies, new ways of doing business, new ways of listening to citizens and communities, and new ways of organizing and delivering information. Hiller and Bélanger (2001) identified six types of e-government: (1) Government services for individuals (G2IS), (2) Government communications with individuals as part of the political process (G2IP), (3) Government communications with businesses as citizens (G2BC), (4) Government communications with businesses in the marketplace (G2BMKT), (5) Government communications with employees (G2E), and (6) Government communications with other government entities (G2G).

The benefits outlined in the literature reviewed are succinctly presented in the following Table 1.

To improve e-governance resources, governments in sub-Saharan Africa have implemented digital literacy training programs, although gaps remain between goals and achievements (Inakefe et al., 2023). However, the digitization of tax services is gaining momentum, and better interaction with government revenue agencies is visible (Kyem, 2016). In Uganda, for example, the digitization of tax services has enabled the government to reap huge benefits, allow multinational companies to file their tax returns from their home country, efficiently monitor taxpayer files, and reduce the cost, time, manpower, and corruption associated with manual tax administration (Waiswa & Okello-Obura, 2014). Similar developments are taking place in Nigeria (Ojo, 2014), Ghana (Asamoah, 2019), and elsewhere in Africa (Froehlich et al., 2020).

**Table 1.** E-government benefits.

Authors	E-governance benefits
(Heeks, 2001)	<ul style="list-style-type: none"> <li>- Workflow Automation</li> <li>- Computerize work processes</li> <li>- Cost reduction</li> <li>- Speed gains</li> <li>- Productivity gains</li> <li>- Increased performance</li> </ul>

**Continued**

(Gage, 2001)	Empowering Citizens
(Gascó, 2003)	Creating a space for citizens to participate in the development process.
(Bhatnagar, 2003)	Improve the traceability, transparency, and accessibility of transaction information.
	- Integration of excluded and marginalized social groups;
	- Increased participation of public authorities in the economic life of the country;
(Kroukamp, 2005b)	- Making information available to the widest possible public in the same timeframe, content and comprehensiveness;
	- Reduction of administrative procedures and bureaucracy;
	- Lower costs;
	- Increased efficiency of transactions;
	- Improved communication between public administrations.
(Pathak et al., 2008)	Reducing corruption
(Bhuiyan, 2011)	- Controlling corruption;
	- Poverty reduction
(Heeks, 2001; Chisenga, 2004; Kumar & Best, 2006; Singh & Sahu, 2018)	- Cost Reduction
(Heeks, 2001; Kumar & Best, 2006)	- Time savings;
(Mohele & De Beer, 2007)	- Improved access to government information
(Kumar & Best, 2006)	Improved communication
(Mphidi, 2008)	Improving service quality
(Kroukamp, 2005a; Kumar & Best, 2006)	Strengthening innovation
	- Increased efficiency
	- Increased effectiveness

Source: Authors.

Looking at the impact of the introduction of electronic tax systems on tax authorities in the literature, we can see that tax authorities have made improvements in terms of the effectiveness and efficiency of their staff, the amount of tax revenue collected, the quality of information collected and the speed with which it is processed, and their ability to promote tax compliance among taxpayers. All these elements are performance aspects for the tax authorities, and we can therefore conclude that the introduction of digital tax procedures has led to an improvement in the performance of the tax authorities. This effect can also be attributed to companies, so that the benefits expected from the digitization of tax procedures, from the point of view of SMEs, can be brought together under the banner of the notion of performance.

### 3. Research Model and Hypotheses Development

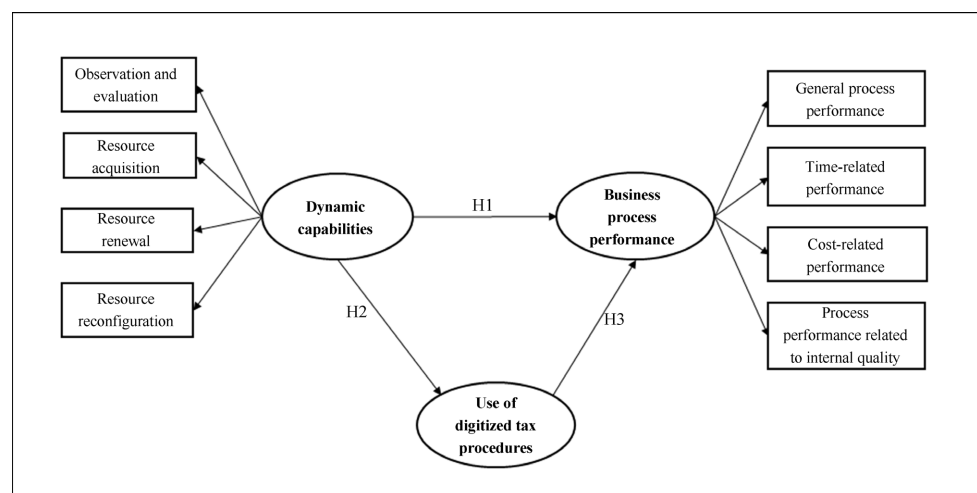
The evolving environment studied here is the Cameroonian tax environment, where procedures are being digitized and a series of digital services offered by the

tax authorities are gradually emerging. The aim of this study is therefore to understand how Cameroonian firms, faced with these changes, integrate, build and reconfigure the capabilities they acquire externally or possess internally in order to adapt to the new procedures and possibly benefit from performance gains. To assess Cameroonian SMEs from this perspective, we use the dynamic capabilities theory proposed by Teece et al. (1997). In this way, we assess the ability of SMEs to monitor the Cameroonian tax environment in such a way as to detect or even anticipate changes and developments; the ability of firms to develop and implement new routines and procedures in such a way as to adapt to tax innovations.

