

# **Evolution of bookkeeping, tax, personnel and ancillary obligations: Survey in an accounting office**

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#### **ABSTRACT**

Accounting began with man's desire to control his assets and has undergone several changes due to economic, political, social, scientific and recently technological progress. In this context, the study aimed to show the evolution of accounting in offices, from manual/mechanical accounting to the automation of entries. Data was collected through a semi-structured interview with an employee of the office studied who witnessed all the phases analyzed in the article. The results showed that the advent of information technology has facilitated the automation, import and integration of entries. However, the need for security has arisen, which is provided by a daily backup routine and mini-courses when necessary to train employees.

**Keywords:** Accounting, Assets.

#### 1 INTRODUCTION

Accounting arose before man knew exactly what it was, because it was due to the desire to control his assets (MOREIRA; CARMO, 2022). According to Iudicibus 2021, there are indications of the existence of a primitive way of doing accounting dating back to 2000 B.C. And as man evolved and participated in more complex activities, a more precise control of his assets became indispensable (DEMO, 2020). Thus, accounting gradually became a science with the evolution of its theory and practices (OLIVEIRA; SAINTS; AMORIM, 2023).

Accounting has undergone significant transformations due to economic, political, cultural, social and scientific progress, as well as to the knowledge accumulated by society over time, the result of trials and errors experienced in daily life (RIBEIRO, 202;). During the first industrial revolution, the accounting processes that only covered simple commercial operations were insufficient for the scenario that was being drawn, during this period the accountant did not assist in decision-making, he was only a launcher of accounting acts and facts (ALVES DA SILVA FILHO, 2022, NASCIMENTO, 2022). In this context, the requirements for filling out the contact profile would be manual skills (writing, calculations, in addition to accounting fundamentals); emphasis on precision, since precision and attention to detail, given that an error would be very difficult to correct, having a more operational role, focusing on the organization and maintenance of accounting records (BRAIDOTTI; CARROZZA.; BARROS, 2020).

The second important change occurred in the nineteenth century, when large publicly traded companies needed to be regulated, Iudícibus, Martins and Carvalho (2005), in turn, point out that at this

juncture accounting began to follow a more scientific path, abandoning its nature of merely recording and assuming a speculative role. With the introduction of computerization, the profile of the accounted began to require software skills, with the emergence or development of bookkeeping programs; Some tasks could be automatic, such as calculations, journal entries, and reconciliations, and became more efficient and less prone to errors or misunderstandings with the use of the programs. One can provide a financial analysis service to support or support their clients (PEITER, 2023; FREDO, 2021; PEROTTI, 2021)

The world changed with the advent of the internet and robotic technology, giving rise to computer accounting, as explained by Gonçalves and Riccio (2009), in the 80s, the emphasis was on the dissemination of personal computers and the emergence of Information Technology (IT) aimed at offices. This IT was made up of automation systems aimed at managing documents, agendas, and communication. The way of doing accounting has changed rapidly, when compared to the time that was previously required for changes with a similar degree of relevance. In this the accountant's profile started to require skills in advanced technology, they need advanced skills in technology, including automation, data analysis, artificial intelligence and machine learning; strategic focus: Routine tasks are largely automated, allowing accountants to focus on strategic financial analysis and tax planning; expanded advisory role: Accountants play a more advisory role, providing strategic insights and financial guidance to clients or the organization (FIGUEIREDO, 2020; BRAGA, 2020).

These technological changes are reflected in accounting and the growing importance of strategic financial analysis. In addition, accountants now need to be aware of the ethical and legal implications of the technology, such as data security and compliance with privacy regulations (PEITER, 2023; FREDO, 2021; PEROTTI, 2021). In summary, the accountant's profile has changed from a highly manual professional to an expert in technology and strategic financial analysis. The ability to adapt to technological changes and continuously learn is essential for success in modern accounting (PEITER, 2023; FREDO, 2021; PEROTTI, 2021).

In accounting, information technology is indispensable for any office. As Arruda, Gomes and Santos (2013) explain, Information Technology is more present in the accountant's routine, previously the work was carried out completely in handwriting, currently it is entered into systems, requiring more care when dealing with data or information.

In the context of the fourth industrial revolution, the professional accountant had his routine automated, giving room to have a more strategic vision and evolve the way of doing accounting, as stated by Xavier and Rodrigues (2019), the Industrial Revolution in its fourth stage is marked by the insertion of technology capable of allowing the fusion between the physical and digital worlds. There are many speculations that the accountant is a professional who may be extinct, but according to studies what should happen is an adaptation of the work on the part of the accountant and the way that the data is transmitted by

clients to offices. According to the study by Andrade and Mehlecke (2020), it is crucial to establish initiatives that offer support for the readjustment of financial and operational practices, promoting the adoption of new behaviors that facilitate the transition to digital accounting.

The problem of this study is from the perspective of the professional accountant, what is the impact of technology in an accounting office? From the research problem is the general objective, which is to show the evolution of accounting in offices, from manual/mechanical accounting to the automation of entries. In order to fulfill the general objective, three specific objectives are proposed, namely: to investigate the facilities of information technology, to compare the changes in the configuration of teams before and after the adoption of technologies and what are the advantages and disadvantages that information technology has brought to offices. The specific objectives proposed aim to offer a comprehensive view of the implications of automation and information systems in accounting, contributing to the improvement of professional practices and to the preparation of accountants for future challenges.

