

ATTESTATION

je soussigné, Pr. **Lotfi KHRIFECH**, Directeur de la publication de la "Revue Internationale Multidisciplinaire d'Economie et de Gestion, RIMEGE", atteste par la présente que **Madame Imen JAMMOUSSI et Monsieur Mourad MROUA** ont soumis un article à la dite revue intitulé

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Artificial intelligence at the service of information and accounting processing: The case of Tunisian companies

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Abstract

In this research work, we will focus particularly on the phenomenon of Artificial Intelligence to take a look at its impact on the practices of accounting firms. We opted for a qualitative study to verify our assumptions and to know the feasibility of this technique in accounting practice.

We were interested in the cases of Tunisian companies to achieve very significant results according to which accounting firms are increasingly using matrix intelligence to accomplish their tasks and process their clients' documents, mainly those relating to the accounting documents of companies, thus admitting, the positive impact of artificial intelligence on the way they carry out their professional tasks.

Keywords: Artificial intelligence – Accounting – Accounting documents – Accounting information system.

Introduction

Artificial intelligence has certainly disrupted the organization of conventional work (Cai, 2022; Giles, 2019). This change affects not only accounting procedures, methods and techniques, but also organizational structures, models and forms (Sudaryanto et al., 2023; Lee and Tajudeen, 2020; Stancheva-Todorova, 2018).

Artificial intelligence is a subject of fascination for experts and researchers alike (Qasim and Kharba, 2020; Chowdhury, 2023; Junmei, 2018). It continues to raise questions about its actual application in financial and accounting processes (Smith, 2019; Khan, 2022; Bose et al., 2023). The year 1956 saw the invention of the Artificial Intelligence discipline by John McCarthy during the "Dartmouth Conference", organized in the United States. It was, then, defined by the American mathematician Marvin Lee Minsky, as being: "the construction of computer programs which devote themselves to tasks which are, for the moment, accomplished in a more satisfactory way by human beings because they require high-level mental processes such as perceptual learning, memory organization and critical reasoning". It must be said that these computer programs go beyond those called "algorithmic", where the programmer knows the solution to the problem and can program the approach that allows him to solve it. With Artificial Intelligence, the aim is to create machines capable of simulating human intelligence, with a volume of data so large that it is inaccessible to human processing (Bose et al., 2023; Gusai, 2019; Luo et al., 2018). Already for more than twenty years, data and invoices have been automatically processed, which are documents with a variable structure, even if the information contained therein is identical, since their location is always different, depending on the supplier, making the more complex analysis (Zheng, 2021; Zhang, 2022). Today, the solutions we offer,

in terms of performance and reliability, are different from those of the time, even if both aimed at the same objective, namely the automation of a repetitive process to optimize the efficiency of financial processes and thus make life easier for accountants (Kindzeka, 2023; Ng, 2022; Ng, 2023; Zhang et al., 2020).

Previously, accountants manually processed invoices, purchase orders or delivery notes, which they then entered, still manually, into computer systems to transmit them to the managers concerned for approval and payment (Zhang et al., 2020; Ionescu, 2019).

With artificial intelligence, these manual steps are replaced by an automatic function that automatically analyzes, recognizes, routes and integrates the data into the information system, which leads, at the end of the chain, to suppliers who now know when they will be paid, thus having real-time information (Duffy, 2018; Chukwuani and Egidi, 2020; Berdiyeva et al., 2021). Thus, artificial intelligence helps to make accounting services more efficient, in terms of time spent on processing, entries, research, imputation, validation and classification (Cazazian, 2022).

Now, with AI, the process and the data are more secure, and therefore more reliable. This concerns the quality of financial data, the absence of lost documents, fraud detection, etc. It is able to extract all the data present on the invoices, to check the relevance and consistency and to propose appropriate allocations (Rashwan et al., 2020; Singh et al., 2023).

Thus, AI should be added to the known factors, which will gradually replace humans, with their algorithms and Learning machines; which is likely to simplify the lives of humans who will be replaced by robots (Liao, 2022; Zhu and Cuan, 2022).

Cambridge University astrophysicist S. Hawking said in 2014: "Once humans developed artificial intelligence, it would take off on its own and redefine itself faster and faster. Humans, limited by slow biological evolution, could not compete and would be overwhelmed."

Today, several economic sectors are affected by AI, to varying degrees (Singh et al., 2023; Alkan, 2022; Chen, 2021). However, accounting remains very affected by this revolution.

