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Original Article

Digitalization's Effect on Non-farm Enterprises Performance in Togo

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Abstract *- This article aims to assess the impact of digital technology adoption on non-farm enterprise's performance in Togo. The propensity score method is used with data from the General Enterprises Census (RGE, 2018). The results show that the manager's level of education, whether the enterprise is involved in research and development, the type of internet connection the enterprise subscribed to, and its location are the main factors associated with using digital technologies in enterprises. Furthermore, using digital technology increases enterprise turnover by around 50% compared with enterprises which do not use it. However, the impact is more significant for foreign trade enterprises (51%) than for SMEs (29%) and large enterprises (13%). These results suggest that decision-makers should continue with the momentum noted in recent years regarding reforms aimed at improving the business environment, one of the key pillars of which remains the digitization of public services. This is at the heart of the government's roadmap and is intended to enhance the use of digital technology by private-sector businesses.*

Keywords *- Digitalization, Non-farm enterprises performance, Private sector, Digital markets, Technology.*

1. Introduction

It is widely accepted that digitalization, or the adoption of digital technologies, regarded as combinations of Information Technology (IT), communication, and connectivity, allows the achievement of lasting competitive advantages that are key to the survival of enterprises (Martínez-Caro et al., 2020). Digitization involves transferring physical data into digital form (Salo, 2006). Digitalization refers to the changes that digital technologies can bring to a company's business model, mainly in essential functions such as the storage, processing, and exchange of data (Carr, 2003), which, for instance, translate into the digitization of data throughout the value chain or the automation of processes. Digitalization offers information integration and supports visibility and decision-making in companies (Li et al., 2020). It is, therefore, seen as a catalyst for more digitalized supply chains (Gartner, 2018). It also provides the potential for seamless information flow, communication, and connectivity across companies and supply chains (Chi et al., 2018; Sedera et al., 2016). Digitalization enables real-time management of operations, supply chain activities, and visibility (Ardito et al., 2019).

Furthermore, digitalization or digital technology affects enterprises through two main channels. On the one hand, the market offer is transformed by launching new products or services because of their specific quality and purpose. Digital products and services manufactured and offered by producers using digitized processes are also emerging. On the other hand, digital markets create an entirely new form of market demand. This is the market of (virtual) digital buyers, individuals, or companies. In addition, digital technologies have brought about a specific revolution in supply chain management (marketing communication and product distribution. Specifically, the emergence of digital marketing channels enables direct communication between the buyer and the seller. The digital economy makes it possible to exclude many intermediaries in the supply chain, significantly increasing value for the end consumer because of lower prices and faster delivery. Digital technologies are changing payment methods because most transactions today are carried out via cashless payment systems, with the most robust growth in mobile payments.

Research has shown a positive link between digitalization and the economic performance of companies (Vu et al., 2020). Causality goes from digitalization to economic growth regarding macroeconomic work (Fernández-Portillo et al., 2019), leading to economic development, as well as at the microeconomic level through improvements in processes, products, sales, and finally, profits (Eze et al., 2018; Fernández-Portillo et al., 2020; Gërguri-Rashiti et al., 2017). However, there is no consensus on this issue. Indeed, several works have pointed out that the impact of digital technologies on the economy may be different. For example, some research suggests that there is little or no relationship between ICTs and the economy at the national level (Pradhan, Arvin, Nair,

Bennett & Bahmani, 2019; Thompson & Garbacz, 2011; Yazdan & Hossein, 2013). Similarly, at the firm level, some evidence questions the positive impact of digital technologies on the performance of companies (Bertschek, Cerquera & Klein, 2013; Haller & Lyons, 2015).

Enterprises in Togo are reasonably open to digital technologies. Even if the adoption of such tools is still in the very early stages, international companies and those run by young people are blazing a trail. According to statistics from the Togo Chamber of Commerce and Industry (CCIT, 2021), 83% of entrepreneurs surveyed use instant messaging systems to communicate with buyers and suppliers. E-mail is another preferred channel for 58% of the firms, and 24% say they have a web page (CCIT, 2021). It is no surprise that young entrepreneurs are leading technological integration in Togo. They are more willing than their elders to invest in technological capabilities and innovative activities. The number of firms run by young people who invest substantially in research and development and the creation of new products is 10 points higher than that of firms not run by young people (CCIT, 2021). According to the general census of enterprises in Togo, only 36.7% of sole proprietorships and companies have access to technology in running their activities.