Kaplan and Norton (2001), with their Balanced Scorecard (BSC) concept, break down the overall notion of performance into several subsets, each linked to an aspect of the life and operations of an organization. These are the financial dimension, the customer dimension, the internal business process dimension, and the learning and growth dimension. Some of these aspects are inextricably linked to the concept that will have attracted our attention in the context of our study, namely the internal business dimension. Dumas et al. (2013) refine the internal business process dimension of the BSC by making it more practical. They break it down into performance in terms of cost, time, quality and flexibility. In fact, Dumas et al. (2013) argue that the way work is done in an organization guarantees results that create opportunities for improvement. These improvements can include cost reduction, shorter lead times and lower error rates, as well as gaining competitive advantage through innovation. Processes determine an organization's ability to adapt to new circumstances and comply with an increasing number of regulatory requirements (Van Looy & Shafagatova, 2016).

The objective of the construct “use of digitized tax procedures” is to assess the effective use of digitized tax procedures by Cameroonian businesses. More specifically, the digitized tax services actually used by businesses.

The research model is presented in Figure 1 below.



Source: Authors.

**Figure 1.** Research model.

### 3.1. Dynamic Capabilities, Business Process Performance

Dynamic capabilities are aligned with the organization's dynamic vision, based on the evolution of resources and skills (Wang & Ahmed, 2007). Thus, a company that is fully capable of integrating, building and reconfiguring its internal and external competencies to cope with a rapidly changing environment is likely to have a better competitive edge. In this sense, dynamic capabilities in the context of digitized tax procedures, refer to the ability to develop skills in response to changes in manual methods, to the ability to acquire and develop resources to respond to the digitization process. Teece et al. (1997) proposes a 4-step process that has been widely adopted in the literature. The first stage consists in observing and assessing the environment with a view to identifying market opportunities or technological innovations to be seized. Once an opportunity has been identified, the second step is to implement the appropriate means to seize it, through a process of resource acquisition. This is followed by the renewal of resources and, finally, the reconfiguration of internal resources. Dynamic capabilities, which apply to managerial issues and disruptive market innovations, are therefore a source of performance for companies that manage them strategically. Dynamic capabilities and performance appear as two intrinsically linked and even inseparable notions, insofar as the former serves to explain the sources of the latter. We therefore put forward the following hypotheses:

*H1: Dynamic capabilities have a positive and significant influence on business process performance.*

### 3.2. Dynamic Capabilities and Use of Digitized Tax Procedures

The relationship between dynamic capabilities and information systems is an integral part of a company's core digital strategy. The use of digitized tax procedures therefore implies that digitalization is effectively integrated into these processes, i.e., that it enables tax-related information to be collected, summarized and forwarded to the tax authorities for processing. The dynamic capability of companies to mobilize and deploy the information, knowledge and skills they need to keep pace with changes in the tax environment, and to make effective use of the tax authorities' electronic services, is therefore of paramount importance. We put forward the following hypothesis.

*H2: Dynamic capabilities have a positive and significant influence on the use of digitized tax procedures.*

### 3.3. Used of Digitized Tax Procedures and Business Process Performance

Delone and McLean (2016) presents the "use" as the degree of integration of information systems into the business processes of the user and the work routine of each individual. This construct measures the use of tax e-services, developed thanks to ICT and implemented by tax authorities. In this sense, the permanent use of digitalized tax procedures implies a change in the company's processes,

working methods and organization, in other words, a restructuring of internal processes that can lead to the achievement of the objectives set by the company in terms of time, cost and quality optimization. Therefore, we propose the following hypothesis:

*H3: The use of digitized tax procedures has a positive and significant impact on the performance of business processes.*

## 4. Methodology

### 4.1. The Context

The technology boom in sub-Saharan Africa has lagged behind other continents, possibly due to the region's economic, technological and infrastructural backwardness. Nevertheless, African nations are determined to catch up and have made strides in improving Internet access, cell phone usage, and digital transformation. This provides economic agents with opportunities to create new markets and extend existing ones. Singh and Sahu trace the first attempts at e-governance projects back to the 1970s. Developed countries quickly grasped the importance of these changes and embraced them, benefiting today from the positive spin-offs of digitized procedures. Sub-Saharan African nations were slow to embrace the digitization of public services, with tax digitization projects not gaining traction until the 2010s. Nonetheless, sub-Saharan African countries have been implementing measures to digitalize their tax administration processes over recent years, and Cameroon is no exception to this trend.

The digitization of tax procedures in Cameroon was executed through the launch of the “Fiscalis” platform in 2014 by the Directorate General of Taxation (DGT) under the supervision of the Ministry of Finance. This platform offers several tax services, such as remote declaration, remote payment of taxes due, and retrieval of supporting documents issued by the DGT, including tax notices and tax clearance certificates (DGI, 2023). The need for change in the tax administration of Cameroon stems from the necessity to revitalize public services in this area, given that the tax environment is a crucial aspect of the country's business climate. Cameroon is currently ranked 181st out of 190 countries on the “payment of taxes” indicator, according to the Doing Business ranking of 2020. This ranking justifies the need to implement policies aimed at restructuring Cameroon's tax environment by means of dematerializing tax procedures. After several years of operation of online tax activity platforms in Cameroon, it is timely to evaluate their impact on the performance of SMEs.

### 4.2. Research Design and Data Collection

#### 1) Questionnaire design

We selected Cameroonian SMEs that benefit from digitized tax services as our target population, as our study focuses on the impact of the use of digitized tax procedures on the business process performance of Cameroonian companies. Within Cameroon's entrepreneurial ecosystem, these companies are the most



significant taxpayers. Moreover, e-governance in Cameroon is undergoing significant transformations. Several e-governance projects, whether focused on modernizing tax and customs services or facilitating the payment of government department services through electronic payments, are in development.