In this research work, to understand and interpret the perceptions of accountants with regard to the use of artificial intelligence, we opted for a qualitative approach, by posing postulates rather than hypotheses.

To this end, we conducted semi-structured interviews, face to face, to be able to assess the answers to the questions proposed during these interviews.

I. Rules and procedures

Companies process and present accounting and financial information (Kommunuri, 2022). This process is imposed by accounting law, tax law and accounting standardization systems, integrating increasingly advanced computer technologies (accounting software, networks, automated data entry, etc.) (Liao, 2022).

We are then faced with two notions, that of account and that of writing, the account being the smallest information storage unit, and we speak of writing when a transaction is recorded on an accounting medium and in the accounts. We then say that this transaction is recorded, which makes it possible to keep it in memory (Weimei, 2021; Lee and Tajudeen, 2020).

Note that accounting information is produced in and by an organization using the necessary technical and human resources. This, according to Amari (2016) and Damerji and Salimi (2021), continues to change with technological advances.

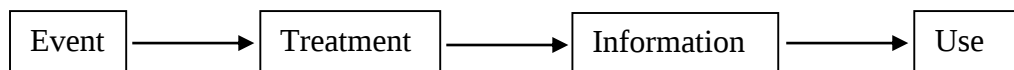


Figure 1: Accounting process

All of the accounting treatments make it possible to move from the observed economic transaction to the provision of the information produced to third parties (Damerji, 2020; Ionescu, 2018).

I.1. How to process the information?

It is an action that consists of selecting information that relates to an economic act and that connects the company and its partners and that gives rise to a quantifiable expression (Petkov, 2020).

This information is stored and classified. The classification criteria are set out by Pige and Beau (2007): Employment/resource/activity/heritage. However, it should be remembered that processing information amounts to controlling it and then synthesizing it by presenting it in an aggregated form, and finally communicating it in the form of documents to users (Zhang et al., 2020; Petkov, 2020; Junmei, 2018) .

It should be noted that the company's activity involves daily operations related to operations, investment and financing (Ionescu, 2019; Hasan, 2021; Kommunuri, 2022).

The recordings that reflect them are made throughout the accounting period: these are “current transactions”. At the end of the financial year, the company takes an inventory and closes the accounts (Chowdhury, 2023; Zheng, 2021).

I.2. Evolution of an Accounting Firm

It must be said that the relationship between the accountant and his clients is becoming more and more dematerialized and collaborative. Several countries, such as France, have created online practices, offering very competitive fees (Vărzaru, 2022; Qiu, 2021; Hu, 2022). These modern firms offer Electronic Document Management (EDM), a sine qua non condition for a successful transformation. This GED allows archiving, centralization of information, performance and security in the search for documents, which are either scanned or downloaded from internal or external sites (Bose et al., 2023; Sudaryanto et al., 2023; Weimei, 2021).

GED also allows rapid access to information and accounting. It allows a significant saving in the cost of processing files with the absence of handling of papers, during the revision of the accounts (Alkan, 2022; Berdiyeva et al., 2021).

In addition, “the cloud” allows the consultation of accounting documents with a view to processing them, thus avoiding manual entry and saving time (Liao, 2022; Chen, 2021; Ionescu, 2019).

- In addition, interconnections with other software simplify the processing and management of files, in particular with (Chukwuani and Egiyi, 2020; Rashwan et al., 2020; Singh et al., 2023):
- The processing of expense reports scanned and accounted for using OCR
- Automation of the purchasing circuit and supplier invoices.

- Automation of the sales circuit, CRM, customer follow-up, connection with cash management software for customer follow-up (Li and Zheng, 2018; Qasim and Kharba, 2020).
- Downloading of bank entries... Periodic situations as well as financial statements are drawn up and sent online to partners (Zero Paper).

Internal management software allows you to set up dashboards for monitoring and progress of work, various deadlines, emails, budget management, fees, etc. (Zhang et al., 2020; Almagtome, 2021; Chowdhury, 2023)

The automation of accounting entry has ostensibly developed, at the same time developing accounting firms and ensuring productivity, profitability, and greater added value. Generally, we offer automatic entry to all customers, which reduces the time spent on entering accounting entries. This time will be allocated to less basic tasks such as customer support, advice, proposing dashboards (Bose et al., 2023; Junmei, 2018).