The most relevant infrastructural factors of the digital economy are digital technologies related to the use of digital resources (technologies, tools, applications, and algorithms), which enable digital assets to be found, analyzed, created, shared, and used efficiently in an IT environment (Kahrović & Avdović, 2021). Digital technologies can fall under two groups or, more specifically, two categories: primary and secondary technologies. In recent years, Primary digital technologies that have transformed the global economy into a digital economy are mobile, social networks, cloud computing, the Internet of Things, and Big Data analysis (Rogers, 2016). Frequently used secondary digital technologies include 3D printers, robotics, drones, mobile technologies, and artificial intelligence. These digital technologies represent converging forces of digital disruption likely to significantly influence the changes about to take place in the market. These forces are innovative and revolutionary in their own right, but when combined, they radically transform society and enterprises, eliminate old ways of doing business, and create new market leaders (Schwertner, 2017).

This research, therefore, aims to determine the extent to which the above technologies are used by Togolese enterprises, as well as to analyze the impact of primary digital technologies on their performance. The current level of adoption and usage of technological innovations in companies is comparatively low, primarily due to various factors. This limited adoption also hampers research in this area. Therefore, the existing research gaps primarily revolve around the development, adoption, and utilization of digital technology, specifically the digitization of businesses. Nevertheless, this study extends its focus to the challenge of evaluating the impact of business digitization on the performance of Small and Medium-sized Enterprises (SMEs) in Togo. It is evident that businesses were selected as the primary research domain not only to address the gaps in existing literature but also due to their pivotal role in the Togolese economy. Previous works mainly focused on the key elements of digital transformation and the forces that drive such digital transformation (Park et al., 2015). There is an urgent need to analyze the outcomes of companies' digital transformation. Therefore, compared to the existing literature, the contributions of this article are twofold. First, based on company data, this article fills the gap in the literature in Togo, thus providing valuable micro-level complements to the analyses of the impacts of digitalization. Secondly, this study examines the different levels of digital transformation that impact enterprises' performance.

The rest of this article is structured as follows: The next section presents the literature review. Then, the research methodology is presented, followed by the results and discussion. The final section presents the conclusion and policy implications.

2. Literature Review

This literature review explores the various dimensions of digitalization's effect on enterprises' performance. Digitalization, or digital transformation, emerged in recent decades as a major phenomenon in the business world. It covers the increasing adoption and integration of digital technologies into all enterprise operations and management aspects. This transformation has generated considerable interest in its impact on enterprise performance.

Digitization is associated with some potential benefits for enterprises, including improved operational efficiency. Indeed, digitalization leads to increased process automation, reduced transaction costs, and better resource management, thus contributing to the overall improvement in the operational performance of companies (Brynjolfsson & McAfee, 2014; Sircar & Choi, 2009; Tambe & Hitt, 2014). Kahrović and Avdović (2021) analyzed the impact of digital technologies on enterprise performance in Serbia and showed that digital technologies significantly impact enterprise performance. Martínez-Caro et al. (2020) study the effect of digital technologies on enterprises' performance, highlighting the role of digital organizational culture. Based on a structural model, their results have revealed that digital technologies improve companies' organizational and financial performance through new services and working methods within value networks. The result confirms a wave of empirical works highlighting the impact of digitalization on company performance through organizational culture (Dubey et al., 2019; Richards et al., 2019; Vesselkov et al., 2018).

The impact of digitalization on productivity gains is increasingly recognized. Digitalization improves enterprises' productivity by streamlining processes, strengthening collaboration, extending commercial reach, facilitating innovation, and increasing responsiveness to market changes. However, its successful implementation requires the availability of digital skills and the quality of technological infrastructures. Anderton et al. (2023) analyze the effect of digitalization on an enterprise's productivity based on a panel of European companies. Their results suggest that the one with a higher average share of investment in digital technologies shows faster growth in total factor productivity for two identical companies. These results are in line with those obtained by Brynjolfsson et al. (2008), Cette et al. (2018), and Gal et al. (2019). Meher et al. (2021) have shown that digitalization through improved payment systems, enterprise expenditure management, timesaving, and control over embezzlement or theft contribute to the growth of small and medium enterprises in India.

