

The Effects of Disruptive Technologies on Modern Accounting

An Honors Thesis (HONR 499)

by

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Muncie, Indiana

May 2021

Expected Date of Graduation

May 2021

Abstract

Disruptive technologies are any sort of technology that disrupts the way businesses consumers, and industries function. Disruptive technologies are significantly impacting all aspects of the accounting world, ranging from employees to the standards these individuals must follow.

Automation and other technologies have eliminated the need for certain skills and replaced them with a demand for more analytical based skills. The increased productivity associated with disruptive technologies has increased firm's growth. Accordingly, time saved on once repetitive tasks can now be used to offer a wide array of services to clients, who also have new demands. Governments and the governing bodies of accountants also need to deal with these changes and are adapting to do so.

Acknowledgments

I would like to thank Dr. John Ledbetter for taking the time to be my advisor for this thesis. Dr. Ledbetter has aided me, not only as a professor, but as a mentor and asset to both my academic and professional aspirations, throughout my time at Ball State. I would also like to thank my professors in both the Ball State Accounting Department and Ball State Honors College, for imparting the skills and inspiration necessary to complete this thesis.

Process Analysis Statement

In order to choose my topic, I thought about all of the items that had been relevant to my education in accounting, outside of the technical and mathematical skills. I brainstormed a list of items and topics of everything that I could think of from my four years of undergraduate accounting. This left me with a list of fragmented ideas that really had no enveloping theme. I then realized that while all of the ideas may have had no coherent theme together, they all shared the commonality of being affected by an outside force, this force being disruptive technologies.

Disruptive technologies can be defined as any sort of technology that disrupts the way businesses, consumers, and industries function. These technologies sometimes even create new industries and markets. With this definition in mind, I began my research on disruptive technologies, by seeing which ones were the most prevalent to the world of accounting. One of the biggest challenges I faced in this preparatory period was figuring out how I would present my findings. At first, I thought about analyzing each major technology and describing their effects. However, this would have been a difficult model to follow as there would have been a lot of overlap in the uses and effects of certain technologies. I then came up with the idea to divide the paper into three sections. These sections would cover the effects disruptive technologies, in general, have on three parties ranging from most specific (individuals) to the broadest (accounting standards).

This subject is very important to anyone currently involved in the accounting industry or anyone who plans to be in the future. The topics discussed in this thesis will help prospective employees get an idea of what skills current employers are looking for. Those in academics could also benefit from this thesis, as the consequences of the disconnect between a classroom education and the actual job place, are discussed. Additionally, this thesis could be important for

employees and employers in the current industry. This is because these individuals should be aware of more than just the demands of their current jobs and should also be aware of the larger trends influencing the industry.

My initial preconception of this topic was that these disruptive technologies were on track to replace a large portion of accountants. I also did not think that these disruptive technologies would have influence on the broader areas of accounting such as the accounting standards and guidelines. However, as I learned more and more about the effects of these technologies, I learned that these preconceptions were not completely true. I learned much more about how critical thinking and objectivity there is in the majority of many accounting positions. Because my educational background has been limited to technical training in the classroom and low-level auditing during my internship, I did not truly understand how much decision making relied on human objectivity. Additionally, I learned that disruptive technologies were not only performing accounting related tasks, but they were also shaping the very way the industry is regulated. This is once again something I never would have considered had it not been for the research necessary to complete this thesis.

In this process, not only did I learn about the ins and outs of disruptive technologies and their corresponding effects, I also learned about how to identify and understand ongoing and oncoming shifts in an industry. This is something that is especially important to me as I shift my education to law school. This understanding will allow me to possibly identify trends that parallel the ones discussed in this paper. I will then have the chance to identify this and prepare myself accordingly to put myself in a position to succeed.

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1.1 *What is a Disruptive Technology?*

Disruptive technology, by definition, is a technology that disrupts the way businesses, consumers, and industries function [1]. Often times these technologies are created in order to improve upon preexisting products and procedures. However, more than ever, the objective of these innovations is now expanding past the mere improvement of existing items. Previously, disruption had been a secondary result of innovation. Currently, in today's dynamic technological landscape, the concept of disruption has become the primary goal of innovation, rather than a byproduct.

