

## Potential disruptive business models in the accounting market: case study with Brazilian companies

Potenciais modelos de negócios disruptivos no mercado contábil: estudo de caso com empresas brasileiras

Potenciales modelos de negocios disruptivos en el mercado contable: estudio de caso con empresas brasileñas

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### Abstract

Aiming at sustainability and competitiveness in the market, accounting companies seek to understand the transformations generated by new digital technologies, which are impacting the accounting profession and innovating different elements of the business. In this context, this study aims to describe the characteristics of potential disruptive business models in the Brazilian accounting market, through a single and integrated case study with six innovative companies operating in different areas of accounting. Although the emergence of new business models is an alert to changes in the business accounting scenario, the results showed that traditional models are still little disturbed by innovative models, especially as they focus on a specific slice of the market, not usually explored by traditional models. The results showed the influence of new technological resources as a support of the accounting activities and processes; and accounting knowledge as an essential resource for both business models.

**Keywords:** Business models; Disruptive business models; Digital technology; Innovation; Accounting

### Resumo

Visando a sustentabilidade e competitividade no mercado, empresas contábeis buscam compreender as transformações geradas pelas novas tecnologias digitais, que estão impactando a profissão contábil e inovando diferentes elementos dos negócios. Nesse contexto, o presente estudo tem como objetivo descrever as características de potenciais modelos de negócios disruptivos existentes no mercado contábil brasileiro, por meio de um estudo de caso único e integrado com seis empresas inovadoras atuantes em diferentes áreas da contabilidade. Apesar da emergência de novos modelos de negócios serem um alerta para as mudanças no cenário contábil empresarial, os resultados evidenciaram que os modelos tradicionais ainda estão sendo pouco perturbados pelos modelos inovadores, em especial por se concentrarem em uma fatia específica do mercado, não explorada costumeiramente pelos modelos tradicionais. Os resultados evidenciaram a influência de novos recursos tecnológicos apoiando atividades e processos contábeis; e o conhecimento contábil como recurso essencial para ambos os modelos de negócio.

**Palavras-chave:** Modelos de negócios; Modelos de negócios disruptivos; Tecnologia digital; Inovação; Contabilidade

## Resumen

Con el objetivo de la sostenibilidad y la competitividad en el mercado, las empresas contables buscan comprender las transformaciones que generan las nuevas tecnologías digitales, que están impactando la profesión contable e innovando diferentes elementos del negocio. En este contexto, este estudio tiene como objetivo describir las características de los modelos de negocio potencialmente disruptivos en el mercado contable brasileño, a través de un estudio de caso único e integrado con seis empresas innovadoras que operan en diferentes áreas de la contabilidad. Aunque la aparición de nuevos modelos de negocio es una alerta a los cambios en el escenario de la contabilidad empresarial, los resultados mostraron que los modelos tradicionales todavía se ven poco afectados por los modelos innovadores, especialmente porque se centran en un segmento específico del mercado, que no se suele explorar. Los resultados mostraron la influencia de nuevos recursos tecnológicos que apoyan las actividades y los procesos contables; y el conocimiento contable como recurso fundamental para ambos modelos de negocio.

**Palabras clave:** Modelos de negocios; Modelos de negocios disruptivos; Tecnología; Innovación; Contabilidad

## 1 Introduction

In order to assist in data processing and information dissemination, the accounting professional has included different technological resources in the work routine over time (Gelinas & Gogan, 2006). From the first computerized information systems to accounting software, integrated management systems (enterprise resource planning - ERP), and the advent of the internet, all these resources presented significant changes in the functioning of accounting processes (Knudsen, 2020). Currently, new digital technologies are responsible for significant changes in different segments, including Accounting (Remane, Hanelt, Nickerson, & Kolbe, 2017). The use of data storage and analysis software, cloud solutions, digital platforms, and document management systems are examples of digital technologies that allow increased flexibility in the daily actions of accountants (Bygren, 2016; Sebastian et al., 2017; Knudsen, 2020).

How technologies modify the foundations of traditional business models is more challenging than the incorporation of new technological solutions in activities and processes (Dimitriu & Matei, 2015). Besides supporting activities, these solutions have the potential to change businesses (Bygren, 2016; Remane et al., 2017). Understanding the technological change and its influence in businesses is essential to ensure the survival and sustainability of accounting firms (Frey & Osborne, 2017). The current scenario indicates that different business elements are changing to take advantage of opportunities emerging with new digital solutions (Remane et al., 2017).

Dimitriu and Matei (2015) state that digital solutions modify especially activities; and the speed to access information allows other elements to change, such as financial aspects. For Basova (2017), the efficiency of using new technological resources in processes has the potential to contribute to value proposition by offering customers data analysis solutions, for example. These aspects highlight the importance of understanding the structures of business models in contexts of technological changes (Metallo, Agrifoglio, Schiavone, & Mueller, 2018). Business models are tools that help to create or modify business structures, and Canvas is a model that systematizes strategic, operational, and financial aspects, allowing adjustments to follow market trends (Osterwalder & Pigneur, 2011).

Concern regarding the organization of business elements has interested managers to innovate business models (Schiavi, Behr, & Marcolin, 2019). Thus, disruptive business models emerge to replace existing models, adapting organizational structures to new technologies and enabling the offer of products or services of unique value to the market (Mitchell & Coles, 2004; Markides, 2006; Hwang & Christensen, 2008; Wu, Ma, & Shi, 2010). Regarding accounting firms, the nature of business is changing due to new technological solutions. Automation and digitalization of activities not only bring efficiency to accounting obligations (Knudsen, 2020), but also create opportunities to supply high added value services (Baron, 2016; Basova, 2017).

In this context, this article describes the characteristics of potentially disruptive business models that currently exist in the Brazilian accounting market. We performed an embedded single case study with companies operating in different accounting areas which have been seeking innovations for their businesses. In the data collection stage, we interviewed managers and collected institutional documents from these companies. In addition, we interviewed academic and market professionals who helped to characterize traditional business models in the accounting area, enabling comparison with new models emerging with new technologies.

Chiu, Liu, Muehlmann and Baldwin (2019) highlighted that the changes provided by digital technologies in the accounting field deserve the attention of researchers and managers. It is necessary to pay attention to this emerging scenario as the accounting market is changing through new technologies and innovations, which impact how professionals and businesses in this area operate (Guthrie & Parker, 2016). This study provides better understanding of the current behavior of the Brazilian accounting market. By presenting trends in new business models and comparing them with traditional existing models, this article

brings contributions to the field and to managers on how to manage the technological impact on business and the possibilities for innovation in the practice of accounting business.

## 2 Disruption in Business Models of Accounting

Initial studies on market disruptions focused on discontinuous technologies and innovations that indicated the decline of large companies, ignoring the potential of new technologies that initially did not meet the needs of conventional customers (Bower & Christensen, 1995). Analyzes extended to the concept of disruptive business models, uniting the management aspects of business models and technological disruptions (Christensen & Raynor, 2003), as business model disruption is perceived when emerging technologies and innovations critically affect business models that are not prepared for these changes (Moore, 2004). Commercialization of a new technology or innovation requires companies to understand their business models, especially when opportunities do not fit into the existing business models (Chesbrough & Rosenbloom, 2002). Thus, disruptive business models emerge to replace existing business models, whether by reorganizing or creating organizational structures aimed to adapt the business model to new technologies or innovations (Mitchell & Coles, 2004; Hwang & Christensen, 2008; Wu et al., 2010).

