Digital transformation of accounting practices by SMEs in the city of Bukavu in the Democratic Republic of the Congo

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Abstract

Purpose – The objective of this study is to document the digital accounting software and platforms used by SMEs in Bukavu, analyze the factors (technical skills, financial resources, institutional support, and regulation) influencing their adoption, and propose optimization strategies for sustainable integration adapted to the local socio-economic and technological context.
Design/methodology/approach – Drawing on the UTAUT model, a conceptual framework was developed and data from a survey of SME managers were econometrically analyzed. Principal component analysis and the use of Partial Least Squares enabled the testing of the hypotheses and the answering of the research question.
Findings – Descriptive analyses revealed that most SMEs adopt a basic form of digital accounting. The majority of them use standard software such as Excel and Access. Explanatory analyses based on the PLS method indicate that all studied variables significantly contribute to the digitalization of accounting in Bukavu. The PLS algorithm test highlights the model's strong predictive capacity, confirming its validity and adequacy to the data.
Originality/value – In addition to the methodological approach based on structural equations, which is appropriate for analysing relationships between latent variables, this study stands out for its focus on SMEs and its particular emphasis on the digitalization of accounting in a region where digital adoption remains low.

Keywords– Digital transformation, accounting practices, SMEs, City of Bukavu, and DRC.
Paper type – Research Paper

Transformation digitale des pratiques comptables par les PMEs de la ville de Bukavu en RDC

Résumé

Objectif – L'objectif de cette étude est de recenser les logiciels et plateformes de comptabilité numérique utilisés par les PME de Bukavu, analyser les facteurs (compétences techniques, ressources financières, soutien institutionnel et réglementation) influençant leur adoption, et formuler des stratégies d'optimisation pour une intégration pérenne, adaptée au contexte socio-économique et technologique local.

Approche méthodologique – En s'inspirant du modèle UTAUT, un cadre conceptuel a été élaboré et des données issues d'une enquête auprès de responsables de PME ont été économétriquement analysées. L'analyse en composantes principales et l'utilisation des Moindres Carrés Partiels ont permis de tester les hypothèses et de répondre à la question de recherche.

Résultats – Les analyses descriptives ont montré que la plupart des PME adoptent une comptabilité digitalisée basique. La majorité d'entre elles utilisent des logiciels standards tels qu'Excel et Access. Les analyses explicatives basées sur la méthode PLS indiquent que l'ensemble des variables étudiées contribue largement à la digitalisation de la comptabilité dans la ville de Bukavu. Le test d'algorithme PLS met en évidence une forte capacité prédictive du modèle, confirmant ainsi sa validité et son adéquation aux données.

Originalité/pertinence : En plus de l'approche méthodologique base sur les équations structurelles, une approche appropriée pour analyser les relations entre les variables latentes, cette étude se distingue par son focus sur les PME et par son accent particulier sur la digitalisation de la comptabilité par ses entreprises dans une région où la digitalisation reste encore faible.

Mot clés : Transformation digitale, Pratiques comptables, PME, ville de Bukavu et RDC

Type de document – Article de recherche

1. Introduction

Digital transformation is steadily advancing and has become a cornerstone of modern life. The Digital 2023 report reveals that approximately 5.16 billion people around the world use the internet, underscoring the profound impact of digital technology on both personal and professional spheres. The digital revolution is reshaping the fundamental aspects of corporate work: collaboration methods, time management, and task organization are being restructured, rendering traditional practices obsolete (Usai et al., 2021). To adapt, companies are increasingly integrating digital technologies to manage complex tasks and boost operational efficiency (Vial, 2019).

In 2010, 62.7% of companies worldwide employed at least ten staff members with broadband access. Today, all organizations—especially SMEs—utilize the Internet on a daily basis (Neamţu et al., 2019). Digital transformation is disrupting numerous sectors, including accounting (Fijabi & Lasisi, 2023). In the European Union, the Digital Economy and Society Index (DESI) indicates that 75% of companies have adopted digital tools in accounting, such as cloud computing, big data, and artificial intelligence. Digitization facilitates process automation, enhances data accuracy, and supports the production of real-time reports, while also presenting challenges regarding security, training, and costs. Addressing these issues is essential for the successful implementation of digital systems (Perdana & Wang, 2024).

In Sub-Saharan Africa, significant progress has been made toward digital transformation over the past decade. Hundreds of millions of people now have access to the Internet and use various digital services productively. Between 2016 and 2021, the number of Internet users increased by 115% (African Union Commission & OECD, 2021). The African economy, predominantly composed of expanding small businesses, indicates that despite these SMEs maintaining accounting records, they are not always automated or handled by a professional accountant (Taura et al., 2019). This is due to low technological capacity, the absence of support programs, and insufficient technological infrastructure to facilitate the adoption of digital tools in accounting operations (Virtanen & Kock, 2022). Several studies have analyzed the adoption of ICT in businesses, focusing mainly on the types of software used.

Otete (2020) found in a study on the adoption of audit software by small and medium-sized enterprises in East Africa that only one in four firms (25%) had adopted audit software. The four most common audit software tools were CaseWare, Myaudit, PCAS, and DraftWorxTM. The three main advantages of using audit software were improved audit quality, efficiency of audit projects, and compliance of accounts with IFRS. Additionally, Mukamba et al. (2022) conducted a study on the factors influencing the adoption of financial ICT in SMEs in Bukavu. They found that the level of financial ICT adoption by Bukavu SMEs was 73.4%, driven by organizational culture, competitive pressure, relationships with partners, and lack of resources. The adoption rate of audit software in the East is significantly lower than that of financial ICT in general. This suggests that while Bukavu SMEs are open to technologies, the specific adoption of audit and accounting tools faces particular obstacles. Kenza & Dounia (2024) also demonstrated in a study on the influence of ICT on financial auditing that the integration of new technologies into financial auditing represents a significant advancement. They showed that automating tasks such as data entry and routine checks reduces the time spent on manual processes, allowing auditors to focus on more complex analyses. This automation also contributes to a significant acceleration of audits, making processes faster compared to traditional methods. In this regard, 81.3% of respondents confirmed that financial audits conducted using new technologies are faster than those performed traditionally.

When examining the literature on ICT adoption in businesses, it is evident that very few studies have focused on the digitization of accounting. Most research has directed attention toward financial

auditing without considering accounting in general. This study, however, focuses on SMEs in Bukavu, a region often overlooked in terms of ICT use and adoption. By focusing on this geographical area, the study can reveal unique challenges and opportunities related to the adoption of digital accounting. It becomes relevant to explore how SMEs manage to digitize their accounting practices and overcome specific obstacles related to their context, including lack of resources and inefficiencies in their organizational structures. Therefore, this study aims to analyze the adoption of digital accounting in Bukavu SMEs. In other words, it evaluates the perceived benefits of digital accounting adoption by Bukavu SMEs (time savings, error reduction, productivity improvement, etc.). It also assesses the impact of constraints (costs, lack of skills, etc.) on the decision to digitize accounting. Finally, it analyses the role of contextual and sociodemographic factors (economic environment, Internet access, institutional support, ICT experience, etc.) in the process of adopting digital accounting. The following sections present the literature review (2), methodological approaches (3), presentation of results (4), discussion of results (5), contributions and limitations of the study (6), and finally, the conclusion.

2. Literature Review

This second point presents a synthesis of the results of previous studies on the digitization of accounting in businesses. These results help to identify the originality of this study and to highlight the gaps that need to be addressed.