This shift in thinking has led to new markets, new demands, and new problems that consumers and producers had previously been unaware of. In an ideal scenario, these newly created markets create value for the economy by producing employment opportunities and a network for suppliers and distributors to prosper. However, this is merely an ideal scenario and realistically a plethora of problems could also ensue. The unpredictable nature of these disruptive technologies lies in the very characteristic that defines and separates them from other innovations, this unique feature being that there is no precedent to demonstrate proper utilization of such a technology. Without this precedent, users of these technologies are sure to endure both the resulting benefits and drawbacks, as the effects of these technologies become more understood.

1.2 Disruptive Technologies in Accounting

As one might expect, the world of accounting receives no exemption from the effects of disruptive technologies. In this section, specific examples of the most prominent disruptive technologies in modern accounting will be given. The emphasis that accounting firms are now placing on these technologies will also be detailed. Because this section is to serve as background, the information included in this section will be more focused on defining and describing specific technologies, rather than analyzing their effects on accounting. The described technologies will not be all encompassing of every disruptive technology present in the accounting world, but these examples should provide an idea of the scopes of applications these technologies have. The identification and explanation of their characteristics will be vital to understanding the effects they have on accounting, which will be discussed later in this thesis.

In a 2020 poll of C-level executives working in financial services, 69.5% of respondents believed artificial intelligence or machine learning, would be the most impactful disruptive technology. In 2021 this percentage fell to 47.5% [2]. This decrease could more than likely be attributed to the widespread implementation of artificial intelligence. As a result of its emergence and common use, these executives may have felt less inclined to view artificial intelligence as a disruptive technology. Nevertheless, based on these percentages it is clear that artificial intelligence is the prominent disruptive technology in today's financial service industry.

Artificial intelligence works by interpreting enormous amounts of data. This data is then analyzed and verified for accuracy. Once this data is analyzed, the software begins to learn how to handle different assigned tasks. These tasks then begin to be carried out automatically by the software. The software then continues to self-learn and engages in constant improvement to better its ability and efficiency in analyzing the data and completing its assigned tasks [3].

Additionally, these machines can be trained to handle a wide variety of tasks if given a wide enough pool of examples to draw from. Due to the complexity of these machines and the different tasks they learn, re-engineering them and problem diagnostics can be challenging.

Robotic process automation (RPA) is similar to artificial intelligence, but not quite as intuitive. RPA is software technology that is developed with the use of artificial intelligence and machine learning. Through this development, bots are created which help carry out simple repetitive tasks. RPA, by itself, is only focused on following the guidelines of its programmed rules, while artificial intelligence has the capacity to learn and make decisions on its own. Despite the differences, these programs can be used together to complement one another. This typically means adding artificial intelligence to RPA in order to give it the capacity to perform more complex tasks like decision making and forecasting [4].

Another technology which is dependent on the widescale consumption of data is predictive analytics technology. Ideally, if a predictive analytics engine is presented with relevant and correct data, trends and patterns can be extracted. These forecasts can then be used to make critical decisions within a company regarding area such as budgeting, resource allocation, and expansion. The major downside of predictive analytics technology, ironically, lies in its extreme aptitude for identifying trends. Often times these technologies identify trends which are simply coincidence or irrelevant. These models also fail to take into account unpredictable outside events that are occurring and effecting data.

Another technology that is gaining widespread use in the accounting world is cloud computing. Cloud computing is the delivery of various services through the internet. These services include data storage, servers, applications, and databases [5]. Cloud computing differs from traditional storage methods, which require physical items, such as a hard drive or local

storage device. This makes it possible for data to be accessed wherever the user has internet. Cloud computing is also notably cheaper than other forms of data storage, which makes this technology particularly appealing to small and mid-sized accounting firms. As with any new technology cloud computing has its flaws, most notably with data privacy and network and connectivity issues.

A new record keeping technology, known as blockchain, is starting to gain popularity in the accounting world. This technology, which was originally designed for the mining of cryptocurrency, now serves as a means of authenticating digital transactions [6]. Despite the original intentions of this technology, the ability to authenticate digital transactions has become an immensely important task in practically any financial setting. For accountants, the blockchain serves as a transparent ledger where transactions are instantly recorded. By storing data in the blockchain the data is decentralized and distributed across an entire network. This decentralization makes the data difficult to tamper with, as all parties participating in the blockchain would need to approve a change in the data for the change to take place. This system also allows for instant reconciliation of statements and ledgers, meaning companies can now have a single set of constantly auditing books [6].