Business model disruption does not necessarily involve the discovery of new products or services, also redefining existing products and services and how to supply them to customers (Markides, 2006). Schiavi et al. (2019) highlight, for example, the impact of disruptive technologies and innovations in the structure of business models (readjustment or creation of new business structures that accompany the potential of emerging technologies in the processing or supply of new services and products). Therefore, in order to create, deliver, and capture value, the business model articulates different business activities and elements. Baden-Fuller and Morgan (2010) stated that a business model consists of several strategic components, and we should pay attention to how these components are organized. One of the most widespread business models emerged from the synthesis of different organizational elements. The business model Canvas, presented by Osterwalder and Pigneur (2011), highlights nine elements focused on strategic, operational, and financial issues and their interconnections (Table 1).

**Table 1:**  
**Business model Canvas**

Components	Description
Value proposition	Seeks to solve customer problems and satisfy their needs with value propositions.
Customer segments	An organization serves one or more customer segments.
Customer relationships	The customer relationship is established and maintained with each customer segment.
Channels	Value proposals are shown to customers through communication, distribution, and sales channels.
Key activities	Set of processes (key activities) performed to offer and deliver the elements aforementioned.
Key resources	Key resources are the assets to offer and deliver the elements aforementioned.
Partner network	Some activities are outsourced and some resources are obtained outside the company.
Cost structure	The elements of the business model results in the cost structure.
Revenue streams	Revenue sources result from value propositions successfully offered to customers.

*Note:* Adapted from "Business Model Generation: A handbook for visionaries, game changers and challengers", by A. Osterwalder, A. & Y. Pigneur, 2011.

The interactive scenario of Canvas is a tool that helps entrepreneurs to create or modify their business model, with its application being important in the process of business model innovation (Osterwalder & Pigneur, 2011). The pioneering spirit of Schumpeter (1934) on the economic analysis of the concept of innovation shows that the innovation process is essential for competitive advantage and economic development, changing the market and society. Schumpeter (1934) also indicates that innovation and technological progress are the basis for economic dynamism, which is even more evident in the current economic scenario. Industries and careers are interrupted and transformed by new technologies (Knudsen, 2020). New business models are emerging and changing markets through new ways of delivering value (Zott et al., 2010). In addition, competitive advantage is increasingly based on meeting customer needs.

In this context, different areas, including the most traditional, face one of the most challenging periods in the market (Guthrie & Parker, 2016). The accounting area is an example, with disruptions caused by new technologies that change its activities (Pan & Seow, 2016). This scenario tends to expand in the future, as authors expect digitalization to increase even more in the accounting area in the coming years (Knudsen, 2020). Moreover, customer needs and behavior towards accounting services are also changing. Strategic changes in business structures and accounting activities are necessary to improve customer experience, whether by efficient performance of accounting functions, better communication, or delivery of products with high added value (Baron, 2016; Bygren, 2016).

Accounting business models are undergoing significant changes in how value is created, delivered, and captured, with some trends already being observed in the market. According to a Crunchbase report on disruptive impacts on accounting, routine tasks in accounting offices, such as data entry and bookkeeping,

are increasingly vulnerable to digitization and automation (Cokins & Angel, 2017). The same report highlights the relevance of auditing technologies that use artificial intelligence to work large data amounts, enabling more relevant samples and increasing the execution speed of these activities. Another trend that has marked the accounting scenario is the use of technologies to provide *insights* through data-intensive analysis (Pan & Seow, 2016; Ransbotham & Kiron, 2017), generating competitive advantage and customer satisfaction (Baron, 2016). Such aspects highlight the figure of the “accountant/consultant” in the digital era, allowing accounting professionals to add more value to the business of their customers (Baron, 2016). In the current scenario, the capacity of the accountant to obtain competitive advantage depends on the combination of skills aimed at technical and practical knowledge, critical thinking, strategic vision, and relationship management (Chartered Accountants, 2015).

Thus, when analyzing changes that have been provided by the new technologies present in the accounting market, one of the highlights by Almeida (2020) was the need to understand the different information currently available (on the market, customers, competition, etc.), in order to improve business activities and bring innovations to accounting businesses. Dantas, Araújo, Silva and Lagioia (2018) complemented that traditional management practices (for example, budget and performance evaluation) influence the innovation capacity of companies, highlighting the potential of accounting professionals in the analysis of information and in business consulting for both customers and themselves. Regarding the accounting business, De Paula, Danjour, Medeiros and Añez (2015) stated that the degree of innovation and differentiation between companies in the accounting market is characterized by the use of technological resources in the processes, which bring benefits such as optimization, agility, security, and cost reduction, among others, for accounting activities. Besides resources, the results by Scarpin, Mondini, Neumann and Machado (2011) indicated that a favorable environment for the development of innovations requires a good internal relationship, interaction, and sharing of ideas, revealing other skills required from the accounting professional.

### 3 Methodological Procedures

This qualitative and descriptive exploratory study describes the characteristics of potentially disruptive business models currently in the Brazilian accounting market, based on an embedded single case study. The definition of single case study refers to an extreme or peculiar case, deviating from daily occurrences (Yin, 2015). The embedded case study refers to more than one unit of analysis (Yin, 2015). Thus, our context is the Brazilian accounting market, more specifically the disruption of accounting business models, which is a subject that is still scarcely explored in the market and academically. The cases refer to the companies we analyzed, which have characteristics of disruption in the description of their business. Due to the innovative characteristic of the companies analyzed, another classification to be highlighted is the peculiarity of these cases (Yin, 2015), which deviate from the other businesses participating in the accounting market, thus justifying the selection and representativeness of these cases as having innovative characteristics according to what is known of the market.

Cases consist of Brazilian accounting firms under the same context of market disruption, as well as subject to similar opportunities and challenges emerging from this scenario. In order to obtain a comprehensive analysis of the Brazilian accounting market, we analyzed companies with activities in the following accounting areas: financial, management, tax, accounting information systems, forensic accounting, and auditing. We searched for companies that develop accounting activities related to the areas aforementioned: accounting office (financial), management consulting (management), tax consulting (tax), accounting software company (accounting information systems), auditing company (auditing), and forensic accounting office (forensic).

We selected cases by non-probabilistic sampling and accessed cases through Google searches and indication of specialists. We searched Google using the terms disruptive business model (and possible derivations innovative business model and new business model) and accounting or one of its areas (financial, management, tax, accounting information systems, forensic, and auditing). We identified companies with potentially disruptive characteristics in their businesses through these searches. In this stage, we selected three companies, one from the financial area, one from the tax area, and one from the accounting information systems area. The second stage had the contribution of six specialists (academic professionals), one from each accounting area, who indicated accounting companies with potential of disruption in their business. In this stage, we selected three companies, one from the management area, one from the forensic accounting area, and one from the auditing area. In total, we selected six companies, all of which are located in the Brazilian southern region. In order to define units of analysis, we contacted the main managers of each company. From this selection, the units of analysis defined were the company managers, who participate in the strategic and financial decisions of the business and were contacted to participate in the research.

After defining cases and units of analysis, we started to collect data. Yin (2015) states that there are several ways to collect data in a case study, being possible to combine more than one type of collection in the same study, contributing to the breadth and validity of research. We chose to interview different actors

and collect institutional documents. We performed semi-structured interviews with the manager of each company and collected documents from these companies (material from websites, blogs, newsletter, and magazines, among others). In addition, we performed semi-structured interviews with six academic professionals and six market professionals (totaling twelve interviews, with two specialists in each area). We interviewed specialists due to the need to describe traditional accounting business models and compare them with new models. The triangulation of these interviews is a strategy to represent the field based on the report of actors with different interests (Flick, 2009b). In the selection of specialists, we used the technique of choice by type, when the researcher selects analysis subjects based on the available information and the prior knowledge of the population, assuming that the sample can represent the universe (Flick, 2009a).