2.1. Literature Review

This study is inspired by the UTAUT model because this model integrates the determinants of eight powerful models explaining adoption and has proven to be more effective than the eight individual adjusted models (Abbad, 2021). Furthermore, it provides a robust theoretical framework for understanding the factors that influence the adoption and use of new technologies in a consumer context, as is the case in this study. Upon examining the literature, it is observed that several researchers have analysed the effects of digitization in businesses, but in diverse ways Letaifa and Salem (2023) demonstrated, through a qualitative analysis based on telephone surveys and online questionnaires, that the digitalization of accounting, as examined in Tunisia, represents a major technological advancement that transformed the operations of accounting firms during the COVID-19 crisis. It served as a lifeline, helping clients and companies overcome the crisis, while also presenting both advantages and disadvantages.

Similarly, Otete (2020) found, in a study on the adoption of audit software by SMEs in East Africa, that only one in four firms (25%) had adopted audit software. He further showed that four audit software programs were the most common (CaseWare, Myaudit, PCAS, and DraftWorxTM). Users reported during surveys that the software improved audit quality, increased the efficiency of audit projects, and ensured compliance with IFRS. They also indicated that the main challenges related to the use of audit software included, among others, the high cost of the software, the lack of timely support from suppliers, and the high cost of internet connectivity. Unlike this study, Otete (2020) did not delve into analyses regarding the influence or absence of audit software on the competitiveness of businesses. Moreover, the sample in his study did not account for other firms that responded to determine this influence. The study we are conducting brings several original elements as it focuses on a more restricted geographical context, namely the city of Bukavu. This spatial delimitation allows for an in-depth analysis of local specificities and contextual factors specific to this city. The study also broadens its scope of investigation by focusing on all SMEs in this city. Otete (2020), on the other hand, focused on a single audit firm. Considering all SMEs in the city of Bukavu in this study allows for a better understanding of the challenges of digitization in a broader context. Finally, this study employs more advanced statistical tools (structural equations and principal component analyses) to identify the complex relationships between variables and construct a more robust explanatory model. Fulop and

Magdas (2022) examined the importance of digitalization in corporate accounting. They note that the market offers a range of digital options, making it essential to choose the solution best suited to the specific needs of each organization. Furthermore, their study indicates that during the COVID-19 period, with its associated restrictions, digital working methods have established themselves as a central element, including within the field of accounting.

Anitha & Kumar, (2023), in a study on the analytical pedagogy of the benefits and challenges of accounting digitization in modern businesses in Kerala, found that out of 140 accounting experts surveyed, the majority believed that accounting digitization had been adopted in their organizations. They also found that the variables were positively correlated with each other. To obtain these results, they used descriptive analysis and Spearman rank correlation. These authors targeted accounting experts, while this study targets SME leaders. This allows for a more strategic viewpoint on the decisions regarding the adoption of accounting digitization and seeks to identify the factors that determine this adoption. However, these authors aim to determine the consequences of digitization on accounting practices.

Kholid et al. (2020) examined the factors influencing micro, small, and medium enterprises (MSMEs) in Indonesia to adopt a mobile accounting application for recording business transactions and preparing financial reports. Using the UTAUT model — with the addition of two supplementary variables — they confirmed that effort expectancy, social influence, and perceived trust have a positive and significant effect on the intention to adopt the application.

At the same time, Regragui (2022), in an empirical study on the factors influencing the adoption of digital tools by Moroccan companies, found, through data collected from 270 businesses and factor analyses, that Moroccan companies place more importance on environmental factors to explain the adoption of digital tools. This means that companies with many partners (clients-suppliers) and high rivalry are more likely to adopt these tools. Generally, he showed that the adoption of digital tools is influenced by organizational factors. Companies with IT infrastructure compatible with the technology they plan to adopt are more likely to adopt these tools. This study has methodological limitations for the analysis of declarative data. Its model did not integrate control variables (industry, size, age of the company). Unlike the previous study, this one incorporates control variables as moderating variables in the relationship between independent variables and the dependent variable. On the other hand, Al-Hattami & Almaqtari (2023) conducted a study on the factors determining the intention to maintain digital accounting systems in SMEs. From a sample of 318 SMEs and using structural equations, they found that system quality, information quality, perceived usefulness, perceived ease of use, and satisfaction are significant factors in the continued use of ICU-DAS. These authors did not examine the effect of demographic variables, whereas a thorough analysis of these variables could provide additional insights. This is why this study integrates demographic variables into the model. Additionally, the analysis conducted by these authors is that of post-adoption, while the analyses in this study begin with the adoption phase. These two studies differ because the factors influencing adoption are not strictly the same as those influencing current use (post-adoption phase).

Similarly, AlNasrallah & Saleem (2022), when analysing the determinants of accounting digitization in an emerging market in Saudi Arabia, found, from a survey of 365 accounting professionals, that perceived ease of use has a direct and indirect effect on accounting digitization. These effects manifest through perceived usefulness on the intention to use electronic accounting. They also found that job relevance and organizational support moderate perceived usefulness and the intention to use electronic accounting. Although this study used quantitative methods (PLS-SEM), the present study pays particular attention to the analysis of the reliability and validity of the measures used. The use of principal component analysis ensures the internal consistency of the concepts studied. By focusing on SMEs, this study explores a category of businesses often overlooked in the literature, despite their

importance in economies. Petchenko et al. (2023) analyzed current trends in the introduction of digitization in accounting in Ukraine. Based on syntheses of articles drawn from the literature review, they found that cloud technologies, software, blockchain, Big Data, and other modern technologies present significant advantages over traditional accounting methods. They showed that these technologies increase the speed of accountants and support routine tasks. However, they noted that the Ukrainian technology sector is not very protected against cybercriminals. This study differs from the previous one in that it does not focus on the results of other studies but uses appropriate statistical tools to analyze the adoption of accounting digitization in SMEs.

2.1. Theory on the UTAUT Model

The theory on the UTAUT model (Unified Theory of Acceptance and Use of Technology) is well designed to provide an explanation of users' intentions to use a technology. UTAUT is a well-established model for explaining user intention behavior regarding the use of information systems (Abbad, 2021). This theory combines the Innovation Diffusion Theory (IDT), the Theory of Reasoned Action (TRA), the Theory of Planned Behavior (TPB), Social Cognitive Theory, Perceived Credibility (PC), Motivational Models, Technology Acceptance Models (TAM), and a hybrid model that combines constructs from TPB and TAM (AlAwadhi & Morris, 2008). A review of the literature shows that several researchers have used this model to analyze human behavior in online learning, electronic management, online banking, and many other fields. This theory identifies four factors influencing technology use, including performance expectancy, hedonic motivation, social influence, and facilitating conditions. It is applied in various fields and scientific disciplines. However, inappropriate use of this theory can lead to negative consequences, necessitating intelligence and rigorous application. In its application, several approaches and theories have been proposed to determine the factors positively or negatively influencing integration, focusing on two variables: intention to use and actual use. The first version of this theory (UTAUT1) suggests that the current use of a technology is determined by behavioral intention. With this version, the possibility of adopting a technology is influenced by four key factors: performance expectancy, effort expectancy, social influence, and facilitating conditions. Additionally, age, gender, experience, and user voluntariness serve as moderating predictors (Venkatesh et al., 2003c). Subsequently, this theory has evolved into a new version. In its second version (UTAUT2), Venkatesh et al. (2012) added three additional factors: hedonic motivation (personal satisfaction), price value (the perceived utility and value of the technology relative to its cost), and habits (automated and repeated behaviors exhibited by users).