In order to contribute to the literature and based on previous research carried out by OLIVEIRA, SANTOS and AMORIM (2023) that had its relevance to provide a better understanding of the need for changes and technological transformation worldwide, the study brought relevant information on how social changes affect accounting since the beginning, in addition to presenting arguments to raise awareness of the need to adapt to the technological revolution and development of the Artificial Intelligence present in everyday business; PEROTTI (2020) Which had its relevance in providing students and professionals in the accounting field with knowledge of how information technology has increased the quality and efficiency of services provided by accounting firms. BRAGA (2020) was relevant as an instrument for clarifying and raising awareness in the accounting community about the need for professionals in the area to keep up to date with technological innovations. This research is justified to understand the evolution of accounting in offices and the challenges and advantages provided to professional accountants in the face of technological transformations from the point of view of a professional in the area and literature reviews.

The structure of the research will be made by 5 sections, with the first being the introduction, followed by the theoretical framework where the concept of technology and information systems is addressed, its impacts on accounting offices in all aspects that touch the quality and productivity of work in accounting offices, the third section is elucidated the work methodology, The fourth section consists of the analysis of the results and the fifth section consists of the final considerations.

#### 2 THEORETICAL BACKGROUND

#### 2.1 INFORMATION TECHNOLOGY

Accounting has changed over the years several times to meet the needs imposed by the new business models that emerged (Andrade and Mehlecke (2020). According to Padoveze (2009), information

technology is a technological grouping used by entities in order to execute information systems and their operations, and it is evident that these resources are linked to information technology, telecommunication and the data transmission process.

For França (2018), Information Technology (IT) helps in the managerial sphere, brings internal and external interconnection, generates elements for a better understanding of knowledge, with the intention of seeking advances in accounting practices. Information technology is one of the main instruments in accounting, being indispensable for facilitating data processing, in addition to providing speed, reliability and efficiency in the accounting service and management of business activities (SÁ, 2006; MARTINS et.al, 2012)

When it comes to modern accounting, the use of information systems has become very important, as it increases productivity by automating processes and reducing rework (Bairro, 2008; Souza, 2021). Information systems are an environment made up of software, hardware, and people who feed this system with data interconnecting various areas of the company (O'Brien 2010; (FROM PAULA; MATTEDI; SILVA, 2012).)tag. Information systems and information technology play the role of bringing companies together, improving the utilization of resources in the supply chain, facilitating the flow of information, and increasing product value (DE PAULA; MATTEDI; SILVA, 2012).

Information systems play a key role in the field of accounting, as they are responsible for collecting, processing, and transforming data into essential information, which is presented in the form of accounting reports (Simulare 2019). These reports are addressed to the internal administration, tax authorities and other interested external users. MOSCOVE, SIMKIN and BAGRANOFF (2002) considered that Accounting Information Systems (SICs) represent a specialized category of information systems that offer crucial insights into the business processes and events that influence the organization. In the view of Lunkes and Rosa (2012), accounting information systems are a fundamental part of creating valuable data for various purposes within an organization and that in order to obtain an effective information system, an appropriate accounting system is of paramount importance. In other words, accounting is based on the generation of information, as raised by Hoss et al 2008, accounting is linked to asset management, the calculation of earnings and the provision of useful information to those interested in evaluating the economic and financial performance of individuals, organizations and nations, in order to support their choices for the best decision. The accountant must connect the individuals, organization, and procedures, with the accounting records.

#### 2.2 AUTOMATED ACCOUNTING

The process of automating entries emerged after the fourth industrial revolution and along with it the term "accounting 4.0", which according to Oliveira and Malinowski (2017) is used to allude to the fourth industrial revolution, which is directly responsible for the change that occurred in most jobs

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worldwide, being no different in the accounting sector. The adaptation of the accountant becomes essential for their survival, in a world where new technologies are very important (YASEEN; SALIE, 2019; CHIU et al., 2019)

One of the most significant impacts concerns the automation of processes. With technological advances, notably including artificial intelligence, machine learning, and robotic process automation (RPA), there is an increase in computer systems performing tasks that were previously repetitive and routine (Souza 2021). This encompasses activities such as data entry, account reconciliation, report production, and even the analysis of accounting information (SCHWAB, 2016).

According to Pinto et al. (2020), there are facilitators, but with them also come the challenges that professionals need to be aware of and ready to adapt from the traditional model to the Industry 4.0 model. Among the advantages associated with this transition, it can be highlighted that the accountant's role goes beyond the mere insertion and verification of information, becoming a collaborator in strategic decisions, contributing to technological innovations that automate operational activities. These same authors also emphasize that the changes towards Industry 4.0 bring to light some benefits of technology that can promote the evolution in the efficiency of the use of time, the reduction of expenses, the prevention of fraud, tax evasion and the ease of reporting. Bringing the change in the quality of accounting information. Among the challenges, the highlight made by BUISÁN and VALDÉS (2017) is that the preparation and training of professionals is a priority in the labor market in industry 4.0.

#### 2.3 PREVIOUS STUDIES

In order to verify the approach used in research with similar themes to the evolution of accounting, the impact of information technology on the bookkeeping of companies. Previous studies with a similar theme will be presented in the Table 1.