We prepared the script to interview academic and market professionals based on the literature by Osterwalder and Pigneur (2011) on elements that form Canvas, namely: customer segment; customer relationship; communication channels; resources; activities/processes; partnerships; costs; revenue; and value proposition (Appendix A). In the script for interviews with managers of companies with disruptive potential (Appendix B), besides using the literature on Canvas (Osterwalder & Pigneur, 2011), we also used the review by Schiavi et al. (2019) on characteristics of disruptive business models. We organized and expanded these characteristics to create categories of analysis, namely: evaluation and (re) adjustment; use of secondary innovation by emerging economies; risks; new markets; services with increased simplicity, convenience, accessibility, and lower cost; new ways of creating value; threats to traditional and stabilized models; entrepreneurial behavior; and business model patterns.

After collecting material, we processed and analyzed data. We recorded (with the consent of interviewees, maintaining the anonymity of the respective companies, managers, and specialists) and transcribed the eighteen interviews to allow better operationalization of the entire material in the *Nvivo 12* software. We also organized document data in *Nvivo 12*. For data analysis, we used content analysis to describe the meaning of qualitative data by assigning categories to the material in a *codebook* with all aspects of description and interpretation (Schreier, 2013). As aforementioned, we organized the codebook through codes derived from the literature on Canvas and on disruptive business models, shown in Appendix C. From these codes, we used the *Nvivo 12* software to identify these elements in the interviews and documents, in order to systematically organize the analysis material.

#### 4 Analysis of Results

Businesses analyzed have disruptive potentials in their structure, which led to a more detailed analysis of these cases. The company in the financial area has been innovative for working on an online office model, offering mandatory accounting services for micro and small companies via digital platform, 100% online, and at low cost. For six years in the market, it is considered the largest and most innovative Brazilian accounting firm for its completely online accounting that reaches different companies in Brazil. The company is in the Management area and despite its traditional structure as an accounting consulting company, it differs from the others by making consulting services accessible (in terms of values and analysis) to micro and small companies, providing its customers with different information that is made available in accounting, management, and communication software, having been on the market for ten years. The company in the Tax area is one of the leading firms in this area, with more than 70 offices in Brazil. In the market for seven years, this company is a pioneer in the use of Big Data, Artificial Intelligence, and robotics in tax analysis processes, which ensures efficiency in capturing tax rules and updating its tax database, allowing consultants to deliver tax solutions quickly and efficiently to more than 2,000 customers.

The company of accounting information systems offers a low-cost platform of financial control to a market segment with reduced supply (micro and small companies), being in the market for six years. It is considered one of the most innovative businesses in the accounting area, having its platform installed in more than 800,000 companies, connecting entrepreneurs with accountants, banks, government, and others. The company of forensic accounting stands out for using softwares, developed internally, to support the work process and facilitate communication with customers and partners, as well as for developing applications (which allows automatic calculation of labor lawsuits) in the last six years. Finally, the auditing company is a small business that has been operating for five years and uses automation technologies in its processes, allowing the execution of more efficient auditing tests and analyzes, when compared with other audit companies of the same size. Table 2 summarizes the information presented.

In order to represent the reports of specialists, we assigned codes to each of the interviewees. The six ACADEMIC SPECIALISTS (AS) are professors who, besides having academic experience, have professional experience in the areas analyzed. The academic specialists received the codes AS\_1 to AS\_6 (AS\_1 for the academic specialist in the financial area, AS\_2 for the management area, AS\_3 for the tax area, AS\_4 for the systems area, AS\_5 for the forensic area, and AS\_6 for the auditing area). The six MARKET SPECIALISTS (MS) are professionals working in their respective areas and in traditional models without signals of innovation. market specialists are indicated by codes MS\_1 to MS\_6 (MS\_1 for the market specialist in the financial area, MS\_2 for the management area, MS\_3 for the tax area, MS\_4 for the systems area, MS\_5 for the forensic area, and MS\_6 for the auditing area).

**Table 2:**  
**Legend and description of units of analysis**

Legend (MANAGEMENT)	Area	Type of Company	Description
M_1	Financial	Online accounting office	Online business model that provides mandatory accounting services to micro and small companies via digital platforms at low cost.
M_2	Management	Management consulting	Business model focused on management services for micro and small companies.
M_3	Tax	Tax consulting	Business model focused on tax solutions updated to specific niches.
M_4	Accounting Information Systems	Software company	Offers a low-cost financial platform to micro and small businesses.
M_5	Forensic	Forensic accounting office	Forensic accounting office that develops applications and internal systems to support work and communication processes.
M_6	Auditing	Auditing company	Small auditing company that uses automation to improve safety and efficiency of processes.

#### 4.1 Comparison between traditional business models and disruptive business models

Initially, we observe that there is no uniformity in relation to the **customer type** served by each of the traditional accounting business models due to the breadth of activities, serving different customers (from small to large companies of any sector), according to the unanimous report of the specialists (academic and market). In the new models, we observe that some companies (as highlighted by managers of financial M\_1, management M\_2, and system M\_4 areas) intend to serve a market share of less attractive customers or non-consumer customers, seeking competitive advantage by offering low-cost products and services to this niche. In addition, M\_3 also highlights the concern to serve niches, especially larger companies of the retail sector, which have increased demands in relation to tax issues. We discuss this fact in detail in subsection 4.2.4.

Another strategic element of the businesses analyzed regards the **relationship** of the company with the customer, as well as the form of **communication** between them (through channels). As reported by all market specialists, traditional accounting models seek a close relationship with customer segments, in order to understand and provide adequate services according to customer needs (MS\_1, MS\_2, MS\_3, MS\_4, MS\_5, and MS\_6). However, academic experts (AS\_1, AS\_4, AS\_5, and AS\_6) state that close relationships are often more evident at the beginning of service provision, distancing over time. The exception is management and tax consultancies (AS\_2 and AS\_3), in which the accountant continuously provides consulting to customers, highlighting the figure of accountant as a business partner of the customer (Baron, 2016). In these cases, traditional means of communication, such as telephone, e-mail, and face-to-face service are the main forms of communication highlighted by market specialists (MS\_1, MS\_2, MS\_3, MS\_4, MS\_5, and MS\_6).

As with traditional accounting models, managers of potentially disruptive companies state that they seek proximity to their customers (M\_1, M\_2, M\_3, M\_4, M\_5, and M\_6). Disruptive business models aim to give attention and sensitize customers in order to maintain the segment and expand market shares (Hwang & Christensen, 2008). Considering that some of new business models work on large-scale (M\_1 and M\_4), the use of digital platforms helps to approximate relationships through giving accounting information in real time, confirming the results of Sebastian et al. (2017) on innovation through the use of platforms. Unlike traditional models, all managers reported increased use of communication technologies (online platforms and other internal communication systems) to contact customers quickly and easily, besides traditional means of communication, such as telephone and e-mail (M\_1, M\_2, M\_3, M\_4, M\_5, and M\_6).

Regarding the **resources** used, we highlight the emphasis given by all specialists (academic and market) to the knowledge of the accountant as a central resource in traditional accounting business models. In new businesses, all managers emphasize the strong influence of new and different technologies supporting accounting activities and processes (M\_1, M\_2, M\_3, M\_4, M\_5, and M\_6), especially those related to digital solutions, such as cloud solutions, digital platforms, process automation, and database (Knudsen, 2020). If in traditional accounting business models the use of technological resources is still accessory, in new business models technology plays an essential role to support the activities of the accounting professional, contributing with the findings of Bygren (2016) on the current impact of new technologies in business and accounting activities. Despite the prominence of new technologies in new business models, the knowledge of the accounting professional is still a central resource to develop activities, as highlighted by all managers. Such aspects show inherent characteristics of companies that provide services, which need the technical expertise of professionals to deliver services.