UTAUT has been extensively studied, and current results agree on the reliability of the tool for understanding integration mechanisms and predicting behavioral intentions (Chong et al., 2022; Dwivedi et al., 2011). In 2022, this second version was revised by adding factors of compatibility, education, innovation inclination, and costs. These factors represent current advancements in ongoing studies that merit further validation. The revised version incorporates moderating variables that interact with the presented factors and positively or negatively modify their influences. These include individual characteristics such as age, gender, and the client/employee quality of individuals, among others. Additionally, the culture of the country is an important factor that tends to either facilitate or hinder the integration of remote work tools. UTAUT has been used to analyze the acceptance and integration of technologies in various sectors such as healthcare (Chang & Lee, 2007), online administration (Gupta et al., 2024), ERP systems in schools (Chauhan & Jaiswal, 2016), business management (Ling Keong et al., 2012), mobile applications (Mütterlein et al., 2019), database usage by students (Yueh et al., 2015), and e-learning systems (Abbad, 2021). Many studies have also analyzed how banks adopt technology (Savić & Pešterac, 2019), but very few have utilized the UTAUT model. These studies have mainly focused on factors related to information technology or variables related to trust and risk in mobile money adoption (Aboobucker & Bao, 2018). Therefore, this study aims to fill this gap by establishing a modified UTAUT model that combines key factors from the UTAUT model, such as effort expectancy, social influence, and performance expectancy, with other factors outside

the UTAUT model, such as perceived security and perceived cost, to analyze the barriers to the adoption of digital financial services. Unlike previous studies on the adoption of financial technologies, this study focuses on the fact.

2.1. Development of Hypotheses and Theoretical Model

This study analyses the factors influencing the digitalization of accounting in SMEs. The choice, reflecting a preference for a solution that meets the needs and aspirations of consumers, is decisive. Digitalization involves digitizing accounting services through computer tools, web platforms, and specialized software, thereby simplifying operations.

2.1.1. Development of Hypotheses

Currently, business leaders and accounting department heads have two options for maintaining accounting within their organizations: manual accounting and automated (digitalized) accounting (Touri et al., 2022). Based on the theory of discrete individual choices, which describes an individual's choice behavior, it is posited that each individual always chooses the action they prefer compared to others (Billot & Thisse, 1995). Thus, in this study, the variable adoption of digital accounting is considered as the preference for digitalized accounting over manual accounting by SMEs in the city of Bukavu. This variable is qualitative as it expresses an attitude that is not directly measurable in numbers. Several methods exist to measure attitude in the context of consumption. We will use a measurement scale (ranging from very favorable, favorable, uncertain, unfavorable, to very unfavorable) as it allows us to know not only the direction but also the intensity of this attitude.

1. **Independent Variables**

As mentioned in point 2.2, this study draws inspiration from the UTAUT 2 model by Venkatesh et al. (2012), which includes seven explanatory variables for the adoption of technological innovations: expected performance, expected effort, social influence, facilitating conditions, hedonic motivation, price value, and habit. These variables are moderated by four other variables: gender, age, experience, and willingness to use (Venkatesh et al., 2012). After contextualizing this model for our study, we retained five variables from the UTAUT 2 model and integrated the perceived risk variable from the Bengrich & Alouane, (2023).

1.1. Expected Performance

It is defined as "the degree to which a person believes that using the system will help them attain gains in job performance" (Venkatesh et al., 2012). In this sense, expected performance is considered the benefits that users can derive from using the system. There is a positive and significant correlation between the benefits of accounting digitalization and the level of adoption of these technologies, as these tools have the power to transform traditional accounting practices by improving efficiency, accuracy, decision-making, and financial management (Anitha K. & Dinesh, 2023). A study conducted among accountants reveals that digitalization, due to its numerous advantages, facilitates the achievement of objectives for accounting firms. They can now work more easily and save valuable time (B. Savić & Pavlović, 2023). Other researchers studying the adoption of accounting digitalization by SMEs in Europe recommend that providers of emerging digital technologies improve the performance of their tools and ensure they meet the specific needs of SMEs. In this way, the adoption of digitalization will accelerate, as SME leaders will have the assurance that these technologies will improve their operations (Kwarteng et al., 2023). The results of this research demonstrate that the higher the performance of digital technologies in accounting, the more users tend to adopt them en masse. Therefore, we propose the following hypothesis:

H1: Expected performance would positively and significantly influence the adoption of digital accounting in SMEs in the city of Bukavu.

1.2. Expected Effort

It corresponds to "the degree of ease associated with using the system." In the theory of diffusion of innovations (IDT), it refers to the idea that if an innovation is perceived as very complex, it will be less adopted. In other words, innovations that are easy to use and perceived as less complex are more likely to be accepted and used (Maddux & Rogers, 1983). In the African context, the lack of skills and knowledge is one of the challenges of digital transformation. Digital technologies are not easy to use for both populations and SMEs (Begazo et al., 2023). Thus, we propose the following hypothesis:

H2: Expected effort would negatively and significantly influence the adoption of digital accounting in SMEs in the city of Bukavu.

This variable is moderated by the level of education and experience. Managers who are better educated and more experienced are more likely to adopt ICTs, as they can better reduce the degree of uncertainty and risk (Mukamba et al., 2022). Similarly, there is a greater effect on the intention to use technologies for individuals with limited experience (Venkatesh et al., 2012).

1.3. Perceived Risk

It represents "the possibility of incurring losses when purchasing or consuming a product, good, or service" (Bezes, 2011). Despite the importance of digitalization, several risks arise from this digitalization and the automation of business management, such as non-compliance risks and information loss risks (Teittinen et al., 2013). According to several studies, the higher the level of perceived risk, the more users tend to abandon the purchase or consumption of the product (Forsythe et al., 2006). The perceived risk variable is a multidimensional construct. However, for simplification purposes, we will retain a single dimension: functional risk, which is the probability that the purchased service is of poor quality or does not deliver the expected level of performance (Sridhar, 2019), as this dimension largely explains consumer intentions (Sara & Bengrich, 2023).

H3: Perceived risk would negatively and significantly influence the adoption of accounting digitalization in SMEs in the city of Bukavu.

1.4. Social Influence

It is "the degree to which a person perceives that important others believe they should use the new system." An individual's behavior is influenced by how others view them after using the technology (Venkatesh et al., 2003a). In Bukavu, social influence is one of the key variables in the intention to adopt digital financial services. When an entrepreneur sees their peers successfully adopting a new technology, they are more likely to follow their example (Mulungula Alain, 2024). We propose the following hypothesis:

H4: Social influence would positively and significantly influence the adoption of accounting digitalization in SMEs in the city of Bukavu.

This variable will be moderated by membership in entrepreneurial networks, as companies that are members of networks can adapt and be flexible in a constantly evolving technological environment (Herelli, 2010). Thus, the more an SME is part of entrepreneurial networks and incubator forums, the greater its chances of digitalizing its accounting.