Table 1: Previous research

	Authors:	OLIVEIRA, SANTOS and AMORIM (2023)
		Analyze the historical evolution of accounting to understand how the technological
	Objective:	evolution of the 21st century has affected the accounting profession
	Methodology:	Bibliographic, descriptive research with a qualitative approach
1		It was concluded that all the transformations suffered in society have brought changes,
	Results: which will not be different with the technological transformations that occ	
		world. In view of this, it is clear that the profession of accountant will not be extinct, but
		will undergo many transformations, since with these changes the profession will require
new skills		new skills.
	Authors:	BRAIDOTTI, CARROZZA and BARROS (2020)
		To describe the way in which bookkeeping has progressed (and, consequently, of
	Objective:	accounting), as well as to analyze the effects of meanings of the technological discourse
2		that, through the gestures of interpretation, we understand as the effect of the sliding of
		meanings of productivity in its constitution

	Methodology:	The development of the analyses took place in a spiral movement, with processes of description, theorization and interpretation in between.
	Results:	Technology, constituting each of the phases of 'counting/manual>>accounting/mechanical>>managing/electronic", was significant for the development of bookkeeping, producing effects on the subjects who practice it and on the society they compose  PEROTTI (2020)
	Authors.	` /
	Objective:	Analyze the impacts caused by the introduction of information systems in the  AMSULPAR regional offices
3	Methodology:	Exploratory, descriptive quantitative research. bibliographic, documentary and field research
	Results:	The results obtained with the research show the most varied and extremely important contributions for entrepreneurs, employees and academics in the accounting area, since there is always the possibility of using information technology as a tool for decision-making for a differentiated management, management that comes from knowledge and information in the management and improvement of techniques in the execution of accounting services.
	Authors:	BRAGA(2020)
	Objective:	Analyze the impact of accounting 4.0 on the life of the accounting professional, identifying the challenges and perspectives with the use of technology.
4	Methodology:	Exploratory, descriptive and quantitative case study type.
	Results:	The factor that most impacted the activity was the development of information systems; The most important benefits brought by the technology were agility and time savings; knowledge about ERP and software used in accounting is good; the companies they work for offer training; Accounting courses do not prepare undergraduates for the requirements of accounting 4.0; companies are looking for new technologies to optimize work; taking technology courses contributes to the expansion of knowledge and prepares for the market; and disagrees that he has difficulty with the use of technology at work.
5	Authors:	MARTINS AND BRUN (2013)
	Objective:	Analyze the technological characteristics of the accounting firms of Cascavel – PR and what is the level of computerization that is being used in the entities
	Methodology:	Exploratory quantitative.
	Results:	It was found that the entities are not only prepared to meet the demand of their clientele but are also adapted to technological innovations, applying them in their routine activities and able to use NF-e and SPED. However, it was noted that there are specific points that can still be explored. Of particular note is the integration between offices and clients and improvements in the support provided to organizations in the accounting sector by software providers.
		G G D (2022)

Source: Survey Data (2023)

# 3 METHOD

# 3.1 SEARCH RANKING

This work is classified as applied research, which, according to Gil (2010), are studies with the objective of general practical and applied solutions to problems of the researcher's daily life.



Table 2: Summary of the method

Classification	Applied, qualitative and descriptive research		
Kind	Survey		
Population	Office studied vs. Previous studies		
Sample	Office studied vs. Previous studies		
Research Instruments	Interview with a semi-structured questionnaire		
Data collection	Face-to-face interview with a company employee		

Source: Survey Data (2023)

In addition, it is qualitative of a descriptive nature, according to Minayo (2009) qualitative research is intended for research that has results that do not have the possibility of being quantified in numbers. In other words, it deals with the universe of meanings, motives, aspirations, beliefs, values and attitudes. It explores the realm of meanings, motivations, desires, convictions, principles, and postures.

#### 3.2 POPULATION AND SAMPLE

In order to achieve all the objectives raised, the object of study is an accounting firm operating in the market for 30 years, the respondent employee has been working for 23 years, he joined in April 2000, currently the firm has a portfolio with 50 clients, most of them being from the national simple and 6 companies from the presumed profit.

The period analyzed will be from when the responding employee joined. When asked what year did he join the company? He received the reply in March 2000. When asked about the firm's uptime and the number of current clients, the answer was 30 years old, with 50 clients in its portfolio.

The method used for this research will be a survey, an English term, with the meaning of being an investigation whose objective is to provide statistical descriptions of people through questions. (FOWLER 2011).

#### 3.3 DATA COLLECTION

Data collection took place through a semi-structured interview with an employee of the company who witnessed all the accounting phases present in the study. The semi-structured interview is a method of obtaining information where there is a continuous dialogue between the interviewee and the researcher, in which the latter must guide the conversation according to his purposes (Queiroz 1988).

In addition, the process that precedes the interview is extremely relevant, requiring the researcher to select the interviewees with knowledge; verify the interest of the interviewees in participating and make the appointment in advance; it is essential to guarantee the absolute confidentiality of the identities of the interviewees; in addition, configure a script according to the research proposal (OLIVEIRA et al., 2020).

#### 3.4 DATA PROCESSING

In order to respond to the specific objectives, the interview will be transcribed and the transcript will be grouped into the following categories and subcategories: Specific objective 1: Investigate the facilities of information technology; Categories: Manual, mechanical; import and automation liabilities, temporary; Subcategories: Training required. Specific Objective 2: Compare changes in the configuration of teams; Categories: Ancillary obligations and tax obligations, temporal; Subcategories: Training required. I decided to separate the first two periods by 10 years, because according to the respondent's report, there was a hiatus in the significant changes that information technology brought to accounting. It takes 10 years to notice significant changes.