In this context, market specialists state that personal and technological resources (on a smaller scale) end up being the main **cost** elements of traditional accounting business models (MS\_1, MS\_2, MS\_3, MS\_4, MS\_5 and MS\_6). Thus, the **revenue source** of accounting services offered to customers

(monetization) is mainly related to the budget for hours of work to perform activities, as is the case of companies in the management, tax, and auditing areas (MS\_2, MS\_3, and MS\_6). Business models of financial (fixed value or percentage of customer profits, MS\_1), systems (software sale or rental, MS\_4), and forensic accounting areas (percentage on the value of the legal cause of the customer, MS\_5) are the exception.

Similarly, managers of new accounting models have the same cost elements, namely: technological (on a larger scale compared to traditional accounting models) and personal (M\_1, M\_2, M\_3, M\_4, M\_5, and M\_6). Due to the importance of the accounting professional for activity execution in new business models, deliveries are monetized through payment for hours of work in companies of management, tax, and auditing areas (M\_2, M\_3, and M\_6), or by percentage on the value of the legal cause of the customer in the case of forensic accounting (M\_5), as in traditional models. However, there is a tendency towards low-cost products and services, as explained mainly by managers of financial (M\_1) and system (M\_4) areas, in which monetization occurs in the form of packages/monthly fees proportional to customer needs. We discuss this fact in detail in subsection 4.2.5.

Regarding **processes** (key activities of the business model), access to customer information is the basis for any activity performed by both traditional and new business models, as stated by specialists (academic and market) and managers. We also note the concern of all managers of new accounting companies to the planning of activities to be performed and to the support of different technologies in the processes of receiving, processing, and delivering information (M\_1, M\_2, M\_3, M\_4, M\_5, and M\_6). We notice that new technological solutions not only play an important role in service organization, but also in the structuring of new accounting models (Dimitriu & Matei, 2015, Chiu et al., 2019; Knudsen, 2020). Thus, digitization of information influences business structure, especially in the financial and system areas (online and digital models) (M\_1 and M\_4).

Complementing processes, both new and traditional business models seek **partnerships** mainly with other accountants and lawyers in order to be assisted in certain activities, as highlighted by specialists (academic and market) and managers. We note that the maintenance of alliances with technological partners was not highlighted by any manager of new accounting companies due to the development of technologies used within companies.

Another important strategic element is the **value deliver** to the customer. We verify by the report of specialists that traditional accounting business models deliver value proposals to their clients based on management and financial issues. Tax (AS\_3 and MS\_3) and forensic accounting (AS\_5 and MS\_5) areas deliver value by financial aspects, whether by reducing losses or increasing gains. Management (AS\_2 and MS\_2), system (AS\_4 and MS\_4), and auditing (AS\_6 and MS\_6) areas have their deliveries focused on management aspects, contributing to information analysis, decision making processes, and improved organization of internal and information controls. On the other hand, we note that activities that only supply mandatory requirements (as is the case of traditional accounting offices, based on tax, labor, and corporate matters, for example - AS\_1 and MS\_1) do not deliver value with as much impact for some customers compared to deliveries reflecting financial (increased gains or reduced losses) and management issues (support in decision-making, and informational and controls organization etc.).

Regarding value propositions of new accounting business models, we note some similarities and differences in relation to traditional business models. Tax (M\_3) and forensic accounting (M\_5) areas deliver value reflecting the customer financial aspects. However, we note that the tax company performs activities with increased focus on consultancy and development of tax strategies, such as mapping tax opportunities and monitoring tax rules automatically (M\_3); unlike traditional tax business models, which focus more on recovery of tax credit, tax review, and calculation activities (AS\_3 and MS\_3).

Management (M\_2), system (M\_4), and auditing (M\_6) areas also have their deliveries focused on management aspects, contributing to the customer decision making process. However, managers of companies of management (M\_2) and system (M\_4) areas stand out by making value deliveries more accessible and feasible to customer segments that do not usually experience these products and services (such as micro and small entrepreneurs). The manager of the auditing company (M\_6) stands out by directing the company towards consulting, seeking not only to indicate deficiencies highlighted in auditing, but also contributing to the customer business, respecting limits between auditing and consulting jobs.

Moreover, unlike traditional business models in the financial area, where we observed that value delivery does not occur as markedly and effectively depending on the customer (MS\_1), value delivery in new business models in the financial area occurs by performing legal obligations faster and more accessible, improving agility to the customer and simplifying operations in relation to accounting aspects (M\_1). The proposition of new ways of creating value is essential to disruptive business models, and we will discuss this issue again in subsection 4.2.6. Thus, we note that innovative accounting business models use similar practices to those employed by traditional models but innovate by offering technology as a distinction when performing their activities, modifying the value proposal in service provision or specializing the market niche. Figure 1 shows a summary of differences between elements of traditional and innovative models.

Traditional Accounting Business Models X Innovative Accounting Business Models				
<p><b>Key Partners</b></p> <p><b>Traditional:</b></p> <ul style="list-style-type: none"> <li>Accountants;</li> <li>Lawyers;</li> <li>Focus on helping in specific activities;</li> </ul> <p><b>Innovative:</b></p> <ul style="list-style-type: none"> <li>Accountants;</li> <li>Lawyers;</li> <li>Focus on helping in specific activities;</li> </ul>	<p><b>Key Activities</b></p> <p><b>Traditional:</b></p> <ul style="list-style-type: none"> <li>Receiving information/documentation;</li> </ul> <p><b>Innovative:</b></p> <ul style="list-style-type: none"> <li><b>Technology facilitating the capture, processing, and delivery of information/documentation;</b></li> </ul> <p><b>Key Resources</b></p> <p><b>Traditional:</b></p> <ul style="list-style-type: none"> <li>Accounting knowledge;</li> </ul> <p><b>Innovative:</b></p> <ul style="list-style-type: none"> <li><b>New technologies (digital platforms, cloud computing, accounting software, etc.)</b></li> <li>Accounting knowledge;</li> </ul>	<p><b>Value Proposition</b></p> <p><b>Traditional:</b></p> <ul style="list-style-type: none"> <li>Based on management and financial issues;</li> <li>Reducing losses or increasing gains;</li> <li>Information analysis and decision making;</li> <li>Increased organization of internal and information controls;</li> <li>Supplying accounting obligations;</li> </ul> <p><b>Innovative:</b></p> <ul style="list-style-type: none"> <li>Based on management and financial issues:</li> <li><b>Accountant as a business partner:</b></li> <li><b>Accessibility to unexploited niches;</b></li> <li><b>Convenience in the supply of accounting obligations;</b></li> </ul>	<p><b>Customer Relationship</b></p> <p><b>Traditional:</b></p> <ul style="list-style-type: none"> <li>Close relationship;</li> </ul> <p><b>Innovative:</b></p> <ul style="list-style-type: none"> <li>Close relationship;</li> <li><b>Technology as an ally for scale service;</b></li> </ul> <p><b>Channels</b></p> <p><b>Traditional:</b></p> <ul style="list-style-type: none"> <li>Telephone;</li> <li>E-mail;</li> <li>Face-to-face service;</li> </ul> <p><b>Innovative:</b></p> <ul style="list-style-type: none"> <li>Traditional means;</li> <li><b>Digital communication platforms;</b></li> </ul>	<p><b>Customer Segments</b></p> <p><b>Traditional:</b></p> <ul style="list-style-type: none"> <li>Customer portfolio with breadth and diversity;</li> </ul> <p><b>Innovative:</b></p> <ul style="list-style-type: none"> <li><b>Unexploited market share;</b></li> <li><b>Specific niche;</b></li> <li><b>Aiming to competitive advantage;</b></li> </ul>
<p><b>Cost Structure</b></p> <p><b>Traditional:</b></p> <ul style="list-style-type: none"> <li>Personal resources;</li> <li>Technological resources (at smaller scale);</li> </ul> <p><b>Innovative:</b></p> <ul style="list-style-type: none"> <li>Personal resources;</li> <li>Technological resources (at <b>larger</b> scale);</li> </ul>		<p><b>Revenue Streams</b></p> <p><b>Traditional:</b></p> <ul style="list-style-type: none"> <li>Budget for hours of work used for the activity;</li> <li>Fixed value by product/service;</li> <li>Percentage on customer profits or legal cause;</li> </ul> <p><b>Innovative:</b></p> <ul style="list-style-type: none"> <li>Budget for hours of work used for the activity;</li> <li>Percentage on legal cause;</li> <li><b>Offer of low-cost products and services;</b></li> <li><b>Packages/monthly fee;</b></li> </ul>		

Legend: the terms highlighted in bold refer to the main aspects of differentiation between new and traditional accounting business models.