1.5. Facilitating Conditions

These are defined as "the degree to which a person believes that an organizational and technical infrastructure exists to support the use of the system." In this study, facilitating conditions are not only internal to the company but also external, such as internet coverage and accounting regulations. Numerous studies on the adoption of accounting digitalization by SMEs in Europe indicate that facilitating conditions are significant predictors of the intention to adopt digitalization by SMEs. It is necessary for SMEs to establish adequate organizational and technical infrastructure to support the adoption of digitalization (Kwarteng et al., 2023). In the DRC, studies show the inadequacy of infrastructure, particularly in the areas of computing and energy, as well as the general lack of digital skills in the population, and notably high costs for internet access, computing devices, and digital financial transactions. In the DRC, especially in Bukavu a study found that convenience (as a facilitating condition) significantly reduces SMEs' intention to adopt digital financial services, contributing to low digital tool adoption (Mulungula Alain, 2024). Thus, we propose the following hypothesis:

H5: Facilitating conditions would negatively and significantly influence the adoption of digital accounting in SMEs in the city of Bukavu.

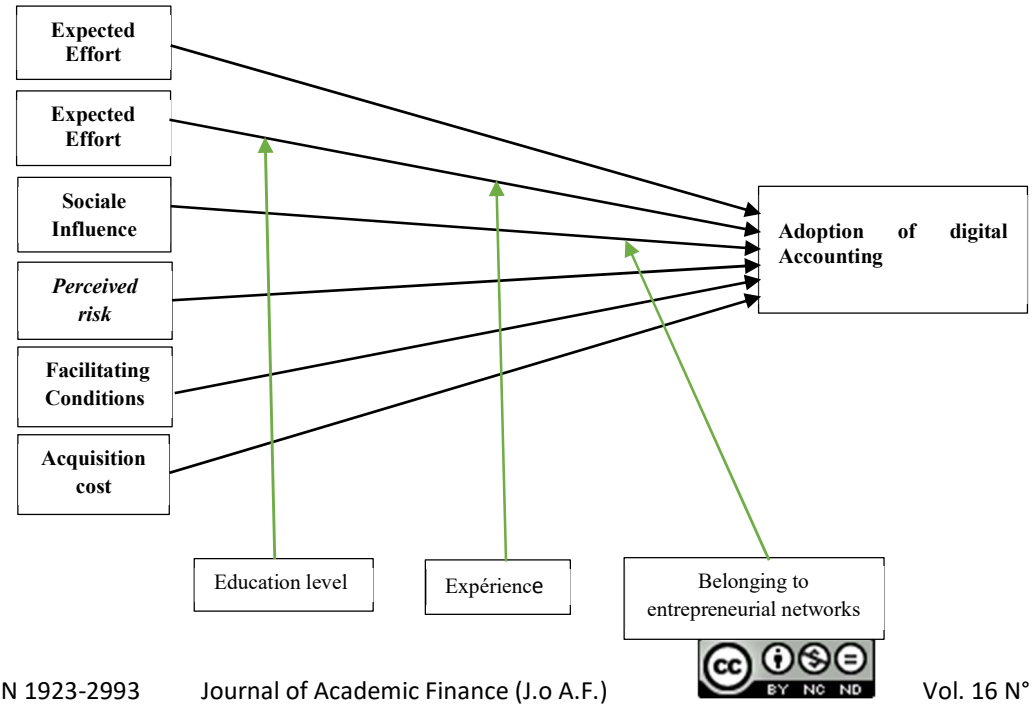
1.6. Acquisition Cost

Acquisition cost is defined as the cognitive trade-off of consumers between the perceived benefits of applications and the monetary cost of their use. This cost is positive when the benefits of using a technology are perceived as greater than the monetary cost, and this price value has a positive impact on intention (Venkatesh et al., 2012). The integration of new technologies into accounting systems is a significant challenge for many companies and organizations, much more complex than a simple technical update. Integrating these new technologies requires substantial resources in terms of budget (Laouina, 2024). This means that the higher the acquisition cost (including implementation costs and hidden costs), the more SMEs would refrain from opting for digital accounting. Given the current African context, where digital tools are more expensive than elsewhere in the world (Taura et al., 2019), we propose the following hypothesis:

H6: Acquisition cost would negatively and significantly influence the adoption of digital accounting in SMEs in the city of Bukavu.

These hypotheses lead to the establishment of a theoretical model for this research. Figure 1 below presents this theoretical model

Figure 1: Theoretical Research Mode



3. Methodological Approaches

This section presents the methods and techniques used by the study to analyze the results and achieve its objectives. It presents the study sample as well as the reliability and validity measures of the variables.

3.1. Sample Size Calculation

According to current estimates, Bukavu has more than one million inhabitants, making it one of the most populous cities in the Democratic Republic of the Congo (van Leeuwen et al., 2021). It is estimated to have over 5,000 SMEs. However, only 713 are recognized by the Provincial Tax Directorate (DPI) of South Kivu. According to the General Directorate of Taxes of South-Kivu, the majority of SMEs in Bukavu employ between six and fifty employees, with 71% being family-owned and 64% focused on commerce. The target population for this study includes accounting department heads within the SMEs of Bukavu. It should be noted that the accounting department head in an SME can be the owner themselves or another person managing the company's accounts. Thus, it takes into account all active SMEs during the data collection period for this study (2024) that are registered in the DPI/South Kivu databases. As of December 2024, 713 SMEs were regularly registered with DPI/South Kivu. This number constitutes the population for this study, which allows for the sample to be calculated using the following formula (Rea et al., 2016):

$$n = \frac{t_P^2 * P(1-P) * N}{t_p^2 * P(1-P) + (N-1) * y^2}$$

Where:

- n : sample size.
- N: actual size of the target population.
- P: expected proportion of a response from the population or actual proportion. Here it can be set to 0.5 by default, which allows for the largest possible sample.
- tp : sampling confidence interval (95%).
- y: sampling margin of error (estimated at 7.83%).

This results in: n = = $\frac{1.96^2 * 0.5(1-0.5) * 713}{1.96^2 * 0.5(1-0.5) + (713-1) * 0.0783^2} = 129$ accounting department heads.

3.2. Statistics and Data Processing

Two econometric approaches facilitate the analysis and processing of data collected through a survey questionnaire addressed to accounting managers in SMEs in Bukavu. First, the study uses Principal Component Analysis (PCA). PCA allows for testing the validity and reliability of the measurement instrument and summarizing information contained in a large number of variables. Second, structural equations, through Partial Least Squares (PLS) method, help identify explanatory factors for the choice of accounting digitization in SMEs in Bukavu.

3.2.1. Principal Component Factor Analyses

Principal Component Analyses (PCA) are multivariate descriptive statistical analyses applied to a set of latent variables that we wish to reduce to a few factors or components (new variables). PCA aims to identify the initial variables or items presenting a relatively significant correlation coefficient, in order to group them to facilitate their interpretation and give them meaning (Carricano et al., 2010). These analyses facilitate the purification of the measurement scale and enhance the validity and reliability of

the construct used in data collection (Lange & Dewitte, 2019). Factor analysis is an inherently empirical and exploratory approach to extract the maximum amount of information (explained variance) from the initial observable variables (Carricano et al., 2010). In these analyses, the first step is to determine the number of factors or components that can adequately explain the observed correlations. This process allows for determining the communalities of each variable. The second step consists of finding simpler and more easily interpretable factors by performing factor rotations (Ferrando et al., 2022). The formation of factors relies on the importance of the initial variables on these factors. The "communalities" (share of variance explained by the item) must exceed 0.5 and, if possible, 0.7. The representation level is considered medium for a threshold of 0.40, good for a threshold of 0.65, and excellent when the communality exceeds 0.80 (Evrard et al., 2009). In this study, we will use the orthogonal rotation method "varimax" as it minimizes the number of variables with high saturations on each factor, thus simplifying the interpretation of the factors (Ferrando et al., 2022).