To conduct this quantitative study, we developed a questionnaire. It was designed based on a literature review that centered on theories and concepts related to the research. The questionnaire has three parts, each measuring a variable of the model we are assessing (see **Appendix**). The first part discusses the dynamic capabilities of the company. It consists of 21 measurement items distributed amongst four sub-constructs. The second part assesses the use of digitized tax procedures using seven items. The third section addresses business process performance, which is evaluated through 18 items categorized into four sub-constructs. 7-point Likert scale that ranges from “completely disagree” to “completely agree” as a measurement of each item (Boone & Boone, 2012).

#### 2) Pre-test phase

It is important to carry out a pre-test to verify the comprehensibility of the first draft of the questionnaire (Taherdoost, 2019). We aim to determine whether the items that measure the constructs are easily understood by the respondents. To achieve this, we gathered a sample of ten individuals comprising five master's students, two civil administrators, and three contractors. At the end of their evaluations, they confirmed that the questionnaire was comprehensible and unambiguous.

#### 3) Minimum sample size determination

Afterwards, we determine the minimum sample size through the GPower 3.1.9.2 software, which has the particularity of calculating the statistical power for various statistical tests (Schoemann et al., 2017). By inserting parameters such as effect size, probability error, the power of the effect, and the number of predictors or latent explanatory variables, we obtained the sample size necessary to test the model effectively. For this, with a total of five (05) predictors (lower constructs), a probability of error  $\alpha = 0.05$ , an effect power  $(1 - \beta) = 0.80$ , and an effect size of  $f^2 = 0.15$ , the minimum total sample size for this study is ninety-two (92) individuals.

#### 4) Pilot test

To ensure the reliability and construct validity of the study, we conducted a pilot test after obtaining a sample of 45 responses. The benefit of pilot testing is that it helps us rectify the questionnaire by removing measurement items that are statistically unreliable or rephrasing them, if possible, to make them more understandable (Hair Jr. et al., 2014). After analyzing the sample data, no changes were made as the results indicated that both the measurement items and the model are statistically reliable and valid. So, we continued our data collection.

#### 5) Data collection phase

We designed the questionnaire on Word and printed several copies. We conducted an on-site visit directly to the SMEs office. We made sure to clarify the purpose of the study, explain the anonymity of the questionnaire and assure the respondents that the data would be used solely for academic research purposes. We administered the questionnaire to individuals responsible for tax compliance within



the company after their agreement to participate in the study. Each SME completed one questionnaire. 200 questionnaires were distributed among SMEs and we received a total of 143 responses that represented 143 different SMEs. Thus, a response rate of 71.5%. Data was collected between November 2021 and April 2022.

#### 6) Common method bias

To detect the possible effect of common method bias (CMB), we performed the full collinearity test [Kock \(2015\)](#). This test suggests that the presence of a variance inflation factor (VIF) greater than 3.3 indicates pathological collinearity and also contamination of the model by CMB. After we conducted the full collinearity test, the results showed that all the VIF values were lower than 3.3, thus confirming the absence of CMB and the reliability of the data collection.

### 4.3. Data Analysis

The data for this study were analyzed using partial least squares structural equation modeling (PLS-SEM) using SmartPLS 4 software ([Ringle et al., 2022](#)). This method has the advantage of evaluating complex models with small sample sizes ([Hair et al., 2019](#)). It is particularly well known in research in marketing, management, entrepreneurship, information systems, etc. We chose a higher-order construct model ([Sarstedt et al., 2019](#)) to reduce the number of relationships in the model and to evaluate the most important concepts of this research. Thus, dynamic capabilities and business process performance are higher-order constructs, each explained by four lower-order constructs. We used the disjoint two-stage approach ([Sarstedt et al., 2019](#)). In the first stage, we evaluated the reflective measurement model of the lower-order constructs, and in the second stage, we used the latent variable scores of the lower-order constructs to create and estimate the higher-order constructs. We then evaluated the measurement model and the structural model of the research model.

## 5. Results

### 5.1. Demographic Profile

The results show that the majority of SMEs surveyed are private limited companies (54%). 48% have between 6 and 20 employees. Most of the managers responding to the survey were men (70%). 46% are aged between 31 and 40, and 34% have an executive function ([Table 2](#)).

### 5.2. Measurement Model Assessment

The purpose of this assessment is to check the model's constructs for their reliability and validity. To measure internal consistency, we look at the outer loading,  $\rho_A$ , and composite reliability (CR), which must be 0.7 or greater. To evaluate convergent validity, we check the average variance extracted (AVE), which should be 0.5 or greater ([Hair et al., 2019](#)). In the first stage, we checked these criteria for the lower-order components. Items with outer loading values below 0.7 and/or VIF values above 3 were removed to improve the reliability and avoid multicollinearity.

linearity issues. Since the lower-order component model fulfilled all criteria, we utilized their latent variable scores to create the model displayed in **Figure 1** during stage two. The assessment of the reflective measurement model of the higher-order constructs adhered to the same standards. **Table 3** shows that the model is reliable and valid since all criteria met the required values.

**Table 2.** Demographic profile of respondents.

Demographic profile		Number	Frequency
Gender of respondent	Woman	43	30%
	Man	100	70%
	Total	143	100%
Age of respondent	20 - 30	21	15%
	31 - 40	66	46%
	41 - 50	42	29%
	51 - 60	14	10%
	Total	143	100%
Respondents' hierarchical position in the company	Senior Executive	25	17%
	Executive	48	34%
	Supervisor	42	29%
	Others	28	20%
	Total	143	100%
Number of employees	$1 \leq X \leq 5$	50	35%
	$6 \leq X \leq 20$	69	48%
	$21 \leq X \leq 100$	16	11%
	More than 100	8	6%
	Total	143	100%
Number of years' experience as company manager	1 - 5	39	27%
	6 - 10	64	45%
	11 - 15	21	15%
	16 - 20	8	6%
	21 - 25	4	3%
	More than 25 years	7	5%
	Total	143	100%
Legal form	Private Limited Company (Ltd)	77	54%
	Public Limited Company (PLC)	19	13%
	Sole Proprietorship	20	14%
	Establishment	20	14%
	Cooperative society	4	3%
	Joint stock company	2	1%
	General partnership	1	1%
	Total	143	100%