Figure 1 - Differences between traditional and innovative accounting business models

We observe from the synthesis above that a considerable part of practices of innovative models do not abandon what has already been performed by traditional models, incorporating new digital technologies as a strategy to approach customers and remain competitive in the market. The main difference is market segmentation in niches that are not always exploited by traditional models. The type of monetization changed to serve this specific market by offering affordable and low-cost products and services, focusing on the scalability and efficiency of processes provided by technology. This strategy seeks competitive advantage based on changes in relationship, communication, and value delivered, specially through solutions such as digital platforms, which significantly contribute both to the customer (by allowing access to a quality product/service of low cost) and to accountants (who take increased advantage of technologies in their activities).

#### 4.2 Analysis of disruptive characteristics

This section analyzes characteristics of potentially disruptive business models for the accounting area. Based on the review by Schiavi et al. (2019), we expanded the characteristics raised by the authors in order to verify the participation of disruptive models in management practice and in the accounting market, based on new technologies that impact the area.

##### 4.2.1 Evaluation and (re) adjustment

The first characteristic inherent to disruptive business models is the evaluation and (re) adjustment of business models and products or services they offer to exploit new technologies or innovation in companies (Schiavi et al., 2019). Disruptive integrating the accountant to the business of the customer, being supported by the use of financial control software fed by customers or automatically, and by management software to provide accounting, financial, and managerial information to the customers, micro and small entrepreneurs who, in many cases, do not have access to Management Accounting.

The manager of the tax company emphasizes that exploitation of new technologies required evaluation and readjustment of the business model: “we started with a more traditional business model, as an accounting company, but at the moment we structured a new brand for the company in this disruptive model, we changed [...] and it required a lot of effort, especially at behavioral level” (M\_3). At first, the company automated its processes for capturing tax rules published in official gazettes, bringing agility to its activities. In a second step, it sought to integrate tax rules and its customers' systems, creating a database, which associates the rules to different products (in this case, the company's main operating segment is the wholesale sector, which handles with numerous products and constant changes), bringing efficiency to the services provided. In a third moment, the use of artificial intelligence in the recognition of images and in the analysis of texts, assists tax consultants in delivering useful information and tax strategies to customers. The manager of the auditing company states that technological tools allowed identifying more efficient solutions

for conducting the business, such as solutions for automating processes and solutions for identifying non-conformities in samples. However, this caused gradual changes in the business: "we started with a very traditional model [...] then it changed a lot, although changing organically, as it was not quite conscious" (M\_6).

Introduction of new technologies did not change services or the business model of the forensic accounting company, only implying better internal organization of the business, from software developed internally and on demand according to the needs of the processes of the office (focused on document management, technical support, etc.). We note that the company has been developing new applications for forensic calculations. However, there is still no new organization from the company to improve the exploitation and commercialization of this tool.

technologies and innovations are best used when combined with business model innovation (Christensen & Raynor, 2003; Moore, 2004). Three of the companies analyzed, from the financial, management, and system areas, originated their business models seeking to better adapt to the exploitation of technologies and innovations, in order to take advantage of the opportunities created by them, as highlighted by M\_4: *"the company was born like that and that is why we pioneered many things, because what we are today is part of our DNA [...] that is why we are quick and innovate so fast"*.

Structuring of business models of companies in the financial and system areas was supported by different technologies (mainly automation, digital platforms and cloud computing) to allow the offer of accounting products and services entirely online. This fact enabled the company of the financial area to stand out among the most innovative companies of 2017 by offering online accounting services more efficiently, accessible, and with low-cost. Similarly, the company of the system area also stands out in the accounting market by providing a low-cost online financial management platform to its customers, that integrates companies, accountants, government, banks etc. The company of the management area structured its business model to allow the accounting professional to be closer to the customer. Thus, innovation in business models occurred in terms of processes, eliminating the sectorization of activities and

#### 4.2.2 Use of secondary innovation by emerging economies

We can observe the characteristic of introducing technologies and innovations from more advanced economies in disruptive business models in emerging economies through secondary innovation in business models (Wu et al., 2010). M\_4 highlights that "Brazil is three to five years behind developed countries in relation to organization, management systems, and integrations, including for the accounting area". We note that the Brazilian accounting context is still distant from innovations in the accounting market especially regarding the introduction of new technologies to support innovation processes in the offer of accounting products and services. Thus, five of the six companies we analyzed observe innovations in the international accounting market looking for opportunities that can be brought to the Brazilian context, a behavior highlighted by Schiavi et al. (2019).

In this context, we highlight innovations regarding technological tools, "as the speed of translation of technology or even of adaptation of technologies from abroad is increasing, [...] our value will be to identify the right tool for the problem before other people realize that this tool is useful" (M\_6). Moreover, managers revealed to be very careful when adapting innovations to the Brazilian context, as "what comes ready does not come necessarily applicable to our context, and sometimes it is much better to create something specifically for the needs of Brazilian companies [...] so, if I have a series of new technologies, ok, we will use the technologies as tools, but do not use ideas" (M\_3). Only the manager of the forensic accounting area highlighted not being concerned to observe the international context of the area, considering that, as highlighted by the interviewee, "forensic accounting only exists in Brazil, abroad they do not even know what we are talking about" (M\_5), pointing to the fact that differences in the area between countries hamper the comparison of businesses.

#### 4.2.3 Risks

Another characteristic refers to the risks related to the potential of innovations to disrupt business models. As highlighted by Schiavi et al. (2019), the potential for disruption of innovation from new technology tends to be more limited in the short term, given the uncertainties related to the use of these technologies. The potential for disruption of innovation that is market-oriented tends to be stronger in the short term, as it meets specific needs of a given segment.

In this context, three companies perceive some risks associated with the potential for disruption of innovations. Two of them saw risks related to the entry of new technology: "if I saw someone making a forensic accounting application like that, I would be thinking 'why did I not have this idea'" (M\_5). M\_4 highlighted some ways of mitigating these risks: "we started with small versions of programs [...] we worked a lot with validation [...] if it worked and if it delivered value, then we developed and improved it [...] there were risks, but there were methodologies to be learned". The interviewee of the company of the management area, on the other hand, perceived some risks associated with the potential for disruption of market-oriented

innovations: “I thought that assuming the position of a more accessible and closer accounting could generate distrust of technical competence” (M\_2).

The other companies did not perceive risks associated with the potential for disruption of innovations in disruptive business models, whether being oriented by new technologies or by the market: “I do not see risks of new technologies in the business, I only see opportunity, opportunity to do better for customers” (M\_1) or “I would say that the greatest risk would be if we had not sought adaptation [...] in a moment I may have a competitor offering increased customization than my company for a much lower cost” (M\_6). For these companies, possibilities that may emerge with different business innovations outweigh the risks that may emerge over time.

#### 4.2.4 New markets

Exploitation of emerging technologies and innovations within disruptive business models allow the offer of products and services that serve new markets, which is a question widely raised in the literature for enabling competitive advantage (Schiavi et al., 2019). Thus, managers of companies of financial, tax, and system areas stated that new technologies used in their processes allowed the creation of products and services that currently serve new customer segments: “It was through new technologies that we could offer the service we offer today, [...] in the cloud, for thousands of companies in several cities in the country, which was not possible before” (M\_1) and “I would say that we even created markets that did not exist, creating needs that maybe people did not even know they had” (M\_3).