Before proceeding with factor analysis, it is crucial to ensure that the data is suitable for this technique. Two statistical tests facilitate this adequacy: the Bartlett test and the KMO test. The Bartlett test checks whether the variables are sufficiently related to form factors. The p-value of the Bartlett index must be less than 0.05. The KMO test, on the other hand, evaluates the quality of the measurements used. Similar to a reliability test, it indicates whether the variables measure what they are supposed to measure (Evrard et al., 2009). KMO values between 0.3 and 0.7 represent acceptable factor solutions. This test, initially performed for each variable, should then be repeated with all variables (Hair et al., 2006) cited by (Carricano et al., 2010). It is also important to measure the reliability of the items capturing the variables. Reliability corresponds to the degree to which the instruments used consistently measure the studied construct (Evrard et al., 2009). A scale is reliable if the same results are obtained multiple times on the same subjects. Three methods can be used to test the reliability of a measure (Carricano et al., 2010). We will retain the alternative forms technique based on Cronbach's alpha, as the questionnaire used is administered to a single group of individuals, which corresponds to the requirements of this technique. The practice involves reducing a large number of initial items in an iterative process of retaining/eliminating items based on the alpha coefficient value, which ranges from 0 to 1. The closer this value is to 1, the stronger the internal consistency of the scale (its reliability) (Carricano et al., 2010).

3.2.2. Structural Equations Using PLS Approach

Structural equations allow for the simultaneous validation of two models within a single general model: the structural model (or internal model), which includes all latent variables and their relationships, and the measurement model (or external model), consisting of the directly observable manifest variables used to estimate the latent variables (Gudergan et al., 2025). Given the characteristics of the constructs in our model, we have a reflective model, meaning that the latent constructions exist independently of the measures used. The direction of causality goes from the latent variable to the observed variables; thus, it is the variation of the latent construct that leads to a variation in the items and not the other way around (Nitzl, 2018). According to Esposito Vinzi et al. (2010), the PLS algorithm includes the following steps: initialization of external weights, external estimation, internal estimation, updating external weights, and calculation of structural coefficients in case of convergence; otherwise, return to the second step.

Various tests are conducted within the framework of structural equations. These include the confirmatory reliability test of Jöreskog's Rho, for which the minimum required threshold is 0.7 (Smolka et al., 2021); convergent validity to verify factor loadings with a value of at least 0.7 (Nitzl, 2018) and AVE with a value of 0.5 (Gudergan et al., 2025); and discriminant validity. Beyond these tests, the study proceeds to validate the structural model through the coefficient of determination (R^2) and the predictive validity (Q^2) of Stone-Geisser to measure the significance and importance of the

obtained structural relationships. R^2 values range from 0 to 1. The closer the value is to 1, the stronger the predictive power; the closer it is to 0, the weaker the prediction. Regarding Q^2, when $Q^2 > 0$, it means that 1 − E O > 0 and that the sum of squares of the observed values is greater than the sum of squares of the errors, indicating that the model has predictive validity (Fernandes, 2012). When $Q^2 < 0$, the model is not acceptable (Tenenhaus, 1999). Finally, the overall validation of the model is obtained through the GoF (Goodness-of-Fit) index. According to Wetzels et al. (2009), a GoF of 0.1 is low, 0.25 is medium, and 0.36 is high.

4. Results

This section presents the results obtained after the collection and analysis of data. It includes, among other things, the results of descriptive statistics (1), the results of the PCA estimates (2), as well as the results of the partial least squares regression.

4.1. Descriptive Statistics of the Variables

This section presents, in terms of frequencies and percentages, the socio-demographic characteristics of the respondents who participated in this investigation. It should be noted that the survey questionnaire was administered to managers and heads of the accounting department in the selected SMEs. The results are summarized below in table (1).

Table 1. Descriptive statistics of the variables

Variables	Modalities	Frequency	Percent
Socio-demographic characteristics of the respondents			
Investigation statuts	Accountant	54	41,9
	Manager	75	58,1
	Total	**129**	**100,0**
Sex of the respondent	Female	26	20,2
	Man	103	79,8
	Total	**129**	**100,0**
Municipality of the respondent	Bagira	18	14,0
	Ibanda	85	65,9
	Kadutu	26	20,2
	Total	**129**	**100,0**
Level of education of the respondent	Primary	4	3,1
	Secondary	17	13,2
	University	108	83,7
	Total	**129**	**100,0**
Types of software used and reasons for adoption			
Membership in entrepreneurial networks	No	70	54,3
	Yes	59	45,7
	Total	**129**	**100,0**
Type of accounting maintained	Digitalized	89	69,0
	Manual	40	31,0
	Total	**129**	**100,0**
Used accounting softwar	None	40	31,0
	QuickBooks	5	3,9
	Access	13	12,1
	Excel	44	34,1

	MD system	4	3,1
	POS (Point of Sale)	4	3,1
	Sage 100	19	14,7
	Total	129	100,0
	Sector of activity		
General commerce	No	38	29,5
	Yes	91	70,5
	Total	129	100,0
Provision of services	No	65	50,4
	Yes	64	49,6
	Total	129	100,0
Agri-Food	No	116	89,9
	Yes	13	10,1
	Total	129	100,0

Source: Compiled by the author from the output of SPSS 25 in MS Excel 2016

The table shows that 58.1% of the surveyed SMEs are managed by their owners, likely due to their small size; many managers view hiring a dedicated accountant as an unnecessary expense. These managers are predominantly male, accounting for 79.8% compared to 20.2% female. The predominance of men reflects the reality of SME management in Africa, where 60% of positions in the business sector are held by men, compared to only 40% by women (Agarwal, 2024). Furthermore, the majority of SMEs are located in the municipality of Ibanda, which accounts for 65.9%, as this municipality is considered the administrative and commercial hub of the city of Bukavu (van Leeuwen et al., 2021). The majority of respondents have a higher education level, at 83.7%, as it has been observed that to ensure sound accounting practices, a minimum level of knowledge in the field is necessary. The survey reveals that less than half of the SMEs, or 45.7% of the sample, are members of business networks. This means that a significant majority (54.3%) do not belong to any formal network. However, networks play a key role in the internationalization of SMEs in emerging markets. They help to overcome inherent barriers due to size and access new opportunities (Dominguez, 2018).

Most SMEs maintain digitalized accounting, at 69.0%, although it is basic digitalized accounting. The majority use basic software such as MS Excel (34.1%) and Access (12%), while a minority use advanced digitalized accounting (SAGE 100, 14.7%; Quick Books, 3.9%). These results are consistent with Taura & al. study (2019), which demonstrated that only 6% of African businesses adopt advanced digital technologies in functions such as accounting, but use basic digital tools intensively. This may be due to insufficient high-performance digital infrastructure (broadband internet, etc.). Indeed, digital infrastructure is limited in certain regions of Africa, which hinders the adoption of these technologies (Taura & al. study, 2019). The observation that a significant majority of SMEs are concentrated in the sectors of general trade (70.5%) and services (50.4%) is a very common phenomenon. This reality is experienced not only in Bukavu but also in many other economic contexts, as these sectors present relatively low entry barriers in terms of social capital and skills, unlike sectors such as industry or construction (St-Pierre et al., 2020).