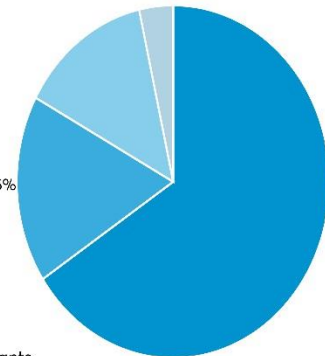
With the applications of these prominent disruptive technologies in mind, one might wonder the scale on which accounting firms are investing in these products. The extent of this investment should aid in comprehending the actual effect these disruptive technologies are having on modern accounting. As of 2020, together EY, PwC, and KPMG planned to invest 9 billion dollars into artificial intelligence and data tech [7]. KPMG led the other notable big 4 firms with their planned investment totaling 5 billion. When asked about the investment, Christian Rast, KPMG's head of technology and knowledge stated, "We are a professional services firm, but

technology is core to our future [7]”. Succinctly put, accounting firms are betting on these technologies to be the future of their business. In a survey done by the Institute of Management Accountants, of the organizations polled, 65.7% felt that enhancing analytical capabilities were a key to gaining a competitive advantage, while a measly 3.5% felt comfortable with the way things are currently done [8]. As one can see by the resources being allocated by Big 4 firms and the majority of organizations feeling these technologies are the key to gaining a competitive advantage, there is a sort of arms race revolving around the research and implementation of disruptive technologies. No firm wants to be left behind in this rapidly changing, technology focused environment.

Data analytics making headway

Enhancing analytics capabilities is seen as a key to future success for 2/3 of respondents

- Key to gaining competitive advantage, 65.7%
- Helps maintain market position, 17.2%
- Evaluating costs and benefits, 13.6%
- Comfortable with way things are currently done, 3.5%



Source: Institute of Management Accountants

1.3 Goals

The goal of this thesis is to coherently transcribe the effects, and the extent of the effects, that disruptive technologies have on modern accounting. I found the best way to do this was to separate the paper into multiple sections, divided based upon the effected party. These sections are arranged from the smallest and most specific party to the broadest. The first section will deal with the impacts felt at the individual level. This section will largely be concerned with how individual employees are affected by these technologies. The next section will concern the effects at an entity wide level. In this case, an entity will be any sort of organization made up of multiple individuals such as accounting firms, client firms, and governments. Lastly, the final

section will cover the effect of the accounting industry as a whole. This will deal with how items such as the principles, standards, and rules are being shaped by disruptive technologies.