The company of the management area states that innovation in its processes allowed the business model to serve a new market segment, although still receiving more traditional customers: “I have very traditional customers who like my service delivery model, but I obtained new customers, many startups who could no longer see value in the model of traditional accountant that only delivers accounting obligations” (M\_2). On the other hand, companies of the auditing and forensic accounting areas, for having well-defined customers, did not begin to serve new markets. However, the managers of these companies highlighted that the support of new technologies increased the visibility of the business in the market, as well as increased customer satisfaction.

#### 4.2.5 Services with increased simplicity, convenience, accessibility, and lower cost

The use of new technologies and innovation processes by disruptive business models help to provide products and services with increased simplicity, convenience, accessibility, and lower cost (Schiavi et al., 2019). We observed these characteristics mainly in business models of the financial and system areas, which offer online accounting services and financial control systems (on large-scale, online, and low-cost for micro and small companies), respectively: “This is the result of our investment work, [...] we were able to give more simplicity, practicality, and mainly economy for our client” (M\_1) and “everything that exists in common between companies that disrupt the market was used by us or was our differentiating factor, but the main factor is to have a cloud system, a system that can be accessed from home, from the company or from cell phones” (M\_4).

The companies of management, tax, and auditing areas state that use of new technologies and innovation processes allowed offering services mainly related to consulting and data interpretation that bring important returns for customer businesses: “Assertiveness is the key word, [...] the use of new technologies gives the business a lot more assertiveness, which gives more safety to the customer” (M\_3). Moreover, although new technologies contribute to cost reduction, the value of consulting from these companies is still competitive in their market segments: “it reflects in cost reduction, certainly, because we do much more with less time, [...] we automated a lot of work in terms of database manipulation” (M\_6) and “I think we offer a proposal at a fairer price, and customers know and understand what they are paying for” (M\_2). Thus, companies emphasize that the service supported by new technologies and innovation processes allows the accountant to be closer to customers, producing more accessible and understandable solutions, as suggested by Baron (2016) and Bygren (2016).

However, in the forensic accounting company, we observe that their services do not have these characteristics, as software is only used to improve the communication between company and customer. Such features were expected by them from the applications that have been developed internally by the company.

#### 4.2.6 New ways of creating value

Value proposition is a strategic element for companies, considering that meeting the needs and solving problems of customers ensure the maintenance of business (Osterwalder & Pigneur, 2011). Disruptive business models are greatly concerned with their market segment, seeking new ways of creating value that sensitize customers and distinguish the company in the market (Schiavi et al., 2019). Thus, we sought to identify the value propositions of the companies analyzed.

Regarding the financial area, the company performs online accounting services for micro and small companies, performing all legal obligations required. Regarding value delivery, M\_1 highlights: "I believe that our service does deliver value, but we are still working to make sure that we deliver basic accounting to micro and small companies very well". We note that the company delivers value specially by serving a specific segment, bringing more accessibility (through low-cost accounting, performing the legal obligations required) and more agility (by providing the service via online platform) to this customer. Thus, we observe that value proposition is similar to what already exists in the market regarding the execution of legal obligations. However, how value proposition is delivered (online accounting at low cost) has been modified by the company to serve the selected market segment, aiming to be more accessible and agile.

Regarding value creation of the management company, M\_2 states: "I brought management accounting closer to people, [...] as in the past my public, micro and small companies, paid for the accountant to work for the government, [...] so it is a job of re-educating the customer to understand that the accountant can offer value". In this context, value proposition serves a specific market segment which often does not use this service, bringing the accountant business closer to the customer in order to assist in decision making processes. Again, value proposition is similar to what already exists in the market, changing the target audience and how solutions are shown and used to work for micro and small businesses.

Regarding value creation of the tax company, M\_3 states: "Any business model is created to meet a problem or need, [...] as customers evolve on technological processes, they want to use their time free for other things, [...] and why would we not adapt to what they need?". In this context, the company seeks new ways of creating value by automating some tasks, such as allocating tax rules in integrated software and in the registration of goods, improving the flexibility and safety of procedures inherent to customer taxation. In addition, activity automation allows professionals to play the role of consultants, developing tax strategies that impact the financial effect, delivering solutions with high added value to the customer.

The systems company seeks to deliver new forms of value through the financial control platform by assisting in the production of information for management, increasing organization, control, and productivity to micro and small entrepreneurs who often do not use that product type. Thus, by offering a low-cost, affordable product aimed to a new market, the company seeks not only to deliver the proposed value, but to improve the product even more, also improving customer experience with the system: "Most of our team consists of people who are improving the platform every day, so we are releasing more integrations, [...] the format for sending financial information to accounting also evolves, as we are always looking for new ways to be more automated" (M\_4).

The auditing company delivers value through indicating deficiencies highlighted in the auditing work, similarly to traditional business models in the auditing area. However, we observe that the company exercises a more consulting profile, contributing to customer business through tax, accounting, or financial evaluations, respecting limits between auditing and consulting. As for the company of the forensic accounting area, new or different ways of creating value were not highlighted by the manager, as value delivery is based on the financial effect for the customer (gain increase or loss reduction), similar to other business models in this area.

#### 4.2.7 Threats to traditional and stabilized models

Schiavi et al. (2019) raised a very important characteristic of disruptive business models, which is the fact that new models directly threat the maintenance of traditional and stabilized models in the market. As highlighted by M\_4: "Any strategy that helps to gain market is a threat to competitors". Therefore, businesses of financial and system areas are attracting a lot of customers by offering low-cost products and services on large-scale, also drawing attention of other competing companies of each area. Although there is impact on the market, companies emphasize that they do not aim to destabilize existing businesses, but to provide better services to the market.

Managers of companies of management and tax areas state that their business models did not have a strong impact on competitors: "I would say that our model, like some disruptive models, comes to complete the space that did not exist, serving a need that no one had seen before in any traditional model, or which could not be done in the traditional model" (M\_3). Finally, managers of the forensic accounting and auditing areas emphasize that technological innovations in their business models served as a way to organize companies internally and improve the speed of activities. Moreover, the manager of the forensic accounting business highlights that the release of the application that the company is developing can have a great impact on the market for representing a greater innovation for this area.

#### 4.2.8 Entrepreneurial behavior

Entrepreneurial behavior is a fundamental characteristic of disruptive business models, raised in the review by Schiavi et al. (2019). Assuming entrepreneurial behavior to analyze the market and the business, looking for new ways to deliver value to the customer, is important for managers to take advantage of opportunities and escape the threats coming with new business models. In the findings by Schumpeter

(1934), the figure of the entrepreneur is the economic agent who does not hesitate to break routines and motivate other economic agents to evolve.

Thus, managers of all companies emphasize that this behavior is a concern within their businesses, showing the importance of thinking on business innovation: “For those who want to work in the disruptive model, entrepreneurship is essential. If you do not apply resources on research and do not have brilliant minds thinking and looking at needs, looking at every square centimeter of opportunity that exists to develop a new thing, it does not work” (M\_3). We also observe that managers are concerned with threats that may emerge in their markets. We can perceive it especially in the speech of the manager of the forensic accounting business, who sees uncertainties in this business for the future and, for this reason, has been looking for alternative solutions to remain in the market: “The area is undergoing transformations and threats come from competition, price, [...] and also from the reform” (M\_5).

### 4.2.9 Business model patterns

Business model patterns can be used to interpret the environment and to anticipate how to perform the intended business. In this regard, all managers observe different businesses as a way of analyzing the market, in order to check business possibilities that may or may not work in the future. The manager of the tax company emphasizes the importance of having different sources to analyze the market and business: “We do not define what we are going to do by only looking internally or only talking to the customer, nor only looking outside. We mix everything together” (M\_3).