Digital technologies have sparked a particular revolution in marketing communication and product distribution. More specifically, the emergence of digital marketing channels has paved the way for direct communication between buyers and sellers (Scuotto et al., 2017). Digitalization offers opportunities for increased targeting and customization through data collection and analysis. Companies can use this information to understand their customers better and adapt their marketing strategies accordingly, increasing the relevance of their offers and improving customer experience. Better still, digitalization has opened up new channels of communication and promotion. Social media, e-mail marketing campaigns, online advertising, and websites enable companies to reach a broader and more diverse audience. Such increased visibility enhances brand awareness and eases the creation of closer relationships with customers. The correlation between marketing and technology was reviewed by several researchers, who confirmed the positive effects of digitalization and the internet, as pointed out by Kannan (2017). The relationship between digitalization and marketing performance has been demonstrated by many researchers, including Bolos et al. (2016) and Brodie et al. (2007).

Digital transformation is not just limited to internal processes. Digitalization has transformed markets by significantly reducing transaction barriers (Chen, 2020). Thanks to increased access to information, consumers and enterprises are better informed about the products and options available. As a result, modern enterprises must adapt to customer expectations and digital consumption models. Online platforms have eliminated traditional intermediaries, simplified distribution and enabling a more direct relationship between producers and consumers. Westerman et al. (2014) highlights the importance of customer experience in the digital context. Better interaction with customers through digital channels can strengthen loyalty and increase overall satisfaction, thus having a positive impact on performance. Digitalization can also change competitive dynamics, forcing companies to rethink their enterprise models. Companies that successfully innovate using new technologies can create sustainable competitive advantages, while those that fail to adapt risk being left behind (Ciasullo & Lim, 2022).

2. Materials and Methods

2.1. Theoretical Framework

The decision to adopt digital technologies is dichotomous, such that $D_i = 1$ if company i adopts digital technologies and $D_i = 0$ if it does not. Companies choose to adopt these services when the expected utility of their use (U_{iD}) is greater than the utility of not using them(U_{iN})so that $U_{iD} > U_{iN}$. The difference between the utility of adopting and not adopting digital technology can be referred to as a latent variable. Z^*such as $Z^* = [(U_{iD}) - (U_{iN}) > 0]$. Z^* being a latent variable, it is not observable (Cameron & Trivedi, 2005). However, it can be expressed in terms of observed variables as follows:

$$Z_i^* = \beta X_i + \varepsilon_i, \qquad D_i = 1[Z_i^* > 0] \tag{1}$$

Where β is a vector of parameters to be estimated, Xi is a vector of characteristics of the companies and their environment, and ε_i is an error term assumed to be normally distributed.

The probability of households adopting digital technologies can be expressed as follows:

$$\Pr(D_i = 1|X_i) = \Pr(Z_i^* > 0) = \Pr(\beta X_i + \varepsilon_i > 0) = \Pr(-\varepsilon_i < \beta X_i) = F(\beta X_i) \tag{2}$$

Where F is the cumulative distribution function of $-\varepsilon_i$ (Cameron & Trivedi, 2005). Depending on the assumptions regarding the functional form of Fprobit or logit, models can be used to model the determinants of digital technology adoption.

2.2. Impact Modelling

Digital technologies are expected to affect firm productivity and revenue. Therefore, the relationship between the adoption decision and outcome variables can be examined by using a simple model. In this model, a risk-neutral firm aims to maximize its revenue while operating in a competitive product and input market.

The firm operates with a single production function, denoted as $Q(W, X)$, where W represents a vector of variable inputs, and X represents firm characteristics. The production function is assumed to be continuous, strictly increasing, and strictly quasi-concave. The firm's turnover function can be represented as follows:

$$\max Y = PQ(W,X) - IW, \ \ subject\ to\ Q(W,X) \geq Q \tag{3}$$

Where Y is the turnover, P is the market price of output, and Q is the expected quantity of output of the firm's goods. I is a column vector of input prices, and W is a vector of input quantities. In addition, the turnover function can also be expressed as a function of digital technology adoption D as well as product and market input prices and firm characteristics:

$$Y = f(D, I, P, X) \quad (4)$$

Equation (3) can therefore be rewritten as follows:

$$\max Y(D, I, P, X) = PQ(W, X) - IW, \ subject\ to\ Q(W, X) \geq Q \quad (5)$$

By applying Hotelling's lemma to input and output prices, output supply and input demand can be obtained by simple differentiation so that:

$$\frac{dY}{dI} = -W = W(D, I, P, X) \quad (6)$$

$$\frac{dY}{dP} = -Q = Q(D, I, P, X) \quad (7)$$

Equations (6) and (7) show that a firm's input demand and output and turnover levels are influenced by the decision to adopt digital technologies, input and output prices, and firm characteristics.