Table 3: Framework for the treatment of specific objectives

Specific Objective	Categories:	Question or	Treatment	Source
		Proposition		
Investigate the	Manual,	Highlight the	Interview transcript and	Transcription (questions
facilities of	Mechanical; Passive	evolution that	transcript grouping into	4, 5, 6, 7, 8 and 9) x
information	Import and	technology has	categories and	Literature
technology	Automation,	brought to the	subcategories	
	Temporal	accounting service		
Compare changes to	Ancillary	Show the convenience	Interview transcript and	
team configuration	obligations and tax	that technologies have	transcript grouping into	Transcription (questions
	obligations,	brought, both in terms	categories and	4, 5, 6, 7, 8 and 9)
	temporal	of logistics and in the	subcategories	Literature
		simplification of		
		bureaucratic		
		processes.		
Advantages and				Transcription (questions
Disadvantages of				10, 12, 13 and 14) x
Information				literature
Technology				

Source: Survey Data (2023)

# 4 PRESENTATION OF DATA AND ANALYSIS OF RESULTS

After the interview process with the employee, the process of analyzing the collected data began, the data will be exposed through grouped tables, following the data treatment process previously reported in the methodology section. The research aimed to explore how accounting in offices was affected, outlining its path from manual/mechanical practices to the possibility of integration, import, and automation of entries.

#### 4.1 PRESENTATION OF THE COLLECTED DATA

The questions were divided into three blocks, with the first block collecting basic information from the company and the respondent. With regard to its size and the time that the individual has been in the market, the second block contains the data on the evolution of the bookkeeping processes over the period analyzed and the third block contains the pertinent considerations that were raised by the employee regarding the advantages and disadvantages that information technology has brought to the accounting service.

# 4.1.1 Evolution of bookkeeping processes

When asked about the impact that technology has brought to the way of tax, accounting, personnel department and ancillary obligations, he brought information that will be transcribed by means of a table, which will be separated by period analyzed, thus bringing better understanding to readers.

Table 4: Corresponding to the year of entry into the office				
FISCAL (2000)	ACCOUNTING (2000)	PERSONNEL DEPARTMENT (2000)	ANCILLARY OBLIGATIONS (2000)	
Bookkeeping of invoices	Verification of the	Control of employees'	Process for opening a	
(Mechanical)	documentation to be	bank of hours	company	
, , , ,	recorded (Manual)	(Mechanical/Spreadsheets)	(Manual/Physical)	
Checking A/P and A/R	Transcription of entries	Payroll Tax Calculation	Business License	
Invoices (Manual)	in cash book (Manual)	(Mechanical/Spreadsheets)	Process	
, , ,	, , ,	•	(Manual/Physical)	
Calculation of taxes on	Posting of Monthly	Transcription of payroll	State Application	
profit (Mechanic in	Business Expenses	funds to the system	Process	
spreadsheets)	(Mechanic)	(Mechanical)	(Manual/Physical)	
Issuance of tax slips	Tax Provision	Vacation Control	Municipal Registration	
(Mechanical by means of	(Mechanical)	(Mechanical/Spreadsheets)	Process	
typewriter)			(Manual/Physical)	
Shipping to companies	Provision of payroll	Calculation of Variable	Company Closure	
(Manual/Physical)	amounts (Mechanical)	Averages	Process	
		(Mechanical/Spreadsheets)	(Manual/Physical)	
Calculation of municipal	Verification of the	Calculation of severance		
and state taxes	postings in the system	pay		
(Mechanical/Spreadsheets)	with the postings	(Mechanical/Spreadsheets)		
	present in the cash			
	book (Manual)			
Checking Service Invoices	Posting Bank			
(Manual)	Statements(Mechanic)			
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	I	1		

Source: Survey Data (2023)

Through the table above it is possible to notice that in the year 2000 all the work of the office was composed of numerous stages that consisted of rework, where the work previously done more than once was reviewed, requiring a lot of time and a lot of human work.

Table 5: Corresponding to the year 2010.

FISCAL (2010)	ACCOUNTING(2010)	PERSONNEL DEPARTMENT (2010)	ANCILLARY OBLIGATIONS (2010)
Bookkeeping of invoices	Verification of the	Control of employees' bank of	Process for opening a
(Mechanical)	documentation to be	hours	company
	recorded (Manual)	(Mechanical/Spreadsheets)	(Manual/Physical)
Checking A/P and A/R Invoices	Transcription of cash book	Calculation of Payroll Taxes	Business License
(Manual)	entries(No longer used)	(Mechanical/Import Liability)	Process
			(Manual/Physical)
Calculation of taxes on profit	Posting of Monthly	Transcription of payroll funds	State Application
(Mechanical/Spreadsheets)	Business Expenses	to the system (Mechanical)	Process
	(Mechanic)		(Manual/Physical)
Issuance of tax guides	Provision of taxes (Import	Vacation Control	Municipal
(Mechanical/Import Passive)	liability)	(Mechanical/Spreadsheets)	Registration Process
			(Manual/Physical)
Shipping to companies	Provision of Payroll	Calculation of Variable	Company Closure
(Manual/Physical)	Amounts (Import Liability)	Averages	Process
		(Mechanical/Spreadsheets)	(Manual/Physical)
Calculation of municipal and	Verification of the postings	Calculation of severance pay	
state taxes (Mechanic)	in the system with the	(Import liability)	
	postings present in the cash		
	book (No longer used)		
Checking Service Invoices	Posting Bank		
(Manual)	Statements(Mechanic)		

Source: Survey Data (2023)

At that time, the work was still very mechanical, requiring a lot of people in the office. However, some things had already been abolished, such as the practice of using cash books. A practice that drastically decreases the average time spent by an accounting employee per firm company.