Moreover, we note that some disruptive models in the current accounting market are reference for some managers: “I see many very interesting startups in the accounting service, highly accessible and with quite reasonable quality, in which, for the type of service they offer, the business is really scalable, as they are solving problems for a lot of people at low cost”. However, we observe certain difficulties to replicate these disruptive models in some accounting areas, such as those focused on management and consulting.

### 4.3 Synthesis of disruptive aspects in accounting business models

As aforementioned, some characteristics of disruptive business models are more evident in certain accounting companies than in others often due to the activities of each area. Thus, Figure 2 synthesizes disruptive aspects in the accounting business models.

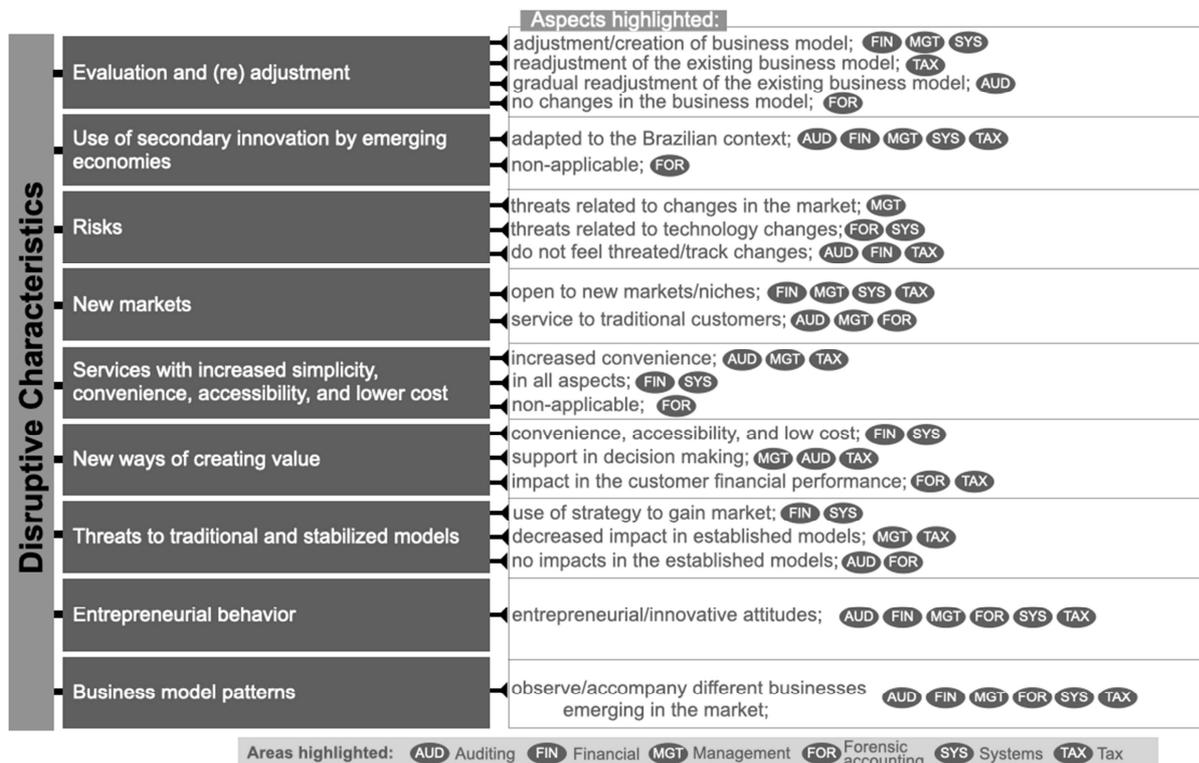


Figure 2 - Synthesis of disruptive aspects in accounting business models

We notice that the companies analyzed in the financial and system areas meet the main characteristics of disruptive models. These are companies that adapted their businesses in order to better exploit new technologies, especially regarding online platforms, cloud computing, and automation, to offer products and services to the following specific market segment: micro and small companies (unattractive or

non-consumer segment). These results corroborate the research by Baron (2016) and Bygren (2016), who highlight that strategic changes in business structures and accounting activities are necessary to improve customer experience. In addition, the highlight of technological aspects corroborates the study by De Paula et al. (2015), who pointed out the differentiation and innovation of accounting businesses by introducing these resources in the processes.

In addition, online accounting (by the company of the financial area) and a system for financial control (by the company of the systems area) brought new value propositions to the market, such as increased accessibility to these products and services, increased speed (online interaction), and increased information organization. These findings demonstrate that routine tasks, such as data entry and bookkeeping, are processes that are increasingly vulnerable to digitization and automation, corroborating the trends presented by Cokins and Angel (2017). Moreover, these two business models offer simpler, convenient, and low-cost products and services, escalating in the market. The presence of these current business structures highlights the process of creation or readjustment of traditional structures, something recommended by Chesbrough and Rosenbloom (2002) when the opportunities provided by new technologies do not fit into existing business models.

In relation to the other businesses, we observe that management, tax, and auditing areas have some characteristics of disruptive business models, highlighting the concern of these companies to innovate in face of changes in the accounting market, as stated by Almeida (2020). However, for dealing with businesses that perform differentiated activities for each customer, scalability becomes an obstacle for these companies, as this is one of the main characteristics that allow disruptive businesses to impact an entire market and destabilize competitors.

We observe that business of management, tax, and auditing areas take advantage of new technologies in their processes and activities to offer consulting services with high added value (service widely requested in the digital economy), which is also corroborated by Pan and Seow (2016) and Ransbotham and Kiron, (2017). The forensic accounting area is the least disrupted in businesses for performing activities that are restricted to a well-defined customer. However, we note that business innovation is already observed and thought by managers as a way to escape future threats, such as labor reform, for example.

## 5 Final Considerations

We achieved the objective of this article by describing the characteristics of potentially disruptive business models that currently exist in the Brazilian accounting market. In recent years, companies in this area have been undergoing constant changes (Guthrie & Parker, 2016), with the entry of new technologies in business being the main influence to break paradigms (Bygren, 2016). However, technology is not the agent that causes disruption in the market, but how technology is exploited in business models to better meet customer needs (Christensen & Raynor, 2003). Therefore, we analyzed business models of six accounting companies with disruptive potential.

In general, the strong influence of new technological resources supporting accounting activities and processes stands out, allowing the accountant to follow two pathways for business innovation: 1) to work for the market at scale and provide solutions for new customers (online accounting and simplified financial systems, for example); and 2) being closer to the customer and deliver activities with increased added value, such as consulting, business strategies, support in decision making etc. Regarding disruptive characteristics, we note that some companies are closer to being considered potentially disruptive business models in the accounting market, such as companies of the financial and system areas. These two companies stand out for offering new products and value-added services on large-scale to less attractive customers, namely: micro and small companies. This fact allowed companies to obtain a share of the national accounting market quickly and intensely. Business disruption is evident by the use of new technologies as a source of business modification and differentiation, not only in the support of activities.

Despite the presence of these businesses on the market today, traditional models are still little disturbed by new emerging businesses, as highlighted by the market professionals. However, the entry of such businesses alerts for changes in the business accounting scenario. Customer needs are changing and the accounting professional will be increasingly required to respond quickly and efficiently to customer problems. This fact corroborates findings by Hood (2017), who stated that the number of professionals prepared to deal with current changes in the accounting market is still reduced. The accounting professional plays a fundamental role in business organization and execution of accounting activities in both traditional and new business models. In face of changes in the accounting scenario, the challenge for accounting professionals will be determined by the capacity to seek new ways of creating value for customers by offering new services and products in innovative business models (Baron, 2016).