Still, new technologies in general and AI in particular, provide the opportunity to develop new skills to help expertise firms offer more customer support missions and to help data entry employees. accountant to "reconvert" to missions with higher added value. We are also looking to integrate artificial intelligence into accounting entry (Giles, 2019; Luo et al., 2018; Khan, 2022; Kindzeka, 2023).

In any case, an increasing number of accounting software publishers offer automation of accounting input, using optical character recognition or OCR (optical character recognition) software, which makes it possible to transform the image of a printed text scanned into a text document and save it in a file that can be used in a word processor, a scanner, a smartphone application (Bose et al., 2023; Bakarich et al., 2021 ; Damerji, 2020; Alkan, 2022). This automation is also based on the technique of the web which consists of extracting the content of websites, via a program, in order to transform it in order to be able to use it in another context (Cai, 2022).

Artificial intelligence (AI) is increasingly being used to automate typing, although machine translation is one of the most complex problems facing AI (Berdiyeva et al., 2021; Rashwan et al., 2020 Sudaryanto et al., 2023). Now, a leap has been taken thanks to the use of artificial neural networks (ANN), which are inspired by the architecture of the human brain. However, what can these artificial neural networks be?

Concretely, to create a model of neural networks, it is necessary to develop a model to recognize an object or something like accounting documents or invoices, of all kinds (Khan, 2022; Weimei, 2021). Thus, software publishers use databases containing all the images that correspond to the elements to be recognized (Ping, 2021; Ionescu, 2019).

This database contains a part which is used to train the model, it is the "training database" and another part which is used to evaluate the model (Lee and Tajudeen, 2020), it is the "training base". validation data. However, this technique has a number of limitations. Indeed, in terms of processing volumes, it is clear that today's software is capable of processing large volumes of invoices; while OCR is not able to recognize all elements of invoices (Rashwan et al., 2020; Ping, 2021; Singh et al., 2023). The AI processes up to 100% of the encrypted data, with breakdown by VAT codes/rates, and possibly by analytical codes, with the aim of meeting the immediacy requirement expected by customers. The evolution of the cipher profession is to instantly provide all useful elements to customers (Luo et al., 2018; Khan, 2022; Kindzeka, 2023).

Accounting and financial data, management, stocks, etc. are immediately available thanks to new technologies, and as soon as customers wish, to be responsive to a competitive market, or to the demand of their own customers (Bose et al. ., 2023; Kommunuri, 2022; Qasim and Kharba, 2020).

However, it is necessary to choose software that has proven itself in the sector of activity representative of the firm's client portfolio for the accounting entry systems to be effective (Ionescu, 2019).

What is the LAB 50 point of view? LAB 50 is "an observatory created by the Regional Company of Auditors (CRCC) of Paris and the Order of Chartered Accountants (OEC) of Paris Île-de-France which, through monitoring, analysis and perspective, aims to understand and freely discuss the impacts of artificial intelligence on the exercise of the profession of statutory auditor and chartered accountant".

It should be noted that the industrial revolution, which attached itself to the presence of a worker behind a machine that works at a continuous pace, led to the development of wage labor; while the digital revolution has favored the outsourcing of labor (Rashwan et al., 2020; Gusai, 2019; Li and Zheng, 2018). Indeed, the fluidity of communications has now made it possible to find, on demand, a qualified service provider, available and exactly calibrated to the mission.

This phenomenon concerns the accounting profession on several aspects, such as soliciting chartered accountants for outsourced CFO missions; or even accentuate the use of subcontracting between accounting professionals, both in the context of accounting expertise missions and in those of statutory auditors (Qasim and Kharba, 2020; Gusai, 2019).

Accounting is everywhere. It is necessary for all businesses regardless of their shapes and sizes. Its tasks are diverse and numerous (Chukwuani and Egiyi, 2020; Kommunuri, 2022; Sudaryanto et al., 2023). The accountant must demonstrate precision, diligence, and rigor in the performance of his duties. He must avoid any noisy environment, for optimal concentration, to be able to interpret the data appearing on the accounting documents (Zheng, 2021).

II. Artificial Intelligence

It is one of the technologies that have changed our lives, and which now represents the future of our society. It is then up to us to study its elements to understand its repercussions on our daily lives (Kommunuri, 2022; Bakarich et al., 2021; Junmei, 2018).

This technology is not new since in 1956; took place in the United States (Dartmouth college), a conference attended by, among others, John McCarthy, Marvin Minsky, Nicolas Rochester and Claude Shannon and during which artificial intelligence was considered as a field of research.