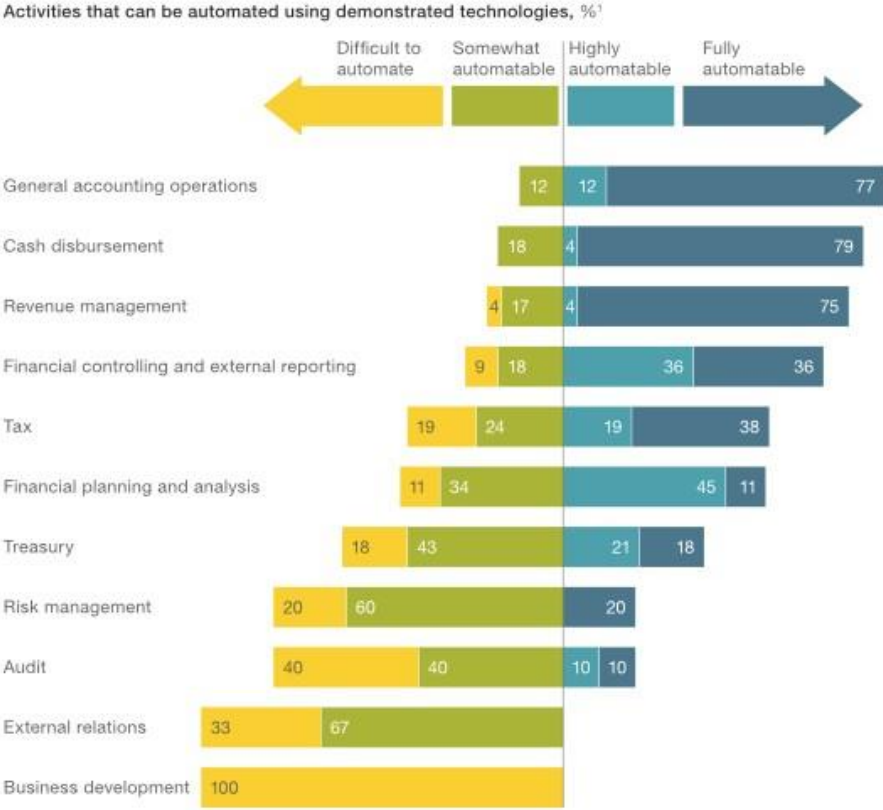
2.1 *Job Displacement*

Whenever new technologies, particularly ones that automate tasks, are introduced into an industry, the first reaction is typically to wonder what this implies for employment opportunities in the given industry. Issues with job displacement by robotics and automation have previously been associated with manufacturing jobs. However, with the rise in the number and capabilities of disruptive technologies, it is more than just blue-collar workers who have to worry about being replaced by technology. This issue has now spread to white collar workers, whose college degrees and specialized training had previously exempt them from the threat of job displacement.

This already rising trend of automation was amplified even further by the Covid-19 pandemic, as reliance on technology became vital to a firm's survival. To put this reliance into context, in a 2021 survey done by Deloitte, eight out of ten corporate executives reported using robot process automation (RPA) in some capacity, while another 16% reported that they planned to implement RPA in some capacity in the near future [9]. RPA technologies are a subcategory of artificial intelligence, but differ slightly, as they are programmed to do more simple and repetitive tasks and lack the capability to learn without programming. However, it is this simplicity that makes RPA so approachable and affordable for a wide variety of firms. For example, an RPA bot that costs roughly \$10,000 a year can now do the job of two to four human workers [9]. Previously, technologies like this had cost much more and took years for the investment to pay for itself. This has led to an increase in use of these technologies by smaller

and middle-sized firms, who previously did not have the resources to spend on such technology. This has led to an increase in the number of jobs that are being automated, particularly in areas where tasks are repetitive and require little critical thinking. The following chart illustrates where accounting related tasks fall on the spectrum of “difficult to automate” to “fully automatable [10]”

Transactional activities are the most automatable, but opportunities exist across most subfunctions.



¹Proportion of tasks. Figures may not sum to 100%, because of rounding.

McKinsey&Company

As one can see, in some instances, these disruptive technologies can be more efficient and cheaper than their human counterparts. As if this were not reason enough to cause a displacement of jobs, this issue is compounded by the fact that automation has become more accepted by society than in previous decades. In recent years, even with these technologies available, executives had been wary to utilize them because of the resulting backlash they may face. This backlash may have been similar to that felt by manufacturers in previous decades or similar to the backlash associated with the 1990's outsourcing boom [9]. However, the Covid-19 pandemic has resulted in massive unemployment and left companies with strained budgets. Therefore, it has become logical and practical for some companies to turn to these disruptive technologies to replace more costly employees. Additionally, companies who may not be financially struggling despite the pandemic, have capitalized on this shift in society's mindset. These companies can now implement cost cutting layoffs and chalk them up to a sign of the times rather than an intentional and ethically questionable decision to increase profits.

2.2 Job Enrichment

Despite the morbidity of the "robots are replacing us," feeling somewhat present in the first section, disruptive technologies are not all bad for the individuals working in the accounting world. Their attributes can also be used to enrich and evolve the current jobs and tasks that are being performed by accounting professionals. As previously stated, these technologies truly have no precedent. Therefore, it is to be expected that the effects of such technologies cover a wide spectrum of negative and positive effects.

The extent to which disruptive technologies can aid an individual are dependent on the skillset and experience of the individual. For example, an entry level auditor may be tasked with the tedious duty of preparing work papers. This monotonous task would surely lead one to

eventually make some sort of error. With the implementation of these disruptive technologies, these lapses in concentration can be avoided and the entry level auditor's time can be spent carrying out other tasks. This could mean more time spent training to master complex skills and therefore add value to the firm quicker than before the presence of these technologies. Another important, yet possibly unquantifiable result of the automation of repetitive tasks, is the benefit to an employee's mental health. The opportunity to partake in more stimulating endeavors, which require more critical thinking and human interaction, produce a more content employee than one who must crunch numbers all day. According to the basic principles of management, this more content employee would normally display increased levels of productivity and be more inclined to stay with the firm.