A common approach to estimating these relationships and the effect of the use of digital technologies would be a set of regression models of the following type:

$$L_i = \alpha_0 + \alpha_1 D_i + \alpha_2 X_i + \alpha_3 C + \mu_i \quad (8)$$

Where Li is the outcome variable of interest, C is a vector of relevant controls, including input and output prices, and μi is a random error term.

To assess how digital technologies are associated with outcome variables, the coefficient α_1 is particularly interesting. However, estimating Eq (8) is likely to generate biased estimates of α_1 because firms have self-selected to adopt digital services, which may mean that Di is correlated with the error term. We use propensity score matching (PSM) and several robustness checks as an alternative.

2.3. Propensity Score Matching

An important issue associated with the use of impact evaluation methods is the specification of the average treatment effect (Di) defined by Rubin (1974) as :

$$\Delta_i = Y_i^A - Y_i^N \quad (9)$$

Where Y_i^A and Y_i^N are the turnover of enterprise i that adopts digital technology and that of the company that does not. Estimating the impact from equation (9) is problematic because Y_i^A or Y_i^N is normally observed, but only for some companies. Thus, what is normally observed can be expressed as follows:

$$Y_i = D_i Y_{iA} + (1 - D_i) Y_{iN} \text{ with } D = 0,1 \quad (10)$$

By designating P as the probability of observing a company with $D = 1$the average effet of the treatment, τ, can be specified as follows:

$$\tau = P[E(Y_A|D = 1) - E(Y_N|D = 1)] + (1 - P)[E(Y_A|D = 0) - E(Y_N|D = 0)], \quad (11)$$

The propensity score, representing the probability of assignment to the treatment based on the pre-treatment variables, is granted using the following formula:

$$p(X) = \Pr[D = 1|X] = \mathrm{E}[D|X], \ p(X) = F\{h(X_i)\} \quad (12)$$

Where $F\{.\}$ maybe a cumulative normal or logistic distribution function.

Once the propensity score has been calculated, the Average Treatment Effect (ATT) of firms adopting digital technology can be estimated as follows:

$$ATT = E[E\{Y_{iA}|D = 1, p(X)\} - E\{Y_{iN}|D = 0, p(X)\}|D = 1] \quad (13)$$

Estimating the effects of treatment based on the propensity score requires two assumptions. The first is the AIC mentioned above. Second, digital technology users' average treatment effect (ATT) is only defined in the common support region. This assumption ensures that firms with the same X characteristics are positively likely to be digital technology users or non-users (Heckman et al., 1997).

The most commonly used approaches for matching users and non-users are the Nearest Neighbor Method (NNM) and the Kernel-based Method (KBM). The nearest neighbor method involves first matching each treated individual with the control individual whose propensity score is closest. The second step is to calculate the differences between each pair of matched units and the ATT as the average of all these differences. In the kernel-based method, all treated subjects are matched to a weighted average of all controls, using weights that are inversely proportional to the distance between the propensity scores of the treated and control groups.

2.4. Data and Sources

Data analyzed in this study come from the General Enterprises Census (RGE). The census was conducted in Togo in 2017-2018 by the National Institute of Statistics and Economic and Demographic Studies (INSEED). The nationwide census targeted all economic units in the formal and informal sectors. "Economic Unit" refers to any commercial activity on enterprise premises. The initial sample

consists of 2447 observations, categorized based on the turnover criteria used by INSEED, including small and medium-sized enterprises (SMEs) and large companies. Data collected relate to the characteristics of the companies, the characteristics of the employers and employees, and the areas of activity and the use of digital technology in the performance of the companies' activities.