There is no consensus on a universal definition of artificial intelligence. However, we can define it as a tool that is used to make machines perform the tasks that humans used to perform with their intelligence (Chukwuani and Egiyi, 2020; Luo et al., 2018). In other words, it is a set of methods that replaces human cognitive performance (Damerji, 2020; Singh et al., 2023).

Generally, the image of artificial intelligence is revealed in the robot. However, a simple smartphone has a very extensive AI (Weimei, 2021; Lee and Tajudeen, 2020).

In accounting, the combination of AI with automation has made the processing of accounting documents easier. This is referred to as robotic automation or RPA (Robotic Process Automation) (Junmei, 2018; Zhang et al., 2020). By applying these "robot software" the tasks are automated, and the process strongly impacted since this technology captures and reads the

computer applications to be able to manipulate in the different computer systems (Almagtome, 2021; Zhang, 2022). This software therefore makes it possible to enter data from the various computer media, avoiding the manual aspect (Zhu and Cuan, 2022; Berdiyeva et al., 2021). Today, several tools are available to perform all of these operations automatically and with very little human intervention (Chen, 2021; Li and Zheng, 2018).

To dematerialize the accounting documents received, it is necessary to automate the process. To do this, it is necessary to use complementary technologies. Indeed, ORC or optical character recognition makes it possible to extract essential information present in all types of media (paper, e-mail, ODF (Gusai, 2019; Qasim and Kharba, 2020). For handwritten documents, we use IRC (intelligent character recognition) adapted to recognize human handwriting (Junmei, 2018; Li and Zheng, 2018; Cazazian, 2022). Data entry is done automatically, after ORC and IRC have recognized the essential data. With document archiving, RAD or automatic document recognition technology is used (Zhu and Cuan, 2022; Chowdhury, 2023). It comes in the form of either a Logo or Barcode, or in the form of a reference number (Sudaryanto et al., 2023). This is a technology that allows the type of document to be recognized and then classified in the computer system (Kommunuri, 2022). Therefore, AI is not trivial; it is even necessary to achieve the performance of replacing the human being. Thus, we must remember that “technology”, in relation to “recognition”, is part of the field of AI (Chowdhury, 2023; Kommunuri, 2022).

In any case, the only automation allows, of course, to carry out specific tasks. However, combined with AI and more particularly with "machine learning", a new generation of automation, which ostensibly reduces human intervention, has been born (Cazazian, 2022; Shi, 2020; Li, 2020).

Finally, we can remember that new technologies, which appear more and more in our society, result in software which is used first to memorize accounting documents, to recognize and interpret information, thanks to ORC and IRC technology. . They are also used, thanks to robot software, to enter data (Rashwan et al., 2020; Bakarich et al., 2021). Finally, they are used to carry out an automated archiving of accounting documents, thanks to RAD technology (Damerji and Salimi, 2021).

Finally, it should be noted that the digitization of the administration has made it easier, faster and safer to process information, and in tax and social security declarations. When the payslip is established, the customer consults it, he checks whether the data is sent to social organizations for the calculation and payment of periodic social security contributions (Ping, 2021; Zhu and Cuan, 2022). This procedure requires “ZERO PAPER”. Regarding tax treatment (VAT. IS. TS. Etc.), the same procedure is applied to various taxes and duties (Stancheva-Todorova, 2018; Giles, 2019). Human intervention is limited to entering basic data or verifying the declarations pre-established by accounting software or by the administration. Thus each company can check the history of its account online, without resorting to the use of paper (Qasim and Kharba, 2020; Petkov, 2020).

Note that with digitization, most accounting entry work is automated, eliminating the accounting production function in its current design (Ionescu, 2019; Luo et al., 2018). Thus, we retain that one of the new missions of the chartered accountant is to support the digital transformation of its clients. He must be helped by IT consultants for this (Lee and Tajudeen, 2020; Berdiyeva et al., 2021; Kommunuri, 2022).

It is nonetheless true that the chartered accountant must, in addition to traditional advisory missions, take care of the management of dashboards, restructuring, the transfer of companies and the management of assets. . He must provide advice and monitoring of cash management, and must position himself as a prescriber and business facilitator (Weimei, 2021; Rashwan et

al., 2020; Singh et al., 2023). It is also responsible for the marketing of products, financing, crypto currencies and cyber security (Kindzeka, 2023; Almagtome, 2021).