4.2. Presentation of the Results of Principal Component Analyses

This section presents the various estimations of the tests associated with principal component analyses using an exploratory approach.

42.1. Validity and purification of scales through exploratory factor analysis.

This subsection presents the results of the principal component analyses derived from SPSS 25 software.

Table 2. Overall Exploration of Data and Scale Items Data

Items	Adequacy Scale		Reliability
	KMO Index	Bartlett Test	Cronbach's Alpha
18	0,555	0,000	0,712

Source: Prepared by the author from the output of SPSS 25 in Ms Excel 2016.

This table (2) indicates that the KMO index of 0.555 is acceptable as it is greater than 0.5 (Evrard et al., 2009). Similarly, Bartlett's test coefficient is significant at the 5% level. The fact that both the KMO and Bartlett's test of sphericity coefficients are acceptable confirms that the data is factorable. Regarding reliability, it appears that the data is reliable at 71.2% (above 70%), which means that if the survey were to be conducted again with another sample from the target population, the same results would be obtained. These results allow for the verification of the contribution of the items to the variance of their respective components. This verification is conducted through the component matrix after rotation.

Table 3. Component matrix after rotation.

Rotation of the component matrix								
Dimensions		**Component**					**Quality of representation**	
		1	**2**	**3**	**4**	**5**	**6**	
Expected performance	PA1		0,75					0,70
	PA2		0,68					0,78
	PA3		0,84					0,87
	PA4		0,70					0,72
Expected effort	EA1	0,78						0,81
	EA2	0,82						0,86
	EA3	0,86						0,89
Social influence	IS1					0,82		0,88
	IS2					0,88		0,88
Perceived risk	RP1				-			0,78
	RP2				0,89			0,91
	RP3				0,92			0,93
Facilitating conditions	CF1							0,84
	CF2						0,772	0,86
	CF3						0,797	0,79
Acquisition cost	CA1			0,75				0,73
	CA2			0,72				0,63
Eigen value		5,57	2,37	1,98	1,49	1,46	1,003	KMO= 0,555
Explained variance in %		32,74	13,9	11,65	8,76	8,50	5,90	Alpha=0, 712
Extraction method: Principal Component Analysis Rotation method: Varimax with Kaiser normalization								
a. Convergence of the rotation in 6 iterations								

Source : Compiled by us from the output of SPSS 25 in MS Excel 2016.

After an orthogonal varimax rotation carried out over 6 iterations, the initial measurement scale, consisting of 18 items divided into 6 components, validated all 18 items, as they mainly show communalities greater than 0.50. This means they are strongly related to a single component.

Furthermore, each item contributes more than 50% to the variance of its respective component. This may be due to strong correlations between the items and their construction. The first component, which explains 32.74% of the total variance, is associated with the expected effort for an SME to digitalize its accounting. It consists of 3 initial items. These items suggest that innovations perceived as easy to use and less complex are more likely to be accepted and utilized (Rogers, 1983). The second component, representing 13.91% of the total variance, is related to expected performance. It comprises 4 initial items. These items suggest that improvements in the performance of digital accounting tools will accelerate the adoption of digitalized accounting, as SME leaders will be confident that these technologies will enhance their operations (Kwarteng et al., 2023). The third component, acquisition cost, explains 11.65% of the total variance. Its two items suggest that the higher the acquisition cost (including implementation costs and hidden costs), the less likely SMEs are to adopt digital accounting (Laouina, 2024). The fourth component, perceived risk, explains 8.76% of the total variance. Its three items suggest that the higher the perceived risk level, the more SMEs tend to refrain from adopting digital accounting (Forsythe et al., 2006). Finally, the two remaining components (5 and 6) are related to social influence (8.50%), which suggests that when an entrepreneur sees their peers successfully adopting digital accounting, they are more inclined to follow their example (Mulungula Alain, 2024), and facilitating conditions (5.90%), which indicate that better conditions (infrastructure, regulations) influence SMEs' choice of digital tools.

4.2.2. Results of structural equation analyses using the PLS method

This section presents the explanatory analyses that allow for inferring causal relationships between the variables by evaluating the statistical significance of the model coefficients. Model validation and parameter estimation are the initial steps of the analysis. Hypothesis testing will then determine the influence of independent variables, including moderation effects, on the adoption of digital accounting.

4.2.2.1. Validity and reliability of the model

In this point, it is about testing the validity and reliability of the model jointly.

A. Convergent validity

This is about testing the reliability of the model using Cronbach's alpha and Rho.

Table 4. Convergent validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
CF	0.436	0.490	0.730	0.485
CA	0.642	0.688	0.845	0.732
EA	0.908	0.915	0.942	0.844
IS	0.183	0.185	0.709	0.550
PA	0.663	0.661	0.796	0.496
RP	0.792	1.152	0.847	0.652

Source : Output SmartPLS 4

These results show significant variability in reliability across different dimensions. Some dimensions (EA = 0,908 and RP = 0,792) demonstrate very good reliability. Other dimensions (PA = 0,663 and CA= 0,663) have an acceptable alpha but could be improved. Meanwhile, others (CF and IS) exhibit issues

with internal consistency. The AVE is generally above 0.50, indicating good convergence of the items towards the constructs they are intended to measure. The results suggest that some dimensions require improvements. This may be due to the limited number of items used during data collection, highlighting the need to add new items to strengthen the reliability and validity of the scale for these constructs.

B. Discriminant validity

In this section, the aim is to analyze the correlations between the variables using the Fornell & Larcker matrix.

Table 5. Correlations between latent variables

	ARE	ACD	CF	CA	EA	EXP	IS	NE	PA	RP
ARE	**1.000**									
ACD	0.282	**1.000**								
CF	-0.162	0.423	0.697							
CA	0.087	0.234	0.595	**0.856**						
EA	0.029	0.628	0.612	0.399	**0.919**					
EXP	-0.049	0.485	0.435	0.258	0.392	**1.000**				
IS	0.401	0.658	0.319	0.252	0.418	0.445	**0.741**			
NE	0.241	0.240	-0.169	0.003	-0.046	-0.125	0.180	**1.000**		
PA	0.004	0.546	0.405	0.073	0.509	0.321	0.406	-0.100	**0.704**	
RP	-0.056	-0.472	-0.427	-0.353	-0.256	-0.639	-0.621	0.131	-0.441	**0.807**

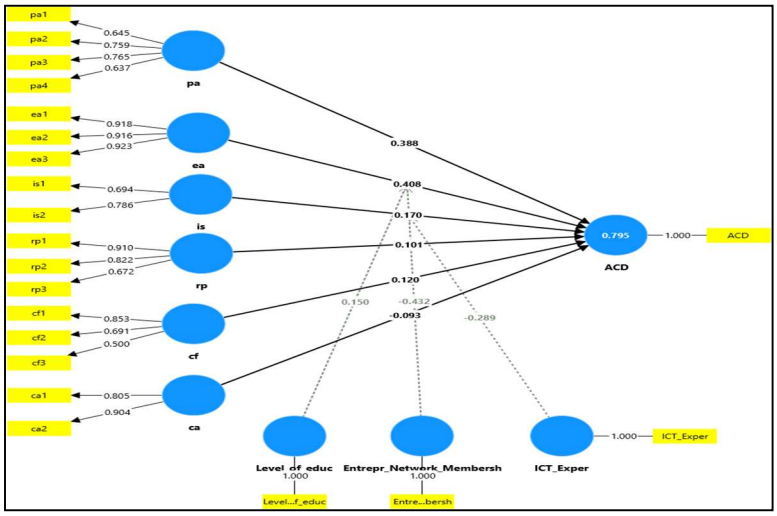
Source: output SmartPLS 4

This result indicates a perfect positive correlation between the variables themselves, proving that the model of this study is valid. Each latent variable is perfectly related to its indicators, but not to the other latent variables in the model. (Gudergan & al., 2025).