Table 6: Corresponding to the year 2015.

TAX (2015)	ACCOUNTING(2015)	PERSONNEL DEPARTMENT (2015)	ANCILLARY OBLIGATIONS (2015)
Bookkeeping of	Verification of the	Control of employees' bank of	Process for opening a
invoices (Mechanical)	documentation to be	hours (Mechanical)	company
	recorded (Manual)		(Manual/Physical)
Checking A/P and A/R	Transcription of cash book	Calculation of Payroll Taxes	Business License
Invoices (Manual)	entries(No longer used)	(Mechanical/Import Liability)	Process
			(Manual/Physical)
Calculation of taxes on	Posting of Monthly	Transcription of payroll funds	State Application
profit (Import liability)	Business Expenses	to the system (Mechanical)	Process
	(Mechanic)		(Manual/Physical)
Issuance of tax guides	Provision of taxes (Import	Vacation Control	Municipal Registration
(Mechanical/Import	liability)	(Mechanical/Spreadsheets)	Process
Passive)			(Manual/Physical)
Shipping to companies	Provision of Payroll	Calculation of Variable	Company Closure
(Manual/With	Amounts (Import Liability)	Averages (Import Liabilities)	Process
companies opting for			(Manual/Physical)
internet delivery)			_
Calculation of	Verification of the postings	Calculation of severance pay	
municipal and state	in the system with the	(Import liability)	
taxes (Mechanic)	postings present in the cash	- •	
	book (No longer used)		
Checking Service	Posting Bank		



es (Manual)   Statements(Mechanic)
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Source: Survey Data (2023)

In 2015, the process of digitization of the accountant's work, it is possible to verify some changes in tax and accounting bookkeeping, with the personnel department and ancillary obligations being left behind in some issues, requiring more time of work.

Table 7: Corresponding to the year 2020.

TAX (2020)	ACCOUNTING(2020)	PERSONNEL DEPARTMENT (2020)	ANCILLARY OBLIGATIONS (2020)
Bookkeeping of invoices	Verification of the	Control of employees'	Process for opening a
(Import liability)	documentation to be	bank of hours	company
	recorded (Manual)	(Mechanical)	(Mechanical/Online)
Verification of incoming and	Transcription of cash book	Calculation of Payroll	Business License Process
outgoing invoices	entries(No longer used)	Taxes	(Mechanical/Online))
(Mechanical/Spreadsheets)		(Mechanical/Import	
		Liability)	
Calculation of taxes related to	Posting of Monthly	Transcription of payroll	State Registration
profit (Mechanical)	Business Expenses	funds to the system	Process
	(Mechanic)	(Mechanical)	(Mechanical/Online)
Issuance of tax guides	Provision of taxes (Import	Vacation Control	Process for municipal
(Mechanical/Import Passive)	liability)	(Import Liability)	registration
			(Mechanical/Online)
Shipping to businesses (Most	Provision of Payroll	Calculation of Variable	Company Closure
businesses opting for internet	Amounts (Import Liability)	Averages (Import	Process (Internet
delivery)		Liabilities)	Mechanic)
Calculation of municipal and	Verification of the postings	Calculation of	
state taxes (Mechanic)	in the system with the	severance pay (Import	
	postings present in the cash	liability)	
	book (No longer used)		
Verification of Service Invoices	Posting Bank		
(Mechanical/Spreadsheets)	Statements(Import		
_	Liabilities)		

Source: Survey Data (2023)

The year 2020 was when the digitalization of work became an essential part, because with the adversities of covid-19 and the necessary social distancing, countless processes that were previously face-to-face were forced to be digitized. With this, facilitating and reducing bureaucracy in numerous situations.

Table 8: Corresponding to the year 2023.

TAX (2023)	ACCOUNTING(2023)	PERSONNEL DEPARTMENT (2023)	ANCILLARY OBLIGATIONS (2023)
Bookkeeping of invoices (Import liability)	Verification of the documentation to be	Control of employees' bank of hours	Process for opening a company
(import naomity)	recorded (Manual)	(Mechanical)	(Mechanical/Online)
Verification of incoming and outgoing invoices (Mechanical/Spreadsheets)	Transcription of cash book entries(No longer used)	Calculation of Payroll Taxes (Mechanical/Import Liability)	Business License Process (Mechanical/Online))
Calculation of taxes related to profit (Import liability)	Posting of Monthly Business Expenses (Mechanic)	Transcription of payroll funds to the system (Mechanical)	State Registration Process (Mechanical/Online)
Issuance of tax guides (Mechanical/Import Passive)	Provision of taxes (Import liability)	Vacation Control (Import Liability)	Process for municipal registration (Mechanical/Online)
Sending taxes to companies (On the internet)	Provision of Payroll Amounts (Import Liability)	Calculation of Variable Averages (Import Liabilities)	Company Closure Process (Internet Mechanic)
Calculation of municipal and state taxes (Mechanic)	Verification of the postings in the system with the postings present in the cash book (No longer used)	Calculation of severance pay (Import liability)	
Verification of Service Invoices (Mechanical/Spreadsheets)	Posting Bank Statements(Import Liabilities)		

Source: Survey Data (2023)

### 4.1.2 Influence of information technology on the workforce

When asked about the configuration of the staff, the following answer was presented, which will be grouped in a table with the services, number of workers needed over time.