**Table 3.** Construct's reliability and validity.

Higher-order constructs	Lower-order constructs	Outer loadings	Cronbach's alpha	Rho_A	Composite reliability (CR)	Average variance extracted (AVE)
Dynamic Capabilities	Observation and evaluation	0.814	0.899	0.901	0.930	0.769
	Resources acquisition	0.903				
	Resources renewal	0.918				
	Resources reconfiguration	0.869				
Business process performance	General process performance	0.745	0.865	0.866	0.909	0.714
	Timed related process performance	0.878				
	Cost related process performance	0.866				
	Process performance related to internal quality	0.884	0.872	0.877	0.921	0.796
	Use of digitized tax procedures-UPFD1	0.859				
	Use of digitized tax procedures-UPFD3	0.908				
	Use of digitized tax procedures-UPFD4	0.909				

Source: Authors.

Discriminant validity was assessed by the Fornell-Lacker criterion (Fornell & Larcker, 1981), which suggests that the square root of the AVEs, along with the diagonal, must be greater than all the values below and left. Table 4 shows that discriminant validity is not a problem in the research model.

**Table 4.** Discriminant validity-Fornell-Larcker criterion.

Constructs	(1)	(2)	(3)
Business process performance (1)	0.845		
Dynamic capabilities (2)	0.827	0.877	
Use of digitized tax procedures (3)	0.644	0.511	0.892

### 5.3. Structural Model Assessment

With the satisfactory measurement model in place, the subsequent step is to assess the structural model. In this regard, we first examine collinearity to ensure that the results are not biased. We evaluated the Variance Inflation Factor (VIF) values, which indicate probable collinearity issues when they exceed 5 and possible collinearity issues when they range from 3 - 5. Ideally, the VIF values should be

closer to 3 or lower (Hair et al., 2019). The results indicate that there is no issue with collinearity in the research model, as the internal VIF values for measurement items in the lower-order constructs are below 3.

Next, we examined the model's explanatory power using  $R^2$ .  $R^2$  values of 0.75, 0.50, and 0.25 are considered substantial, moderate, and weak, respectively (Hair et al., 2019). Results (Table 5) indicate that 78.6% ( $R^2 = 0.786$ ) of the business process performance construct is explained by dynamic capabilities and digitized tax procedures use. Additionally, the use of digitized tax procedures construct was explained by dynamic capabilities at 26.2% ( $R^2 = 0.262$ ).

**Table 5.** Explanatory power ( $R^2$ ).

Dependents constructs	R-square	R-square adjusted
Business process performance	0.786	0.783
Use of digitized tax procedures	0.262	0.257

Finally, the bootstrapping method was used to determine the significance and statistical relevance of the path coefficients. The results (Table 6) confirm all hypotheses, demonstrating that dynamic capabilities have a positive and significant influence on business process performance (H1;  $\beta = 0.675$ ,  $p < 0.001$ ) and the use of digitized tax procedures (H2;  $\beta = 0.511$ ,  $p < 0.001$ ). The use of digitized tax procedures has a positive and significant influence on business process performance (H3;  $\beta = 0.299$ ,  $p < 0.001$ ).

**Table 6.** Hypotheses testing.

	Hypotheses	Original sample ( $\beta$ )	Sample mean (M)	Standard deviation (STDEV)	T statistics ( $ \beta/STDEV $ )	p values	Sign. Level	Conclusion
H1	Dynamic capabilities → Business process performance	0.675	0.677	0.065	10.428	0.000	****	Accepted
H2	Dynamic capabilities → Use of digitized tax procedures	0.511	0.512	0.080	6.393	0.000	****	Accepted
H3	Use of digitized tax procedures → Business process performance	0.299	0.295	0.070	4.279	0.000	****	Accepted

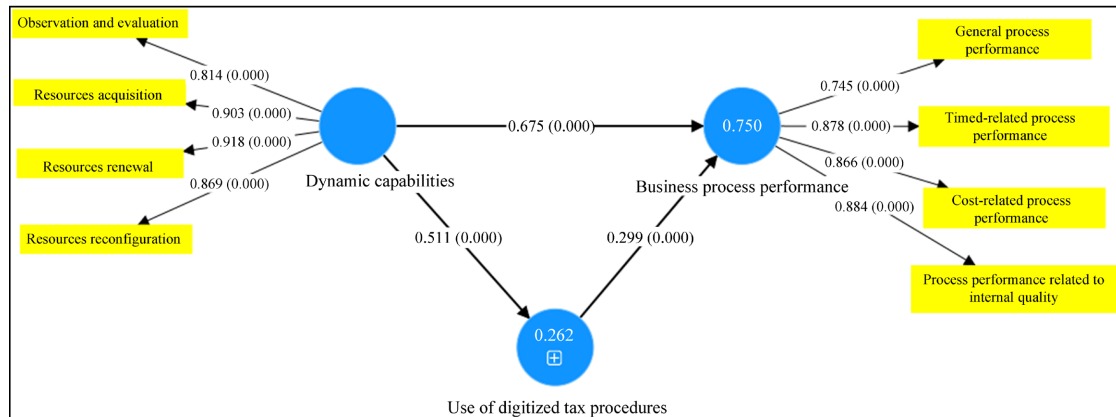
\*\*\*\*  $p < 0.001$ ; \*\*\*  $p < 0.01$ ; \*\*  $p < 0.05$ ; \*  $p < 0.1$ ; n.s. not significant.

The results also show that the use of digitized tax procedures completely mediates the relationship between dynamic capabilities and business process performance. In other words, the dynamic capabilities of SMEs have an indirect influence on the performance of business processes when these SMEs make use of electronic tax services (Table 7).