Table 2. Recommended font sizes

Variables	Adopting Digital Technology	No Adoption of Digital Technology	Propensity Score Logit	
			Coefficients	(Z-values)
Manager's sex				
Female	8.22	91.78	-	-
Male	42.38	57.62	.0083	(0.96)
Age of the unit	-	-	-0.006	(-0.85)
0 - 4 years	33.92	66.08	-	-
5 - 9 years	40.05	59.95	-	-
10 - 19 years	43.32	56.68	-	-
20 - 29 years old	50.74	49.26	-	-
40 and 40+	52.38	47.62	-	-
Number of employees	45.66	21.56	0.072	(1.05)
Formal (Ref: No)	27.42	72.58	0.269*	(1.96)
Ownership 2ndary establishments	26.19	73.81	-0.445	(-1.18)
Nationality (Foreign ref)	11.02	88.98	0.226	(1.11)
Level of education (Ref: None)	0.97	99.03	-	-
Primary	18.28	81.72	0.032	(0.05)
Secondary 1	16.32	83.68	-0.014	(-0.02)
Secondary 2	27.23	72.77	-0.184	(-0.29)
Higher	55.69	44.31	0.150**	(1.98)
Uses computer	56.9	43.1	1.417***	(4.45)
Connection type (Ref: None)	0	100	-	-
Fixed	4.11	95.89	2.022***	(8.44)
Mobile	65.96	34.04	2.189***	(8.13)
Fixed and mobile	57.95	42.05	2.427***	(7.85)
R&D activity	75	25	1.140**	(2.36)
Number of working days	5.71	5.95	-0.153	(-1.42)
Region (Ref: Grand Lomé)	36.87	73.13		
Maritime	15.15	84.85	-1.388**	(-2.46)
Plateaux	23.71	76.29	-0.564	(-1.50)
Central	14.55	85.45	-0.841	(-1.32)
Kara	16.25	83.75	-1.014**	(-2.14)
Savanes	24.29	65.71	-0.112	(-0.21)
_cons			-2.305***	(-2.60)
SMEs	23.83	76.17		
Large companies	39.88	60.12		
Import-export	57.2	42.8		
r2			0.3215	
Ll			-541.23	
P			0.000	
N			1159.000	

2.5. Variables Definition and Measurement

The outcome variable in this research is the company's turnover. Based on the work of Bravo-Ureta et al. (2006), turnover is the value of total production or the sum of the sales (goods or services) made during an accounting period. Production used for domestic consumption was not considered to assess the entrepreneurial capacity of agricultural producers. This income is assumed to improve with the adoption of digital technologies.

The treatment variable is the adoption or use of digital technologies by enterprises. It is a binary variable whose take

value is 1 if the company uses digital technology to carry out its activities. The value is 0 if the company does not use digital technology in carrying out its activities.

The control variables are the age of the enterprise unit measured in years, the number of employees in the enterprise, the formal or informal status of the enterprise, whether the enterprise has a secondary branch, the nationality of the manager (Togolese or foreign), the manager's level of education, the type of connection used by the enterprises (fixed, mobile or a combination of the two), the region where the enterprises are established and the use of research and development in the enterprises' activities.

3. Results

3.1. Descriptive Statistics and Logit Regression

Table 1 presents the descriptive statistics of the characteristics of companies using or not using digital technologies in their activities in columns (1) and (2), respectively. In addition, column (3) presents the logit regression results of firms' adoption of digital technology. The oldest companies are more likely to use digital technology in their activities. In addition, the proportion of large enterprises using digital technology is higher than that of small and medium-sized enterprises. Only 26.19% of enterprises with secondary establishments use digital technology. In terms of the manager's level of education, companies with highly educated managers are the ones that use digital technologies the most.

Furthermore, companies with a mobile connection are more likely to use digital technology to do enterprises. According to the logit regression, there is a high probability of using digital technology in companies with fixed and mobile connections within their structure. However, this probability is higher for those with a mobile connection.

Most companies that carry out research and development activities adopt digital technology. This result is reinforced by the logit regression, which reveals that the probability of adopting digital technology is higher among companies with research and development activities than those without. Regarding the companies' location, it has been observed that the number of companies using digital technology is higher in Lome than in other regions. On the other hand, the logit regression shows that the probability of using digital technology is lower in the other regions of Togo than in the Greater Lomé region.

3.2. Distribution of Propensity Scores

Figure 1A shows the kernel density curves of the estimated propensity scores for the entire treatment group (digital technology use) and the control group (no digital technology use). The figures show that the distribution for the technology user group is shifted to the right, indicating that digital technology firms have higher propensity scores than those in the control group. Therefore, companies in the treatment group are more likely to use digital technology than those in the control group. The two groups must be balanced because they differ on the basic covariates.

The results of the balancing procedure show that the kernel density diagrams of the groups of companies that use digital technology and those that do not overlap almost perfectly (Figure 1B). These figures show that the two groups have been balanced based on propensity scores.