Table 9: Corresponding to the number of workers over the years surveyed

Ancillary obligations	Tax obligations	Year
4	6	2000
3	5	2010
2	4	2015
1	2	2020
1	2	2023

Source: Survey Data (2023)

Through this table and the tables in the previous section, it is possible to notice that as information technology entered the office, manual, mechanical and repetitive work gave way to imports and automation, bringing increased productivity on the part of employees. In other words, information technology has brought the company's ability to reduce its staff while maintaining the quality of the service provided, as long as the employees are fit for the service. This aptitude was due to the completion of training courses offered by the software that the company uses for accounting.

# 4.1.3 Relevant points raised by the interviewee:

When asked about the advantages and disadvantages of information technology, the employee pointed out as a positive point: Speed to solve problems, reduction of bureaucracy, integration, reliability and security.

And as negative points: Continuous learning of the processes that undergo changes, concern with backups and security because through the internet viruses can be installed that damage or leave exposed customer data and the work is dependent on the servers of the federative entities, when there are many accesses they have a great instability of connection making the work unfeasible during the period of instability.

#### 4.2 ANALYSIS OF THE RESULTS

Compared to previous studies, the study is similar to the conclusions of OLIVEIRA, SANTOS and AMORIM (2023), BRAIDOTTI, CARROZZA and BARROS (2020) in that information technology has impacted accounting and it is necessary for the professional to adapt to the new demands required. In addition, it also goes against what was previously seen by BRAGA (2020) and PERROTI (2020), in both concluded that computerization is of great use, especially in the matter of improving the accountant's work and its performance. In relation to the study by MARTINS and BRUN (2013), there was an advance in the issue of support provided to organizations in the accounting sector by software supplier companies, because, according to the respondent employee, the support of companies is very effective when problems are reported, fixing them with updates or solving them through customer service via call.

# **5 FINAL THOUGHTS**

The present study aimed to show the evolution of accounting in offices, from manual/mechanical accounting to the automation of entries. To achieve this, it was necessary to conduct a semi-structured interview with an employee of the office studied, in addition to a comparison with the literature previously conducted on similar topics.

Regarding the impact of information technology on bookkeeping, tax, personnel department and ancillary obligations, it was verified that the advent of information technology brought as a facilitator the automation, import and integration of entries. But it also became necessary to provide security provided by a routine of backups made daily on the internal server and on an external machine that is located in the home of one of the company's partners and a series of training carried out by employees to be able to book and send tax and accessory obligations in the correct way. This result is similar to that presented by Martins and Brun (2013) but with an addendum that in the year 2023 software is more prepared to comply with tax and ancillary obligations, it also goes against the results obtained by the study by Braga (2020) where the factor



that most impacted accounting was the development of information systems, with an addendum that the analyzed companies use ERP and the office studied uses accounting information systems that are not integrated management systems.

It is observed that, with regard to employee training, from 2015 onwards, the number of employees required to comply with all ancillary obligations was reduced by half when compared to 2000, and compliance with tax obligations was reduced by 33%. However, in 2020 and the pandemic, it brought less bureaucracy and, with that, a drastic reduction, halving the number of employees needed in both ancillary and tax obligations.

As limitations to this study are due to the fact that it was carried out in only one office, as a suggestion for further studies is to carry out this analysis in the offices of the greater Florianópolis region, but with closed questions instead of semi-structured questionnaires, facilitating the response of the entrepreneurs, because a study with this degree of depth referring to the internal processes of the studied company is difficult for entrepreneurs to adhere to.



#### **REFERENCES**

ALVES DA SILVA FILHO, C. Contabilidade de Custos: uma análise sobre os métodos de custeio para o auxílio na tomada de decisões. Revista de Estudos Interdisciplinares do Vale do Araguaia - REIVA, v. 5, n. 03, p. 21, 12 set. 2022. Disponível em: http://reiva.unifaj.edu.br/reiva/article/view/254/203. Acesso 30 ago 2023.

ANDRADE CBH, MEHLECKE QTC. As inovações tecnológicas e a contabilidade digital: Um estudo de caso sobre a aceitação da contabilidade digital no processo de geração de informação contábil em um escritório contábil do Vale do Paranhana/RS. Revista Eletrônica de Ciências Contábeis, 2020; 9(1): 93-122. Disponível em: http://seer.faccat.br/index.php/contabeis/article/view/1596

BAIRRO, Darliene Rodrigues de. Sistema de informação contábil como ferramenta para a tomada de decisão. Accounting And Management, Pato Branco, p. 2, 2008

BRAGA,E. T. F. . Contabilidade 4.0: constatações e perspectiva do profissional contábil. 2020. 62f. Monografia (Graduação em Administração) - Curso de Ciências Contábeis - Centro Universitário Unidade de Ensino Superior Dom Bosco – UNDB, 2020. São Luís: Centro Universitário UNDB, 2020. Disponível em:

http://repositorio.undb.edu.br/bitstream/areas/175/1/ELAINE%20TALESSA%20FIGUEIREDO%20BRA GA.pdf. Acesso 30 ago 2023.