**Table 7.** Mediation relationship.

Mediation relation	Original sample ( $\beta$ )	Sample mean (M)	Standard deviation (STDEV)	T statistics ( $ \beta/STDEV $ )	p values	Sign. level	Conclusion
Dynamic capabilities $\rightarrow$ Use of digitized tax procedures $\rightarrow$ Business process performance	0.153	0.150	0.039	3.881	0.000	****	Full mediation

The estimation model is shown in **Figure 2** below.

**Figure 2.** Estimation model.

## 6. Discussions and Implications

The results presented above validate the hypotheses we have previously proposed based on the literature. Overall, we find that dynamic capabilities influence both the use of digitized tax procedures and business process performance. Similarly, we find that the use of digitized tax procedures has a positive influence on business process performance. In fact, there is a relationship between the ability of Cameroonian firms to scan the tax environment in Cameroon, organize a monitoring and anticipate its changes in order to better adapt to them, and the frequency with which they use digitized tax services. Furthermore, the ability of Cameroonian SMEs to transform their routines, adapt their skills, update their resources and adapt their resources enables them to achieve performance gains. On the other hand, the results confirm that the introduction of digitized tax procedures has enabled companies to achieve performance gains thanks to the levers of time, internal quality and, finally, costs.

It's now clear that the use of digitized tax procedures enables companies to achieve performance gains and improve their business processes (Kretschmer & Khashabi, 2020). With this in mind, companies can take a more far-sighted view of the possibility of migrating completely to digitalized management of their interactions with the tax authorities, since in practice, manual tax declarations have not yet completely disappeared. The use of digitized tax procedures therefore represents a niche that should be seized by setting up appropriate managerial mecha-

nisms. In practice, this would mean extending the use of digitized tax procedures to all the interactions with the tax authorities that compliance with tax obligations requires (Uyar et al., 2021). The use of digitized tax procedures in Cameroon is still concentrated on certain services, such as electronic tax filing, or on specific taxes such as VAT or the flat-rate minimum tax. The other services, taxes and fees on offer have yet to be incorporated. Managers should therefore be more enthusiastic about exploiting them.

On the other hand, improving the digitization of tax procedures within African companies requires consideration of several factors. These include investing in the digital solutions needed to digitize the company's accounting processes, coupled with the training of dedicated staff. Successful digitization often depends on the skills of the staff. Training staff on tax software and supporting change management within the organization are critical. It is also necessary to ensure compliance with local regulations and to provide monitoring and reporting capabilities. This includes data security and protection of tax information. Collaboration with tax authorities can also facilitate the transition to greater digitization and help achieve e-governance goals (Cisi & Sansalvadore, 2022). Understanding regulatory requirements and working with government agencies can help ensure compliance and anticipate changes in tax legislation. We also recommend that the government invest more in mobile technology. Many SMEs are located in areas with poor internet access (Frazier et al., 2013). Tax return solutions can be made available to a wider range of people, including very small businesses and independent entrepreneurs in remote geographical areas.

## 7. Research Contributions

Our study contributes to the literature on the use of digitized tax procedures and business process performance in the Cameroonian context.

First, we fill the gap in the literature on the digitization of tax procedures in sub-Saharan Africa by focusing on the taxpayer (user) perspective rather than the tax administration. Using Cameroon as a case study, we show that although the implementation of e-governance solutions for tax management is recent in Africa, they can optimize the internal business processes of SMEs. Second, this study shows that dynamic capabilities are strategically essential when SMEs implement or want to implement an e-governance solution. We theoretically confirm the role of dynamic capabilities in achieving business performance, but also in the digitization of tax procedures. Finally, this study on the digitization of tax procedures can provide managers with guidance to make informed decisions, optimize tax and accounting operations, manage resources, minimize risks, and position the company for continued growth in an ever-changing digital environment. We motivate more research about cybersecurity, compliance, impact assessment on economic outcomes, and data analytics related to digitized tax procedures.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