4.2.2.2. Model estimation Using the PLS Algorithm and Bootstrapping

The aim is to present the estimated general model for this study, as well as the standardized multiple regression coefficients and their significance levels.

Figure 2: Result of the PLS algorithm



Source: output SmartPLS 4

This figure presents the results obtained through the PLS algorithm technique. These results show that the variables included in the model explain approximately 79.5% of the variability in the adoption of digital accounting by SMEs in the city of Bukavu.

Table 6. Model coefficient, significance, and decision rule using the Bootstrap algorithm.

	Path coefficient	T statistics (|O/STDEV|)	P values	Règle de décision
CF -> CD	-0.030	0.309	0.757	Rejetée
COA -> ACD	-0.125	1.258	0.209	Rejetée
EA -> ACD	0.182	2.264	0.024	Confirmée
IS -> ACD	0.235	2.217	0.027	Confirmée
ARE-> ACD	0.300	4.774	0.000	Confirmée
RIPE -> ACD	-0.091	0.916	0.360	Rejetée
NE x EA-> ACD	-0.021	0.370	0.711	Rejetée
EXP x EA -> ACD	-0.415	5.417	0.000	Confirmée
ARE x INSO -> ACD	0.017	0.144	0.886	Rejetée

Source : Output SmartPLS 4

This table presents the results of the Structural Equation Model (PLS-SEM). It indicates the impact of different variables on the adoption of digital accounting. Each row represents a relationship between an independent variable and the dependent variable (adoption of digital accounting). Each coefficient represents the strength and direction of the relationship. The p-values indicate the statistical significance of the relationship. A p-value lower than 0.05 generally indicates that the relationship is statistically significant, meaning it is not due to chance, which allows for the confirmation or rejection of hypotheses. However, it appears that facilitating conditions have a negative (-0.03) but not significant (0.757 > 0.05) influence on the adoption of digital accounting. The inadequacy of infrastructure within and outside SMEs in the city of Bukavu leads to this non-adoption. Nevertheless, this negative influence is not significant. Such results lead to the rejection of the fifth hypothesis, which posited that facilitating conditions would negatively and significantly influence the adoption of digital accounting by SMEs in the city of Bukavu. This could be due to the fact that SMEs in the city of Bukavu are not homogeneous. Some may be more receptive to change and digitization than others, regardless of the facilitating conditions.

Similarly, the second hypothesis suggests that expected effort would negatively and significantly influence the adoption of digital accounting by SMEs in the city of Bukavu. This means that the less complex technological innovations are perceived to be, the more they will be adopted. However, the results obtained reveal that expected effort positively and significantly explains the adoption of digital accounting (0.18), indicating that the more complex digital accounting is perceived to be, the more it is adopted. This second hypothesis is therefore refuted. This result may seem counterintuitive, but several explanations can be put forward. Notably, businesses may be attracted to technological challenges. A higher expected effort may be perceived as a sign of modernity, innovation, and competitiveness. Additionally, the construct "expected performance" has a positive and significant relationship (Coeff 0.30 & p=0.000). SMEs in the city of Bukavu are more likely to adopt digital accounting if they anticipate better performance with this option. Such results confirm the first hypothesis, which posits that expected performance would positively and significantly influence the adoption of digital accounting by SMEs in the city of Bukavu. These results can be explained by the fact that the digitization of accounting is now widely considered effective for streamlining the production of financial statements with fewer errors and in minimal time. In other words, the adoption of digital accounting would allow micro and small enterprises to modernize and move closer to more efficient managerial techniques (Berrou & Mellet, 2017).

Perceived risk, on the other hand, has a negative but non-significant relationship (Coeff -0.091 & p=0.360). This implies that if perceived risk is high, SMEs are likely not to adopt digital accounting, even if this relationship is not significant. Therefore, the third hypothesis, which proposed that perceived risk would negatively and significantly influence the adoption of digital accounting by SMEs in the city of Bukavu, is rejected. This relationship is not strong enough to be considered robust. Additionally, the construct "acquisition cost" has a negative non-significant relationship. This implies that if the value for money is not good, SMEs are likely not to choose digital accounting. However, this relationship is not significant, meaning that the causal link cannot be considered robust. This leads to the rejection of the sixth hypothesis, which posited that acquisition cost would negatively and significantly influence the adoption of digital accounting by SMEs in the city of Bukavu. This relationship is not significant because other variables not accounted for in the analysis may influence both perceived cost and the decision to adopt digitization. Finally, the variable "social influence" presents a positive and significant coefficient (0.235, p=0.027). This result indicates that social influence has a positive and significant effect on the adoption of digital accounting. In other words, the more a company is exposed to positive social influences favoring digitization (for example, colleagues who have adopted the solution, positive feedback), the more likely it is to adopt this solution itself. These results confirm the fourth hypothesis that social influence would positively and significantly influence the adoption of digital accounting in SMEs in the city of Bukavu. These results demonstrate that companies are often reluctant to adopt new technologies due to uncertainty about their effectiveness and cost. Social influence helps to reduce this uncertainty by providing successful models and concrete evidence of the benefits of digitization.

4.2.2.3. Effect of Moderating Variables

Analysing the results provided by the Bootstrap algorithm, it is observed that ICT experience does not moderate the relationship between expected effort and the adoption of digital accounting. However, although experience does not moderate this relationship, the link between these three variables is significant. This significance demonstrates that the positive effect of expected effort on the adoption of digital accounting is weakened when ICT experience is minimal. In other words, a high effort in using ICT may discourage SMEs with low ICT experience from adopting this technology. They perceive the technological challenges as too significant compared to their skills, and vice versa. Additionally, the results show that the level of education does not moderate the relationship between expected effort and the adoption of digital accounting. In other words, the effect that expected effort has on the adoption of digital accounting is not moderated by the level of education. This could be explained by the fact that, in the context of the city of Bukavu, the economy relies on a poorly educated and predominantly trading population. Finally, membership in entrepreneur networks moderates the relationship between social influence and the adoption of digital accounting by SMEs in the city of Bukavu. This result implies that the social influence exerted within the network spreads according to group norms, relationships between group members, and so on. These results allow for the overall evaluation of the model through three indicators (R^2, Q^2, and GoF). Below are the results of the overall model evaluation:

Table 7. Model Evaluation

	R-square	R-square adjusted	Q^2predict	GoF
Adoption of Digital Accounting	0.773	0.749	0.717	0.62

Source : Output SmartPLS 4

The R^2 obtained from this model, which is 0.774, reflects the strength of the predictive power of this model. Similarly, the Q^2 index of 0.717 > 0 indicates that the sum of the squares of the observed values is greater than the sum of the squares of the errors, which means that the model demonstrates strong

predictive validity (Fernandes, 2012). Finally, the GoF index indicates that the model in this study is largely validated as a whole, since (0.62 > 0.36) as stipulated by the literature review (Wetzel et al., 2009)

5. Discussion of Results

After a thorough analysis of the collected data, the results show that most SMEs maintain a digitized accounting system, specifically 69.0%, but it is a basic form of digitized accounting. These results corroborate those obtained by Taura, N. D. & al., (20219) in a study on the opportunities of digitization in businesses in Africa. This author demonstrated that African companies use basic computer tools to manage their accounting. Furthermore, it was found that the variables of expected performance, expected effort, facilitating conditions, perceived risk, social influence, and acquisition cost explain 77.3% of the variance in the adoption of digital accounting by SMEs in the city of Bukavu. These results tend to support those of Venkatesh et al. (2012) in a study on the explanatory factors of internet usage by consumers. In this study, the author established the UTAUT 2 model, and its variables accounted for 74% of the variance in the intention to use technologies in the consumption context. However, there exists a divergence between the model of this study and that used by these authors, as well as in the weight of each variable in explaining the dependent variable.