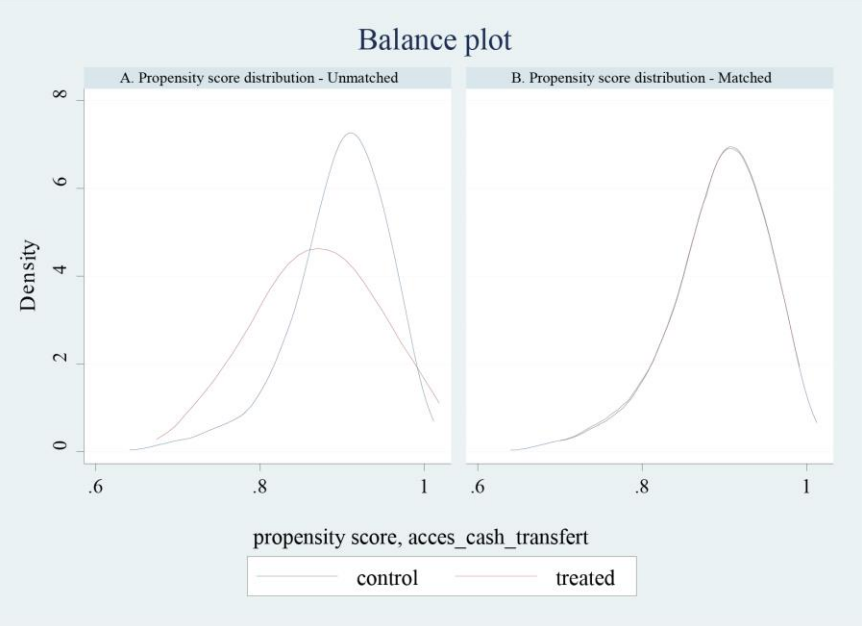

Fig. 2 Distribution of propensity scores

3.3. Covariates Balance

The aim at this stage is to ensure that we achieve balance for each of the basic covariates used in calculating propensity scores when balancing the groups. Figure 2 presents a dot plot comparing the standardized mean difference between the t and c conditions in the full sample for the key covariates before (dark filled circles) and after (cross) matching on the propensity scores. Standardized differences in the selected covariates are evident in the sample studied. After matching, the standardized mean differences are close to zero. These results demonstrate that achieving balance between the treatment and control groups across all covariates is possible.

3.4. Impact of the Use of Digital Technology on Turnover

The results in Table 2 show the estimated ATTs on company turnover, particularly on SMEs, large companies, and those involved in foreign trade. Considering all enterprises together, it should be noted that using digital technology in their activities contributes to an average improvement in enterprise turnover of more than 50% compared with enterprises that do not use digital technology. The results also show that using digital technology by small and medium-sized enterprises helps them improve their performance, i.e., increasing their turnover by an average of around 29% compared with those who do not use this technology.

Large companies' results show that using digital technology enables them to increase their turnover by around 13% compared with those not using digital technology. In the case of companies involved in foreign trade, the results show that by adopting digital technology in the running of their enterprises, they contribute to an increase in turnover of around 50%.