## References

- Akpan-Obong, P. I., Trinh, M. P., Ayo, C. K., & Oni, A. (2023). E-governance as Good Governance? Evidence from 15 West African Countries. *Information Technology for Development*, 29, 256-275. <https://doi.org/10.1080/02681102.2022.2123770>
- Alibraheem, M. H., & Abdul Jabbar, H. (2016). Electronic Tax Filing Adoption and Its Impact on Tax Employees Performance in Jordan: A Proposed Framework. *World Applied Sciences Journal*, 34, 393-399.
- Almarabeh, T., & AbuAli, A. (2010). A General Framework for e-Government: Definition Maturity Challenges, Opportunities, and Success. *European Journal of Scientific Research*, 39, 29-42.
- Asamoah, K. (2019). E-governance in Africa's Local Governments: Do District Assemblies in Ghana Optimize the Use of Websites and Social Media? *The Electronic Journal of Information Systems in Developing Countries*, 85, e12082. <https://doi.org/10.1002/isd2.12082>
- Bannister, F., & Connolly, R. (2012). Defining e-Governance. *e-Service Journal*, 8, 3-25. <https://doi.org/10.2979/eservicej.8.2.3>
- Bhatnagar, S. (2003). *Transparency and Corruption: Does e-Government Help* (pp. 1-9). DRAFT Paper Prepared for the Compilation of CHRI.
- Bhuiyan, S. H. (2011). Modernizing Bangladesh Public Administration through E-Governance: Benefits and Challenges. *Government Information Quarterly*, 28, 54-65. <https://doi.org/10.1016/j.giq.2010.04.006>
- Boone, H., & Boone, D. (2012). Analyzing Likert Data. *Journal of Extension*, 50, Article No. 48. <https://doi.org/10.34068/joe.50.02.48>
- Chisenga, J. (2004). Africa Governments in Cyberspace: Are They Bridging the Content Divide. In P. Birungi, & M. G. Musoke (Eds.), *SCECSAL XV. Towards a Knowledge Society of Africa*.
- Cisi, M., & Sansalvadore, F. (2022). Formalized Business Networks in SMEs and Structural Relations for Their Governance. *Journal of Small Business & Entrepreneurship*, 34, 295-312. <https://doi.org/10.1080/08276331.2019.1691317>
- DeLone, W. H., & McLean, E. R. (2016). Information Systems Success Measurement. *Foundations and Trends® in Information Systems*, 2, 1-116. <https://doi.org/10.1561/29000000005>
- DGI (2023). *Direction Générale des Impôts*. Ministère des Finances. <https://www.impots.cm/>
- Dumas, M., La Rosa, M., Mendling, J., & Reijers, H. A. (2013). Introduction to Business Process Management. In M. Dumas, M. La Rosa, J. Mendling, & H. A. Reijers (Eds.), *Fundamentals of Business Process Management* (pp. 1-33). Springer. [https://doi.org/10.1007/978-3-662-56509-4\\_1](https://doi.org/10.1007/978-3-662-56509-4_1)
- Fornell, C., & Larcker, D. F. (1981). Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics. *Journal of Marketing Research*, 18, 382-388. <https://doi.org/10.1177/002224378101800313>
- Frazier, B., Stoel, L., Niehm, L., & Eckerson, N. (2013). Optimism for New Business Survival in Rural Communities: An Institutional Perspective. *Journal of Small Business & Entrepreneurship*, 26, 443-462. <https://doi.org/10.1080/08276331.2013.876761>
- Froehlich, A., Ringas, N., & Wilson, J. (2020). E-Governance in Africa and the World. In A. Froehlich, N. Ringas, & J. Wilson (Eds.), *Space Supporting Africa: Volume 3: Security, Peace, and Development through Efficient Governance Supported by Space Applications* (pp. 53-124). Springer International Publishing.



- [https://doi.org/10.1007/978-3-030-52260-5\\_2](https://doi.org/10.1007/978-3-030-52260-5_2)
- Gage, J. (2001). *Some Thoughts on How ICTs Could Really Change the World* (pp. 4-9). The Global Information Technology Report.
- Gascó, M. (2003). New Technologies and Institutional Change in Public Administration. *Social Science Computer Review*, 21, 6-14. <https://doi.org/10.1177/0894439302238967>
- Goodhue, D. L., & Thompson, R. L. (1995). Task-Technology Fit and Individual Performance. *MIS Quarterly*, 19, 213-236. <https://doi.org/10.2307/249689>
- Gupta, M. P., & Jana, D. (2003). E-Government Evaluation: A Framework and Case Study. *Government Information Quarterly*, 20, 365-387. <https://doi.org/10.1016/j.giq.2003.08.002>
- Hair Jr., J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial Least Squares Structural Equation Modeling (PLS-SEM). *European Business Review*, 26, 106-121. <https://doi.org/10.1108/eb-10-2013-0128>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to Use and How to Report the Results of PLS-SEM. *European Business Review*, 31, 2-24. <https://doi.org/10.1108/eb-11-2018-0203>
- Heeks, R. (2001). Understanding E-Governance for Development. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3540058>
- Hiller, J. S., & Bélanger, F. (2001). Privacy Strategies for Electronic Government. *E-Government*, 200, 162-198.
- Inakefe, G. I., Bassey, V. U., Ikeanyibe, O. M., Nwagboso, C. I., Agbor, U. I., Ebegbulem, J. et al. (2023). Digital Literacy and E-Governance Adoption for Service Delivery in Cross River State Civil Service. *International Journal of Electronic Government Research*, 19, 1-23. <https://doi.org/10.4018/ijegr.328327>
- Iyer, L. S., & Rao, R. N. S. (2017). E-Governance Implementation in the Telecentres of Karnataka, India: Costs, Governance & Benefits. *Asian Journal of Research in Social Sciences and Humanities*, 7, 377-385. <https://doi.org/10.5958/2249-7315.2017.00323.9>
- Kaplan, R. S., & Norton, D. P. (2001). Transforming the Balanced Scorecard from Performance Measurement to Strategic Management: Part I. *Accounting Horizons*, 15, 87-104. <https://doi.org/10.2308/acch.2001.15.1.87>
- Kock, N. (2015). Common Method Bias in PLS-SEM: A Full Collinearity Assessment Approach. *International Journal of e-Collaboration*, 11, 1-10. <https://doi.org/10.4018/ijec.2015100101>
- Kretschmer, T., & Khashabi, P. (2020). Digital Transformation and Organization Design: An Integrated Approach. *California Management Review*, 62, 86-104. <https://doi.org/10.1177/0008125620940296>
- Kroukamp, H. (2005a). E-Governance in South Africa: Are We Coping? *Acta Academica*, 37, 52-69.
- Kroukamp, H. (2005b). E-Governance in South Africa: Are We Coping? *Acta Academica*, 37, 52-69.
- Kumar, R., & Best, M. L. (2006). Impact and Sustainability of E-Government Services in Developing Countries: Lessons Learned from Tamil Nadu, India. *The Information Society*, 22, 1-12. <https://doi.org/10.1080/01972240500388149>
- Kyem, P. A. K. (2016). Mobile Phone Expansion and Opportunities for E-Governance in Sub-Saharan Africa. *The Electronic Journal of Information Systems in Developing Countries*, 75, 1-15. <https://doi.org/10.1002/j.1681-4835.2016.tb00548.x>
- Masunga, F. J., Mapesa, H. J., & Nyalle, M. A. (2020). Influence of E-Tax System on Tax