In particular, the results obtained indicate that expected performance is the variable that positively and significantly explains the adoption of digital accounting by SMEs. These results align with those of Venkatesh et al. (2012) in a study on the factors influencing internet usage by consumers. These authors found that expected performance is the primary variable exerting a positive and significant effect on the consumer's intention to use the internet. In the same context of the city of Bukavu, this result is in agreement with that obtained by Mulungula Alain (2024) in a study on the adoption of digital financial services and the SME-Bank relationship. The present study also found that expected effort positively and significantly influences the adoption of digital accounting. This result contradicts the basic model (UTAUT 2), in which Venkatesh et al. (2012) found that expected effort exerts a negative and significant effect on the intention to adopt technologies. However, this result is partially consistent with that of Mulungula Alain (2024), who showed that expected effort has a positive but non-significant influence on the intention to use digital financial services by SMEs in the cities of Bukavu and Goma.

Moreover, the construct "perceived risk" has a non-significant negative relationship with the adoption of digital accounting, contrary to the result obtained by Mulungula Alain (2024). In his study, he showed that perceived risk exerts a positive and significant influence on the intention to use digital financial services by SMEs in the cities of Bukavu and Goma. In parallel, this result is similar to that of Bengrich & Alouane, (2023), who, in a study on perceived risk and the online purchasing behavior of Generation Y consumers, found that perceived risk negatively influences the intention to adopt the internet as a purchasing method. The construct "facilitating conditions" exerts a non-significant negative relationship with the adoption of digital accounting. This result contradicts that of Regragui (2022), who, in a study on the factors influencing the adoption of digital tools in Morocco, found that organizational factors (facilitating conditions) exert a positive and significant effect on the adoption of digital tools. At the same time, the results reveal that social influence exerts a positive and significant effect on the adoption of digital accounting. This result partially corroborates those of Venkatesh et al. (2003b) and Mulungula Alain (2024). These two authors respectively found that social influence exerts a positive but non-significant effect on the intention to adopt the internet and digital financial services. Contrary to the results obtained in this study, social influence has both a positive and significant effect on the adoption of digital accounting. Furthermore, the results of Riquelme and Rio (2010) in Singapore confirmed the positive and significant effect of acquisition cost in a study on the adoption of mobile banking services. This result contradicts that of this study, which demonstrates that acquisition cost exerts a non-significant negative relationship. It is also in contradiction with that of Venkatesh et al.

(2012), who showed that price value has a positive and significant impact on the intention to adopt technological innovation**.**

6. Contributions of the study

Overall, this study stands out for its focus on SMEs and its particular emphasis on accounting. By positioning itself at the beginning of the adoption process, the study was able to highlight the initiating factors for the adoption of digital accounting by SMEs. The contributions of this study are at two different levels:

6.1. Theoretical Contributions

The results partially confirm the predictions of the UTAUT2 theory, showing that expected performance and facilitating conditions positively influence the adoption of digital accounting. However, expected effort, perceived risk, and acquisition cost did not have the expected effects. This suggests that the UTAUT2 theory, while useful, may require contextual adaptations to better explain the adoption of technologies in SMEs in developing countries like the DRC, particularly in the city of Bukavu. It would be important to consider a study that adapts UTAUT2 to the context of SMEs in the city of Bukavu. This adaptation would allow for the testing of the real factors that influence the adoption of digital accounting in SMEs in this region.

6.2. Implications for SME Practices

Practically, SMEs need to be made aware of the benefits of digitalizing accounting. It has been demonstrated that digitalizing accounting improves efficiency, reduces errors, and facilitates decision-making. However, this study suggests that SMEs should establish enabling conditions, such as staff training, access to adequate digital infrastructure, and support from favorable public policies. Furthermore, it has been proven that membership in entrepreneurial networks boosts the adoption of digital accounting. Thus, this study recommends that SMEs in the city of Bukavu join entrepreneurial networks to benefit from the advantages related to partnerships. These partnerships facilitate the development of interest in the digitization of core services within the organization. This is made possible through the sharing of experiences, leading to the adoption of innovative practices, such as the digitalization of accounting.

6.3. Limitations of the Study and Future Perspectives

Despite these results, this study has certain limitations and opens up new research perspectives. Theoretically, some constructs required enrichment with additional items. This is the case for the concepts of facilitating conditions and acquisition cost, for which the items proved unreliable. It is therefore necessary to reconsider the theoretical definition of these constructs in future research. It is also possible to replace the items with new ones for measurement or to use a larger sample to obtain more complex structures. A small sample may limit the ability of PCA to identify these types of structures. Furthermore, the variable "perceived risk" is a multidimensional construct. However, for simplification purposes, we only considered one dimension, "functional risk," deemed explanatory of the variance in consumer intentions (Sara & Bengrich, 2023). Future researchers may reconsider this variable as multidimensional by incorporating other dimensions of risk (financial risk, psychological risk, etc.) to minimize the loss of information. Finally, future research may focus on the link between the adoption of digital accounting and the financial performance of SMEs. In this study, researchers will analyze the causal link between the adoption of digital accounting and the financial performance of SMEs. This analysis constitutes a post-adoptive study of digital accounting by SMEs.

Conclusion

This study analyzed the adoption of digital accounting, a technological innovation often used by SMEs to facilitate their accounting practices. The aim of this study is to identify the determinants of digital accounting adoption among SMEs in the city of Bukavu. The explanatory variables are derived from previous studies, primarily based on the UTAUT 2 theory, which addresses the adoption of technological innovations. To test the hypotheses and verify the achievement of the objective, data was collected from 129 accounting managers of SMEs in Bukavu, randomly selected from a survey obtained from the DPI/South Kivu. The collected data underwent basic descriptive analyses to highlight the specific characteristics of our respondents. Additionally, principal component analyses were conducted to test the validity and reliability of the measurement instrument and to summarize the information contained in the variables. These analyses were complemented by structural equations using the partial least squares (PLS) method to identify the explanatory factors of digital accounting adoption by SMEs.

After collecting and analysing the data, the results of the hypothesis testing through the Student's T test demonstrated that expected performance, social influence, and facilitating conditions validated the initial hypotheses, while expected effort, perceived risk, and acquisition cost were rejected. The results of the moderating variables showed that, apart from belonging to entrepreneurial networks, experience in ICT and education level do not moderate the relationship between expected effort and digital accounting adoption. Belonging to entrepreneurial networks moderates a statistically non-significant relationship between social influence and digital accounting adoption. The results revealed an R^2 of 0.774, a Q^2 of 0.717, and a GoF of 0.62, indicating a strong predictive capacity of the model, confirming its validity and adequacy to the data.

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