BRAIDOTTI, F. H. R.; CARROZZA, G.; BARROS, R. C. B. DE. O discurso tecnológico da escrituração contábil na história da contabilidade. Revista DisSoL - Discurso, Sociedade e Linguagem, n. 11, p. 116-127, 12 nov. 2020. Disponível em: https://doi.org/10.35501/dissol.vi11.433. Acesso 30 ago 2023.

BUISÁN, Mario; VALDÉS, Fernando. La Industria Conectada 4.0. Revista de Economia Ice: La Economía Digital en España, [s.l], v. 1, n. 898, p.89-100, out. 2017. Disponível em: . Acesso em: 08/10/2023.

CAP Accounting and Management - Número 07 – Ano 07 – Volume 7 – 2013 – Publicação Anual, Paraná, 2013. Disponível em: http://revistas.utfpr.edu.br/pb/index.php/CAP/article/view/1608

DE PAULA, J. D.; MATTEDI, A. P.; DA SILVA, E. R. S. Sistemas de informação nas empresas de Itajubá. In CONTECSI-International Conference on Information Systems and Technology Management, v. 9, n. 1, p. 186-207, 2012.

DEMO, P.. Aprender com suporte digital - Atividades autorais digitais. Humanidades & Tecnologia Em Revista (FINOM), v. 25, p. 10-94, 2020. Disponível em: http://revistas.icesp.br/index.php/FINOM\_Humanidade\_Tecnologia/article/view/1284/932. Acesso 30 ago 2023.

FIGUEIREDO, M. D.; SILVA da, J. B.; MENEZES, F. S.; FRAGA, D. R. . A Indústria 4.0 e sua influência na evolução da Contabilidade: uma análise da percepção dos docentes do Curso de Ciências Contábeis da Universidade Federal de Sergipe. In: 10° Congresso UFSC de Controladoria e Finanças & 3° UFSC International Accounting Congress e 10° Congresso UFSC de Iniciação Científica, 2020, Santa Catarina. Anais do 10° Congresso UFSC de Iniciação Científica em Contabilidade. Florianópolis, 2020. p. 01-01.Disponível em: http://ccn-ufsc-cdn.s3.amazonaws.com/10CCF/20200713225431\_id.pdf. Acesso 30 ago 2023

FOWLER JUNIOR, Floyd J. Pesquisa de levantamento. Tradução: Rafael Padilla Ferreira. Porto Alegre: Penso, 2011. 232 p. (Métodos de pesquisa).

FREDO, Arlei Roberto Transformação digital [recurso eletrônico] : a percepção dos profissionais de contabilidade / Arlei Roberto Fredo. – 2021. Dados eletrônicos. Dissertação (Mestrado) - Universidade de Caxias do Sul, Programa de Pós-Graduação em Administração, 2021Disponível em:. Acesso 30 ago 2023.

GIL, A. C. Como elaborar projetos de pesquisa. 5. ed. São Paulo: Atlas, 2010.

Honkova, I. (2018). Industry 4.0 Aimed at Accounting System. International Scientific Conference on European Financial Systems, 168-173, Brno, Czech Republic, 15th. Recuperado de https://dk.upce.cz/bitstream/handle/10195/72519/Industry4.pdf?sequence=1&isAllowed=y

HOSS, O. et al. Contabilidade: ensino e decisão. São Paulo: Atlas, 2008.

IIDA, E. A.; CREPALDI, P. G. História da contabilidade. 2017. Disponível em: <a href="https://www.inesul.edu.br/revista/arquivos/arq-idvol\_54\_1529444950.pdf">https://www.inesul.edu.br/revista/arquivos/arq-idvol\_54\_1529444950.pdf</a>> Acesso

IUDÍCIBUS, Sérgio de. Teoria da contabilidade. 12. ed. São Paulo: Atlas, 2021. Disponível em: SOUZA, Maíra Melo de. Material de apoio a disciplina de teoria da contabilidade. Graduação em Ciências Contábeis. Universidade Federal de Santa Catarina. 20. ed. 374 slides. Florianópolis, 2023. Acesso 30 ago 2023

LUNKES, R. J.; ROSA, F. S. da. Gestão hoteleira: custos, sistemas de informação, planejamento

MARTINS, F; BRUN, A.L; OS IMPACTOS DO AVANÇO TECNOLÓGICO NAS EMPRESAS DE CONTABILIDADE DA CIDADE DE CASCAVEL – PARANÁ,

MARTINS, P. L. et al. O profissional Contábil na era da informação. Anais do 9º Simpósio de excelência em Gestão e Tecnologia da UFSJ. Minas Gerais, 2012. Disponível em: < http://www.aedb.br/seget/arquivos/artigos12/28816544.pdf> Acesso em 11 de outubro de 2023.

MINAYO, M. C. S. (org.). Pesquisa social: teoria, método e criatividade. Petrópolis, RJ: Vozes, 2009.

MORAS, V.R; MARASSI, R. B; GUSE, J. C; ROSA DA, F.S; SOARES, F.G.