- Revenue Collection in Tanzania Large Taxpayers: A Prior and Posterior Analysis. *Journal of Accounting Finance and Auditing Studies (JAFAS)*, 6, 44-63.  
<https://doi.org/10.32602/jafas.2020.027>
- Mohele, I., & De Beer, K. (2007). *The Use of Information and Communications Technology (ICT) in e-Service Delivery and Effective Governance in South Africa*.
- Mphidi, H. (2008). Digital Divide and e-Governance in South Africa. *Research, Innovation and Partnerships*.
- Nkohkwo, Q. N.-A., & Islam, M. S. (2013). Challenges to the Successful Implementation of e-Government Initiatives in Sub-Saharan Africa: A Literature Review. *Electronic Journal of e-Government*, 11, 252-266.
- Ojo, J. S. (2014). E-governance: An Imperative for Sustainable Grass Root Development in Nigeria. *Journal of Public Administration and Policy Research*, 6, 77-89.  
<https://doi.org/10.5897/jpapr2013.0264>
- Oliveira, T. A., Oliver, M., & Ramalhinho, H. (2020). Challenges for Connecting Citizens and Smart Cities: ICT, e-Governance and Blockchain. *Sustainability*, 12, Article No. 2926. <https://doi.org/10.3390/su12072926>
- Olubukola Otekunrin, A., Ikechukwu Nwanji, T., Felix Eluyela, D., Inegbedion, H., & Eleda, T. (2021). E-Tax System Effectiveness in Reducing Tax Evasion in Nigeria. *Problems and Perspectives in Management*, 19, 175-185.  
[https://doi.org/10.21511/ppm.19\(4\).2021.15](https://doi.org/10.21511/ppm.19(4).2021.15)
- Pathak, R. D., Singh, G., Belwal, R., Naz, R., & Smith, R. (2008). E-Governance, Corruption and Public Service Delivery: A Comparative Study of Fiji and Ethiopia. *JOAAG*, 3, 65-79.
- Ringle, C. M., Wende, S., & Becker, J.-M. (2022). *SmartPLS 4*. SmartPLS.  
<https://www.smartpls.com/>
- Sarstedt, M., Hair, J. F., Cheah, J., Becker, J., & Ringle, C. M. (2019). How to Specify, Estimate, and Validate Higher-Order Constructs in PLS-SEM. *Australasian Marketing Journal*, 27, 197-211. <https://doi.org/10.1016/j.ausmj.2019.05.003>
- Schoemann, A. M., Boulton, A. J., & Short, S. D. (2017). Determining Power and Sample Size for Simple and Complex Mediation Models. *Social Psychological and Personality Science*, 8, 379-386. <https://doi.org/10.1177/1948550617715068>
- Singh, M., & Sahu, G. P. (2018). Study of e-Governance Implementation: A Literature Review Using Classification Approach. *International Journal of Electronic Governance*, 10, 237-260. <https://doi.org/10.1504/ijeg.2018.095954>
- Taherdoost, H. (2019). What Is the Best Response Scale for Survey and Questionnaire Design; Review of Different Lengths of Rating Scale/Attitude Scale/Likert Scale. *International Journal of Academic Research in Management*, 8, 1-10.
- Teece, D. J. (2007). Explicating Dynamic Capabilities: The Nature and Microfoundations of (Sustainable) Enterprise Performance. *Strategic Management Journal*, 28, 1319-1350.  
<https://doi.org/10.1002/smj.640>
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, 18, 509-533.  
[https://doi.org/10.1002/\(sici\)1097-0266\(199708\)18:7<509::aid-smj882>3.0.co;2-z](https://doi.org/10.1002/(sici)1097-0266(199708)18:7<509::aid-smj882>3.0.co;2-z)
- UN (2020). *UN e-Government Survey 2020*.  
<https://publicadministration.un.org/egovkb/en-us/Reports/UN-E-Government-Survey-2020>
- Uyar, A., Nimer, K., Kuzey, C., Shahbaz, M., & Schneider, F. (2021). Can e-Government Initiatives Alleviate Tax Evasion? The Moderation Effect of ICT. *Technological Foreca-*

*sting and Social Change*, 166, Article ID: 120597.

<https://doi.org/10.1016/j.techfore.2021.120597>

Van Looy, A., & Shafagatova, A. (2016). Business Process Performance Measurement: A Structured Literature Review of Indicators, Measures and Metrics. *SpringerPlus*, 5, Article No. 1797. <https://doi.org/10.1186/s40064-016-3498-1>

Verona, G., & Ravasi, D. (2003). Unbundling Dynamic Capabilities: An Exploratory Study of Continuous Product Innovation. *Industrial and Corporate Change*, 12, 577-606. <https://doi.org/10.1093/icc/12.3.577>

Waiswa, R., & Okello-Obura, C. (2014). To What Extent Have ICTs Contributed to e-Governance in Uganda? *Library Philosophy and Practice*, 6, 43-60.

Wang, C. L., & Ahmed, P. K. (2007). Dynamic Capabilities: A Review and Research Agenda. *International Journal of Management Reviews*, 9, 31-51. <https://doi.org/10.1111/j.1468-2370.2007.00201.x>

Zahra, S. A., Sapienza, H. J., & Davidsson, P. (2006). Entrepreneurship and Dynamic Capabilities: A Review, Model and Research Agenda. *Journal of Management Studies*, 43, 917-955. <https://doi.org/10.1111/j.1467-6486.2006.00616.x>

Zollo, M., & Winter, S. G. (2002). Deliberate Learning and the Evolution of Dynamic Capabilities. *Organization Science*, 13, 339-351. <https://doi.org/10.1287/orsc.13.3.339.2780>