It is no less true that artificial intelligence necessarily impacts the accounting profession, since accounting firms thus hold a lot of data that AI analyzes, controls and relieves professionals in the accounting professions who consider that the creation and basic analysis of Artificial intelligence (Vărzaru, 2022; Hu, 2022; Luo et al., 2018) is an important tool for innovation and business competitiveness. Indeed, AI simplifies complex and repetitive tasks for greater efficiency, it improves the efficiency of processes and reduces their costs, by offering tools for new services (Chukwuani and Egiyi, 2020; Bose et al., 2023).

III. Research Methodology

In this part of the process, we will talk about our direct meeting with professionals, to whom we asked direct questions, allowing them to express themselves freely. Through our questions, we sought to analyze the effect of technology on the accounting process. To carry out this research, we targeted various profiles, in an attempt to detect a certain homogeneity in their responses. We have thus targeted 20 professionals, among whom we find 5 founding directors of SMEs; 9 heads of accounting departments and 6 management controllers in economic entities. The table below shows the schedule and duration of interviews for the targeted sample.

Profile of respondents	Date of interview	Type of interview	Duration of interview	Place of interview
Director and Founder of SME (05 people)	06/11/2022	Face to face	45 minutes	Meeting room
Accountants and department heads compatible in companies economic (9 people)	08/02/2023	Face to face	65 minutes	Meeting room
Management controllers in economic enterprises (06 people)	14/02/2023	Face to face	35 minutes	Meeting room

Table 1: Schedule of Focus Group interviews

During these interviews, we specifically asked three questions, which are: what are the applications resulting from AI and that you apply? Do you think your company is able to use these applications? For you, is the processing of accounting documents the first field of application of AI in your company?

In this approach, having noted that the responses we obtained were not homogeneous, we proceeded by arbitration type analysis. We have therefore grouped the responses into 4 sections.

A first part which evokes the impact on the process. The second concerns the consequences of AI on accounting practices. The third is interested in the advantages of AI and finally the fourth, in the disadvantages.

Finally, we carried out a SWOT type analysis (Strengths, Weaknesses, Opportunities and Threats), to be able to verify the feasibility of using AI to process accounting documents in Tunisian companies.

We also sought to understand how our various interlocutors act when it comes to processing accounting documents. The answers we obtained show that all our interviewees have carried out these activities and that there is a real similarity in their processes, except for a few variations due to the form and size of their company.

It also appears that not all respondents use new technologies. However, they are unanimous on the importance of this technology and its impact on accounting. Almost all of our interviewees know that there are technologies that can impact the accounting process. They specifically cite the scanning of documents using a scanner or a camera just as well to go directly to automatic writing. They are aware that from now on the tasks carried out by the accountant could be modified.

One of the experts argued: *“the digitization of accounting documents must be carried out by all people related to the company, whether they are suppliers, bankers or others.”* He added: *“There is certainly a development in this direction, since invoices are often sent by e-mail. However, all the partners must move in this direction, which will save the company a lot of time and paperwork.”* The massive use of technological tools will further facilitate the automation of the process.

Regarding the dematerialization and the implementation of an automation, the opinions are very varied.

We have created a scatter plot in which the most cited terms during our interviews are highlighted, allowing them to be viewed directly.

Moreover, we learned from our interviews that the speed of document processing represents, for almost all of the sample, the main advantage, especially since the risk of error is nil or very low.

Let us also remember that for our respondents, technology makes it possible to lighten the tasks of the accountant and will save him a significant amount of time, which he will devote to activities requiring reflection and interpretation.

However, for an interviewed accountant and another founding director: “this benefit is mainly intended for those who have accumulated experience who are only able to perform other functions”. They add: “for the less competent, they must complete their training to be able to carry out other activities”. Qualification, according to the interviewees, is of paramount importance in order to be able to assimilate and digest AI, and thus reduce personnel costs.

Still, Artificial Intelligence can present serious threats. Indeed, it can present fake videos, almost undetectable, by usurping the identity of a person, to request access to secure data, to manipulate public opinion or even harm someone's reputation.

Among the serious threats, we cite:

- Hacking autonomous cars: by taking control of an autonomous vehicle to use it as a weapon.
- Tailor-made phishing, by installing malicious software.

- Hacking AI-controlled systems, for example causing a widespread power outage.
- Large-scale blackmail: collect personal data in order to send automated threatening messages.
- Written false information, by writing propaganda articles which apparently are issued by a reliable source.