This research contributes to the field by showing characteristics of potentially disruptive accounting business models and by analyzing these characteristics in contemporary and prominent cases in the current accounting market. Thus, through analysis of results systematized in Figure 2, other businesses in the area can learn and seek the strategies of such business models. These analyzes allow bringing a broader context

to the field and to managers on changes in the accounting scenario by showing management aspects of new businesses that are references in the current accounting market. This research also contributes to theory by showing an empirical study on the innovation process of accounting businesses, as the conservatism of profession and aversion to changes when performing business are aspects that distance innovation from the accounting context (Chang, Hilary, Kang, & Zhang, 2013). Moreover, this research advances the findings by Schiavi et al. (2019) by translating the review of the authors into categories for analysis of empirical data.

We note that, as a limitation, this research, does not allow its results to be generalized when performing a case study. However, we sought to minimize these limitations through methodological justifications that supported the choice for qualitative research and made by an embedded single case study that is peculiar due to the current context of change in the accounting market (impacted by the entry of new technologies and businesses) and the representativeness of the cases as distinctive for the aspects analyzed when compared to other businesses present in the accounting market. Finally, we recommend future studies to explore some of the new technologies, such as big data, automation technologies, cloud computing, digital platforms etc. which are emerging in the market and being used by accounting businesses, in order to understand how these technologies reorganize the businesses and the accounting profession, as well as how they are accepted and used.

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#### **APPENDIX A - Script to interview academic and market professionals.**

1. The company that operates in the \_\_\_\_\_ (*Financial, Management, Tax, Accounting Information Systems, Forensic Accounting or Auditing*) area is targeting which customer type? (Osterwalder & Pigneur, 2011)
2. How would you summarize the relationship of this type of company with its customers? (Osterwalder & Pigneur, 2011)
3. How would you summarize how this type of company communicates with its customers (through distribution and communication channels)? (Osterwalder & Pigneur, 2011)
4. What is the value provided to the customer in view of deliveries made by this type of company? (Osterwalder & Pigneur, 2011)
5. What are the key processes used by this type of company? (Osterwalder & Pigneur, 2011)
6. What are the key resources used by this type of company? (Osterwalder & Pigneur, 2011)
7. How would you describe the partnership network of this type of company with other external partners? (Osterwalder & Pigneur, 2011)
8. What is the cost model (or cost elements) used by this type of company? (Osterwalder & Pigneur, 2011)
9. What is the revenue model used by this type of company? (Osterwalder & Pigneur, 2011)

#### **APPENDIX B - Script to interview managers of companies with disruptive potential.**

1. Which customer type your company that operates in the \_\_\_\_\_ (*Financial, Management, Tax, Accounting Information Systems, Forensic Accounting or Auditing*) area is targeting? (Osterwalder & Pigneur, 2011)
2. How would you summarize your company's relationship with customers? (Osterwalder & Pigneur, 2011)
3. How would you summarize your company's way of communicating with customers (from distribution and communication channels)? (Osterwalder & Pigneur, 2011)
4. What is the value provided to the customer in the face of deliveries made by your company? (Osterwalder & Pigneur, 2011)
5. What are the key processes used by your company? (Osterwalder & Pigneur, 2011)
6. What are the key resources used by your company? (Osterwalder & Pigneur, 2011)
7. How would you describe your company's partnership network with other external partners? (Osterwalder & Pigneur, 2011)
8. What is the cost model (or cost elements) used by your company? (Osterwalder & Pigneur, 2011)
9. What is the revenue model used by your company? (Osterwalder & Pigneur, 2011)
10. Did you notice, in your company, that the exploration of new technology or innovation required the evaluation and readjustment of the business model and the products/services offered for its better use? Comment. (Schiavi et al., 2019)
11. Did you notice, in your company, that the exploration of new technology or innovation - in a new business model - provided the offer of products/services that served new markets, making it possible to obtain competitive advantage and destabilize dominant companies? Comment. (Schiavi et al., 2019)
12. Do you believe that the use of disruptive technologies and/or innovations has brought a different value proposition to the market, as well as providing products and services with greater simplicity, convenience, accessibility, and lower cost? Comment. (Schiavi et al., 2019)
13. Do you see, in your company, that there is a concern and attention of the new business model with the selected market segment, looking for new ways of creating value that sensitize the target customers? Comment. (Schiavi et al., 2019)
14. Regarding the risks associated with the introduction of new technologies and/or other innovation processes, what risks did you perceive in relation to your business? (Schiavi et al., 2019)

15. Do you think that the introduction of new business models in the market posed direct and severe threats to the maintenance of traditional and stabilized models? Comment. (Schiavi et al., 2019)

16. Do you believe that having an entrepreneurial behavior to analyze the market and the business is fundamental to seize opportunities and escape the threats that come with new business models? Is this behavior adopted? Comment. (Schiavi et al., 2019)

17. Do you think that the analysis of business model patterns can be used to interpret the environment and to anticipate how to do the intended business? Have you analyzed other innovative businesses in this area? (Schiavi et al., 2019)

18. Do you believe that companies from emerging economies can introduce technologies and innovations from more advanced economies, through secondary innovations, into business models? Did this happen at your company? (Schiavi et al., 2019)

### **APPENDIX C - Code book on the elements of business models and on the characteristics of disruptive business models**

<b>Code</b>	<b>Description</b>
Value proposition	A company seeks to solve customers' problems and satisfy their needs with value propositions in its products and/or services.
Customer segments	Customers can be segmented into different groups, according to certain characteristics, and a company can serve one or several customer segments.
Customer relationships	Companies establish and maintain relationships with customers in order to retain them.
Channels	Companies develop different communication, distribution, and sales channels to communicate and bring their value propositions to customers.
Key activities	Set of processes performed by companies to offer and deliver the products and/or services provided.
Key resources	The main resources are the elements used by companies to offer and deliver the products and/or services provided.
Partner network	Some activities are outsourced and some resources are acquired outside companies through partnerships.
Cost structure	The different elements of the business model result in the company's cost structure.
Revenue streams	The revenue sources are the result of value propositions successfully offered to customers.
Evaluation and (re) adjustment	The exploration of new technology or innovation process requires an assessment and readjustment of the business models and the products or services offered.
Use of secondary innovation by emerging economies	Emerging economies companies can introduce emerging technologies and innovations, coming from more advanced economies, through secondary innovations, into business models.
Risks	The disruption of disruptive innovations in business models varies, in the short and long term, when driven by technology or when driven by the market.
New markets	The exploration of emerging technologies and innovations in disruptive business models provides the offer of products and services that serve new markets, enabling the obtaining of competitive advantage and the failure of dominant companies.
Services with increased simplicity, convenience, accessibility, and lower cost	Disruptive technologies and innovations, in essence, bring a very different value proposition to the market, as well as providing products and services with greater simplicity, convenience, accessibility, and lower cost.
New ways of creating value	Great concern and attention from disruptive business models with their selected market segment, seeking new ways of creating value that sensitizes consumers, instead of the pure delivery of a new product or service.
Threats to traditional and stabilized models	New business models on the market pose direct and severe threats to the maintenance of traditional and stabilized models.
Entrepreneurial behavior	Having an entrepreneurial behavior, with the purpose of analyzing the market, as well as the business, looking for new ways to deliver value to the consumer, is fundamental for managers, in order to seize the opportunities and escape the threats that come with the new business models.
Business model patterns	Business model patterns can be used to interpret the environment and to anticipate how to do the intended business, through knowledge of elements related to disruptive business models, which can reveal valuable information about these aspects.

### **NOTES**

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## **DATASET**

The dataset that supports the results of this study is not publicly available.

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## **CONSENT TO USE IMAGE**

Does not apply.

## **APPROVAL OF THE RESEARCH ETHICS COMMITTEE**

Does not apply.

## **CONFLICT OF INTERESTS**

Does not apply.

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