MOREIRA, D. J. S.; CARMO, R. P. . A Percepção de discente em relação as disciplinas e a área de custo: um estudo de caso com os discentes dos Cursos de Ciências Contábeis e Administração da UFRA – Tomé-Açu/PA. 2022. 36 f. Trabalho de Conclusão de Curso (Bacharel em Ciências Contábeis) - Universidade Federal Rural da Amazônia, Belém, 2022. Disponível em: http://bdta.ufra.edu.br/jspui//handle/123456789/2493. Acesso 30 ago 2023.

MOSCOVE, S. A.; SIMKIN, M. G.; BAGRANOFF, N. A. Sistema de informações contábeis. São Paulo: Atlas, 2002.

MUDANÇAS OCASIONADAS PELOS SISTEMAS DE INFORMAÇÕES CONTÁBEIS EM ESCRITÓRIOS DE CONTABILIDADE, Revista eletrônica de administração e turismo, 2015, Disponível em: https://periodicos.ufpel.edu.br/index.php/AT/article/view/4971/4285

NASCIMENTO, K E. B, . A importância da contabilidade de custo dentro das empresas prestadoras de serviço. 2022.23f. Trabalho de conclusão de curso (Curso Técnico em Contabilidade) — Escola Técnica Philadelpho Gouvêa Netto, São José do Rio Preto. 2022. Disponível em: http://ric.cps.sp.gov.br/bitstream/123456789/11374/1/TCC%20A%20importancia%20da%20contabilidade %20de%20custos.pdf. Acesso 30 ago 2023.

- O'BRIEN, James A., 1936. Sistema de informação e as decisões gerenciais na era da internet/James A. O'Brien; tradutores: Célio Knipel Moreira, Cid Knipel Moreira; revisor técnico Luiz Eduardo de Abreu da cunha; colaboração especial Jakow Grajew. 3. Ed.-São Paulo: Saraiva 2010
- OLIVEIRA, M. A.; SANTOS, M. G. A.; AMORIM, D. A. . Contabilidade: da evolução histórica à adaptação tecnológica. Revista GeTec: Gestão, Tecnologia e Ciências, v. 12, p. 20-38, 2023 Disponível em: https://revistas.fucamp.edu.br/index.php/getec/article/view/3085/1902. Acesso 30 ago. 2023
- OLIVEIRA, Guilherme Saramago et al. Grupo focal: uma técnica de coleta de dados numa investigação qualitativa? Cadernos da Fucamp, Uberlândia, v. 19, n. 41, p. 1-13, 2020. Disponível em: https://revistas.fucamp.edu.br/index.php/cadernos/article/view/2208. Acesso em: 04/11/2023
- PADOVEZE, C. L. Sistemas de Informações Contábeis. São Paulo: Atlas, 2009.
- PEDERNEIRAS, G. Sustentabilidade na Indústria 4.0. 2020. Disponível em: https://www.industria40.ind.br/artigo/20042- sustentabilidade-na-industria-40, acesso em out. 2023
- PEITER,S, L. . A ressignificação da profissão contábil: Uma análise a partir da perspectiva da construção de sentido. 2023. 114 f. Dissertação (Mestrado em Contabilidade) Universidade Estadual do Oeste do Paraná, Cascavel. 2023l Disponível em: https://tede.unioeste.br/bitstream/tede/6580/5/SANDRA\_PEITER.2023.pdf. Acesso 30 ago 2023.
- PEROTTI, P. H. A importância dos sistemas de informação para a contabilidade em escritórios de contabilidade na região da AMSULPAR. 2020. 86f. Dissertação (Mestrado em Mestrado em Desenvolvimento Regional) Universidade do Contestado. 2020.Disponível em: http://uni-contestado-site.s3.amazonaws.com/editais/DP-14032020162347.pdf. Acesso 30 ago 2023.
- Pinto, M. D. F., Silva, J. B., Menezes, F. S. & Fraga, D. R. (2020). A Indústria 4.0 e sua influência na evolução da Contabilidade: uma análise da percepção dos docentes do Curso de Ciências Contábeis da Universidade Federal de Sergipe. Anais do Congresso UFSC de Controladoria e Fianças, Florianópolis, SC, 10.
- QUEIROZ, M. I. P. Relatos orais: do "indizível" ao "dizível". In: VON SIMSON, O. M. (org. e intr.). *Experimentos com histórias de vida (Itália-Brasil)*. São Paulo: Vértice, Editora Revista dos Tribunais, Enciclopédia Aberta de Ciências Sociais, v.5, 1988. p. 68-80.
- RIBEIRO, L. S.. As incubadoras tecnológicas de cooperativas populares e a produção do conhecimento: uma análise crítica do conhecimento científico no âmbito das ITCPS. 2021. Tese (Doutorado em Tecnologia e Sociedade) Universidade Tecnológica Federal do Paraná, Curitiba, 2021. Disponível em:. Acesso 30 ago 2023.
- SÁ, A.L. A Evolução da Contabilidade. São Paulo: Thomson, 2006.
- SMALL, R.; YASSEEN, Y.; SALIE, H. Re-inventing the professional accountant. Professional Accountant, v. 2019 (35), p. 8-9, 2019.
- SOUZA, Ivan de. Conheça os 5 principais tipos de software de gestão contábil do mercado. ZapSign Blog. 2021. Disponível em: Acesso em: 01 out 2023.