Artificial intelligence also poses medium-severity threats. It facilitates fraud, it facilitates corruption. It can also carry out attacks that are both specific and massive, to probe the weaknesses of the systems before launching several simultaneous attacks. It also diverts drones to attack targets. It can also deprive users of access to a financial service, or to a social activity.

For low-intensity threats that AI can contain, we basically cite the use of Burglar Robots that can slither through mailboxes to retrieve keys. This is weak, very localized and small-scale damage. In any case, AI can thwart sorting and data collection to erase evidence or hide information, fabricate false content.

It is nonetheless true that for our professionals, companies can derive a certain number of strengths and weaknesses from this technological integration. Indeed, the integration of automation has a positive impact on companies (Kindzeka, 2023; Liao, 2022). It processes a large number of documents in less time, it reduces errors, information is available in real time, it reduces fraud, it leads to financial gain by reorganizing human resources and optimizing premises (Damerji and Salimi , 2021; Lee and Tajudeen, 2020; Stancheva-Todorova, 2018).

However, the power of algorithms is often underestimated, from where, according to the statements of our questioned, the man is always present in the process because one does not realize the power of the algorithms which emerge in an impressive way (Gusai, 2019; Kommunuri, 2022; Kindzeka, 2023).

IV. Results and discussion

We note that the professionals interviewed are of the opinion that technology is the cornerstone of all technical progress and the basis on which AI is based. For the various profiles of our respondents, the tendency is to consider AI as an opportunity, with positive consequences, since it allows us to focus on the business, without spending a lot of time processing accounting documents in a way traditional. However, it is still necessary to make settings, to carry out checks to ensure the proper functioning of the software (Liao, 2022; Qasim and Kharba, 2020; Li and Zheng, 2018).

In addition, our interviewees agree that it will be necessary to reduce staff; and obviously this will affect the less qualified accountants. In this sense, the targeted accountants offered, during our interviews, several tips to follow, including essentially:

- It is necessary to specialize to have higher skills
- It is equally essential to develop the relational aspect.
- It is also necessary to be able to keep abreast of the technologies used in order to be able to adapt.

Nevertheless, these professionals argue that in addition to automation, other technologies will impact their business.

Conclusion

The work of the accountant is ostensibly changing with Artificial Intelligence and technological development. Information and communication technologies offer humanity limitless facilities (Ionescu, 2019; Qasim and Kharba, 2020). Digitization and publication tools, added to artificial intelligence, facilitate the production, access and dissemination of information (Weimei, 2021; Chowdhury, 2023).

Through this approach, we sought to find out whether accounting professionals attach great importance to technology and whether accounting firms have a culture with a strong technological dominance (Sudaryanto et al., 2023; Khan, 2022).

We have also demonstrated that technology is only a tool, at most an accelerator, which makes it possible to bring about necessary changes, however, accounting professionals must have a mentality that leaves room for quality, responsiveness and efficiency at the service of customer satisfaction, and to meet increasingly volatile demand.

We opted for a qualitative approach and conducted face-to-face interviews with accounting professionals to arrive at the results that the process, linked to the processing of accounting documents, is based on a new generation of robotic automation and on the 'Artificial Intelligence, through more advanced techniques and more sophisticated algorithms, capable of performing tedious tasks.

The results also reveal that accounting professionals are aware of the changes that mark their environment.

Moreover, this research revealed very interesting results, since the professionals we targeted claimed to have real knowledge regarding the application of software and technology used to process accounting documents.

A number of them say they have already acquired some of these levers.

They argue that for some tasks, a smooth change can be anticipated, because of this technological mutation.

This is an essential element for companies considering changes and considering people as an important element, to guarantee a transformation in the best possible conditions (Bose et al., 2023; Berdiyeva et al. , 2021; Ionescu, 2019).

Studying the human/technology link to carry out accounting tasks has been of paramount importance to us, as it has helped us to identify the essential conditions for the mechanization of information. Indeed, the technical possibilities offered by IC and AI, in the processing of accounting documents, were confirmed at the end of this qualitative research.

The necessary investments are costly, especially since these innovations are expensive and their implementation often involves hidden costs and additional investments (Rashwan et al., 2020). It would then be necessary to find solutions based on capitalization rather than acquisition (Sudaryanto et al., 2023; Berdiyeva et al., 2021; Junmei, 2018).

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