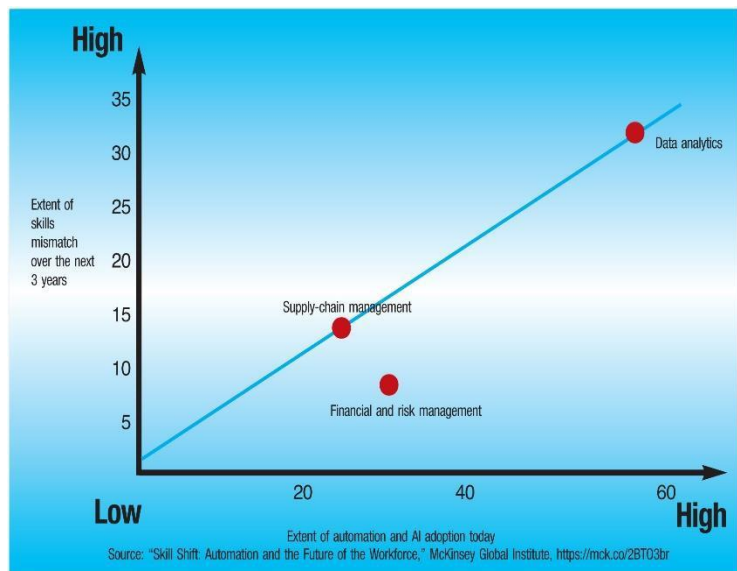
Although most senior accountants are not partaking in the same repetitive tasks as the more entry level accountants, the effect of this increased productivity is felt all the way up at the top. Senior accountants no longer have to deal with time consuming items such as correcting human errors. This newly available time is resulting in the expansion and evolution of the roles that senior accountants have. In a survey done by information provider Thomas Reuters, "96% of mid- and senior-level accountants surveyed say advances in technology are likely to change their role as an accountant within the next ten years. [11]" It is clear that these higher-level accountants feel the very services they provide will have to evolve to accommodate for the massive changes these technologies present. Soon these high-level accountants will likely be focusing their time and effort on advisory services. According to Rob Nixon, a renowned accountancy expert, "The role of business advisor will result in more than 80% of an accountant's revenue, as accountants can add a huge amount of value when they know the facts. [12]" This means that advisory services such as business plan creation and audit services, two

services respondents in the Reuters survey felt were practically un-automatable, will be the main focuses and revenue drivers of accounting firms in the near future.

2.3 Employee Training

Due to this transformation of the modern accounting world, the skillsets that are in demand are rapidly changing. Despite the massive disruption taking place within the industry the content covered in college curriculums and certification exams has remained relatively the same. This has resulted in a large disconnect between the employer's demand and the supply of talent.

As one can see from the graphic, data analytics, a major technology disrupting the accounting world, has an extremely high rate of use and adoption. Despite this widespread adoption, there is an equally large mismatch in the supply and demand of skills in this field. [13]. As a result,



prospective and current employees are being forced to broaden their skillsets through a variety of different methods.

With this disparity in skill and demand, accounting firms must find a way to properly train their workforce to meet such demands. The most common method being used to accomplish this goal is in house training. According to a 2014 survey, which polled 2100 CFOs, over 80% of the polled companies cited in-house training as a way to improve employee's analytical skills. This far outpaced the second most noted method of training, which was mentorship at roughly 40% [14]. The prevalence of in-house training makes sense as many firms

are looking to hone an employee’s skillset in a way that is tailored specifically to their job. Although the specifics of these skills vary by job and firm, Roshan Ramlukan, Ernst and Young’s principle and global assurance analytics, described the ideal analytically skilled employee to have the following three traits [14].

- Good technical skills: Understands the data and knows how to manipulate it.
- Understanding of the business context: Can distill a business problem or opportunity into key questions to be answered and understands the business data flow and the relationship between objects within the business context.
- Analytical mindset: Possesses an inquiring nature and intellectual curiosity.

Ramlukan’s preferred traits serve as a perfect illustration of the changes resulting from disruptive technologies. There is seemingly no reference to technical accounting skills and the identified skills are centered around the understanding of data.

To keep up with the changes caused by disruptive technologies, students looking to work in the accounting industry are modifying their approach to education. In recent years, most state boards have relaxed the 150-hour requirement, which is needed for an accounting degree holder to sit for the CPA exam. As a result, there has been a decrease in the number of students enrolling to obtain their Master’s in accounting [15].