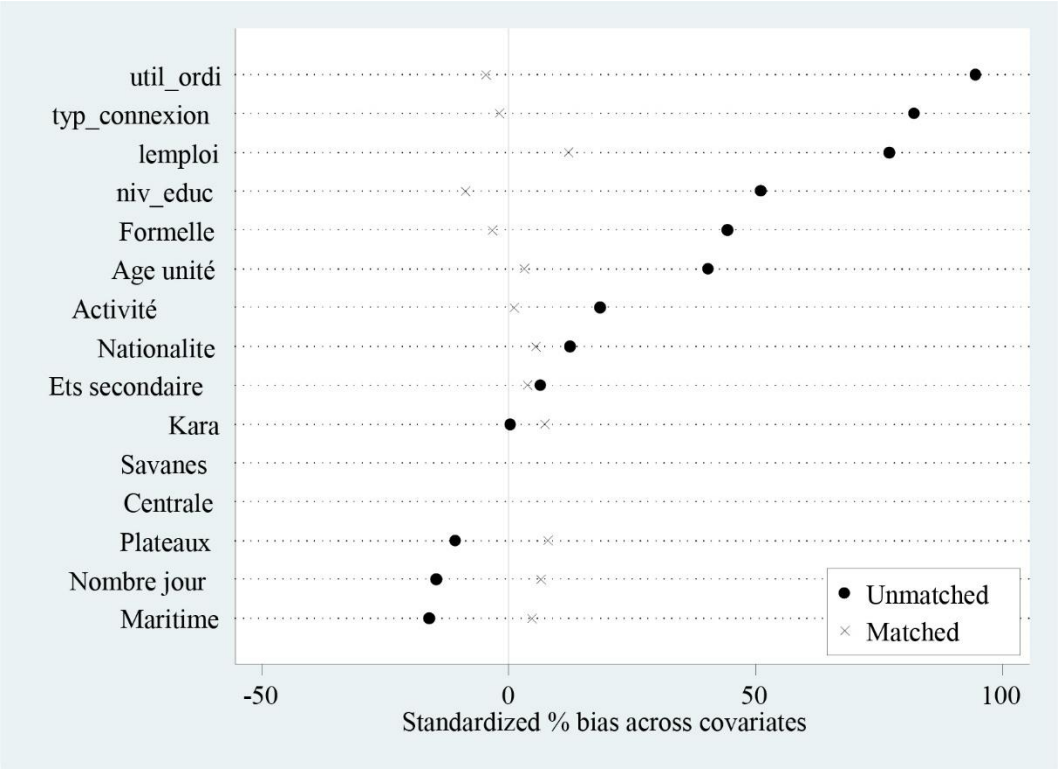

Fig. 2 Dot plot showing the success of propensity score matching

Table 2. Effect of the use of digital technology on turnover

Characteristics	Effects			
	Kernel		Radius	
All	0.537***	(6.88)	0.5140**	(1.98)
SMES	0.289***	(6.03)	0.2952***	(6.12)
Large companies	0.126*	(1.87)	0.1336	(0.90)
Export_imprt	0.51**	(2.20)	0.5590***	(2.45)

4. Discussion

This study was conducted to determine the relationship between the use of digital technology and enterprise performance in Togo. The results of this research establish that the level of higher education, the performance of research and development activities, and the status of the enterprises are positively correlated with the use of digital technology in enterprises in Togo.

These results can be explained that using digital technologies requires minimal cognitive and technological skills. These results confirm previous studies (Hernández et al., 2020; Shafi et al., 2020; Trinugroho et al., 2022). These authors have shown that company-related factors, such as higher education and the availability of fast Internet access, are important factors that increase the likelihood of micro and small companies adopting digital technology.

The results also show that digital technology improves the performance of enterprises, especially for those involved in cross-border activities. These results are in line with those of Cirillo et al. (2023), Seclen-Luna et al. (2022), and Zhai et al. (2022). Indeed, the adoption of digital technologies by the company for running its activities modifies its communication, sales, and information methods, allowing the company to acquire a solid competitive advantage in production and other work streams.

Digital technologies are transforming organizational systems, controlling production processes, and even adapting the production of goods to the needs of local, regional, and global customers. As a result, they enable companies to reorganize themselves and introduce major changes in all their functional areas. Although companies do not follow a set trajectory in embracing digital technologies, as these technologies evolve, they generally adopt those most consistent with their objectives and strategies.

5. Conclusion

From a theoretical point of view, this article not only contributes to the debate on technology adoption by reinforcing the arguments that digital technologies can affect company performance but also that this relationship can differ depending on the size of the company and the sector of activity. In that regard, this study empirically shows a positive relationship between using digital technologies and company turnover. The empirical analysis is based on Togolese companies from which data was collected by INSEED in 2018. The results showed that there are differences in terms of impact in the adoption of digital technologies between enterprise categories. As adopting digital technologies is positively linked to turnover across all enterprises, it has a more significant impact on SMEs than on large enterprises. It should also be noted that the impact is greater in companies involved in foreign trade. These results suggest some policy implications.

The fundamental concept of digital technology lies in its "interconnectivity." Serving as a novel technological infrastructure, it has become an essential component of society and a necessary requirement for businesses to engage in and expand their foreign trade activities. Consequently, there is an urgent need to sustain the progress observed in recent years regarding reforms aimed at enhancing the business environment. One significant aspect of these reforms is the digitalization of public services, constituting a key element within Axis 3 of the government's roadmap.

Moreover, it is crucial for businesses to actively strive for improved levels of digital transformation and fully leverage the potential of digital technology. Doing so can foster enhanced productivity and more efficient management, resulting in a simultaneous reduction of operational costs and internal inefficiencies.

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