## Appendix

**Table A1.** Lower-order constructs' items measurements.

Lower-order constructs	Items measurements	Outer loadings	VIF
<b>Dynamic capabilities</b>			
<b>Observation and evaluation</b> (Teece et al., 1997; Zollo & Winter, 2002; Teece, 2007)	OBE1: Our company constantly invests in research to identify innovations in taxation.	0.730	1.976
	OBE2: Our firm establishes mechanisms for monitoring tax changes (changes resulting from financial laws, circulars and other documents issued by the Ministry of Finance and the General Tax Directorate).	0.849	2.473
	OBE3: With the advent of digitized tax procedures, we found out about the changes that other companies in our sector had made to their tax procedures to bring them into line.	0.829	2.215
	OBE4: The managers of our company know how to interpret the terms of a finance law or the General Tax Code, as well as innovations in the Cameroonian tax environment.	n.s	n.s
	OBE5: Our company is constantly on the lookout for tax-related information from a variety of sources, including the press, formal and informal contacts with customers, competitors and suppliers, trade fairs and universities.	0.820	2.773
	OBE6: Our company adopts formal, planned and organized processes for collecting, analyzing and using information on tax innovations.	0.822	2.289
<b>Resource acquisition</b> (Teece et al., 1997; Zahra et al., 2006; Teece, 2007)	ACR1: Our company has a strong capacity to create, adjust and, if necessary, redefine our business plan and/or objectives.	n.s	n.s
	ACR2: We make effective use of the information at our disposal to guide our decisions.	n.s	n.s
	ACR3: Our company adopts mechanisms to prevent errors and biases in relation to the tax information analyzed and the decisions taken.	n.s	n.s
	ACR4: We typically use outside tax advisors or other professionals to analyze our tax decisions.	0.925	2.059
	ACR5: The company's reward and compensation system encourage employee innovation and creativity.	0.928	2.059
<b>Resource renewal</b> (Teece et al., 1997; Verona & Ravasi, 2003; Teece, 2007)	RNR1: We know how to manage our resources and organizational structure to adapt to change and growth.	0.863	2.085
	RNR2: Our company has a strong ability to integrate into its processes the knowledge and know-how gained from interactions with external partners (consulting firms and other partners).	0.881	2.108
	RNR3: Our company is constantly striving to increase its investment in research and development.	n.s	n.s
	RNR4: Our employees are more committed to reorganization than those of our competitors.	n.s	n.s
	RNR5: Our employees and managers are strongly encouraged to promote new visions, goals and ideas.	0.884	2.003
<b>Resource reconturation</b> (Teece et al., 1997; Verona & Ravasi, 2003; Teece, 2007)	RCR1: Our company allocates resources to enhance employee skills.	0.907	1.918
	RCR2: Our company focuses on raising employee skill levels.	n.s	n.s
	RCR3: Employees are strongly encouraged to make the most of the experience they have gained.	n.s	n.s
	RCR4: Our company has routines for systematizing employee experiences.	n.s	n.s
	RCR5: We are constantly working to improve performance through our tax procedures.	0.931	1.918

## Continued

Use of digitized tax procedures			
Use of digitized tax procedures (Goodhue & Thompson, 1995)	UPFD1: We use digitized tax procedures to declare the taxes to which our company is subject.	0.865	2.016
	UPFD2: We use digital tax procedures to collect our tax notices.	n.s	n.s
	UPFD3: We use digital tax procedures to collect our payment receipts.	0.907	2.645
	UPFD4: We use digitized tax procedures to withdraw our tax exemption notices.	0.905	2.570
	UPFD5: We use mobile tax to pay our taxes.	n.s	n.s
Business Process Performance			
General process performance (Van Looy & Shafagatova, 2016)	PPG1: Our company has an internal audit department responsible for ensuring that procedures are up to date and applied.	0.907	1.839
	PPG2: Our company has a management control body responsible for monitoring the strategic objectives set by the management team.	0.923	1.839
	PPT1: The digitalization of tax procedures has significantly reduced the time spent on tax filing.	n.s	n.s
Timed related process performance (Van Looy & Shafagatova, 2016)	PPT2: The introduction of electronic payment methods by the tax authorities has significantly reduced the time required to pay taxes due.	0.921	1.942
	PPT3: The digitization of tax procedures has significantly improved the availability of tax notices.	0.921	1.942
	PPT4: The digitization of tax procedures has considerably improved the availability of receipts.	n.s	n.s
Cost related process performance (Van Looy & Shafagatova, 2016)	PPT5: The turnaround time for the issuance of notices has improved significantly due to the digitalization of tax procedures.	n.s	n.s
	PPC1: As a result of using digital tax procedures, we have had to bear the cost of reorganizing our accounting information system.	n.s	n.s
	PPC2: The use of digitized tax procedures has significantly reduced, or even eliminated, the cost of providing the printed materials and printouts that were once required for tax declarations.	0.931	1.988
Process performance related to internal quality (Van Looy & Shafagatova, 2016)	PPC3: The use of digital tax procedures has considerably reduced, or even eliminated, the cost of storing supporting documents for tax declarations and payments.	n.s	n.s
	PPC4: The use of digitized tax procedures has significantly reduced, or even eliminated, the costs associated with paying taxes.	0.916	1.988
	PPQI1: The use of digitized tax procedures has significantly reduced, or even eliminated, the occurrence of errors in the tax declaration process.	n.s	n.s
	PPQI2: The use of digitized tax procedures has significantly reduced, or even eliminated, the opportunity cost of paying undue tax surcharges following a tax return error.	0.867	2.380
	PPQI3: The use of digitized tax procedures has significantly improved our ability to file our tax returns on time.	n.s	n.s
	PPQI4: The statistical and tax return for fiscal 2020 was submitted on time.	0.849	2.142
	PPQI5: The use of digitized tax procedures has significantly reduced, or even eliminated, the frequency of late tax payments.	n.s	n.s
	PPQI6: The use of digitized tax procedures has significantly reduced or even eliminated the amounts paid in late tax return penalties.	0.837	2.316
	PPQI7: The use of digitized tax procedures has significantly reduced or even eliminated the time needed to check and correct errors in the amounts to be declared.	0.865	2.500