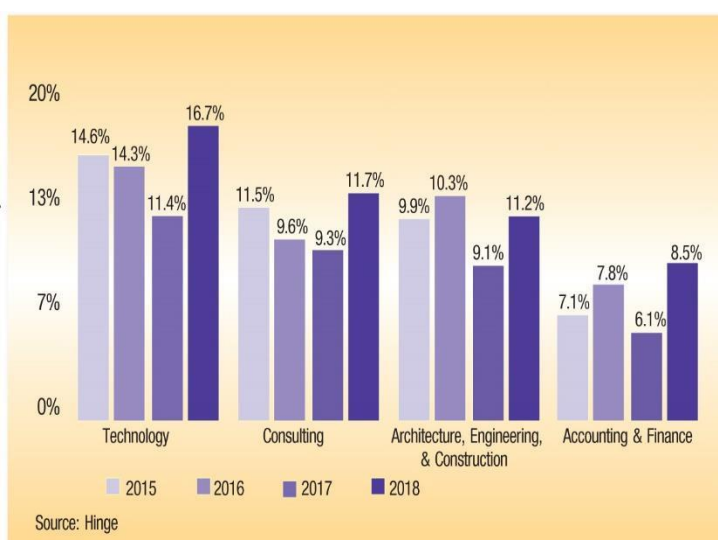
Exhibit 1							
Master’s in Accounting Enrollment: Descriptive Statistics							
2018/19 and 2014/15							
	N	Total Enrollment	Mean	Full-Time	Mean	Part-Time	Mean
2018/19	114	9,813	86	6,797	59	3,016	26
2014/15	172	15,049	87	12,396	72	2,653	15

In order to substitute for the 150-hour requirement, these state boards are instead allowing this prerequisite to be satisfied by an experience requirement. This change in requirements can largely be attributed to the effects of disruptive technologies. The governing bodies are aware of the expanding skillset accounting students need to be prepared for today's job market. Therefore, there is less emphasis being placed on classroom training and more emphasis being placed on the in-house training, which so many firms feel is the most effective method of training.

The effects of this technological revolution have resulted in CPA firms hiring non-accounting graduates at increasing rates. According to the 2019 Trends in the Supply of Accounting Graduates and the Demand for Public Accounting Recruits report, "Nonaccounting graduates constituted 31% of all new graduate hires in public accounting in 2018, an increase of 11 percentage points over 2016. [16]" This data would suggest that CPA firms are now more than ever looking for students with degrees rooted in technology and data analytics, rather than a traditional accounting background. Some firms are even starting to change the way they describe their job listings in order to better fill their needs. Traditional auditing positions are now sometimes replaced with titles such as data scientist or analytics solution architect. These changes caused by disruptive technologies illustrate how prospective and current employees must continue to adapt their skillset in order to have a desirable skillset.

3.1 Firms and Clients

The effects of disruptive technology on the performance of accounting firms can quantitatively be seen as a positive. According to a Rosenberg Survey, 2019 revenue growth was at 7.7%, up from the 2018 growth, which was reported at 7% [17]. As one can see from the following graphic, which displays median growth by professional services sector, there is a correlation between the growth of the technology sector and the according growths of the other services [17].



Despite the overall growth seen by the industry, it is larger firms that are leading this trend, greatly outperforming their smaller counterparts. This trend is likely due to the amount of resources larger firms have to spend on disruptive technology in comparison to their smaller competitors. Greater access to these technologies results in an according increase in efficiency and productivity, allowing larger firms to expand their services and clientele base. Larger firms were much more likely than smaller firms to engage in advisory and information security services. These are services which typically produce more revenue and have a higher profit

margin than the typical compliance-based accounting services. This gap in growth between large and small firms is further exacerbated by these large firms having the capability to take on more clients, due to increased technological efficiencies. Logically, these smaller clients will want to deal with a service provider who has access to the best technologies and offers their services and expertise at a low price. Smaller firms are unable to compete with larger firms in these arenas and as a result, the competition for smaller clients has become more competitive and lowered profit margins.

Disruptive technologies have not only effected firms and clients in a quantitative manner, but they are also shaping the culture of these entities. As previously stated, many small clients are taking their business from smaller more local firms to larger firms. With the emergence of certain technologies, the aspect of human connection in this client-provider relationship is diminishing. This shift has been exemplified by the Covid-19 pandemic, as firms and their clients were able to carry on business as usual without the same face to face interaction that has normally taken place in client-provider relationships. All of this has led to clients having less of a personal connection to a firm and therefore less loyalty. With emotion out of the equation, it is easier for clients to choose a firm with the lowest prices and best resources, once again widening the gap between large and small firms.

In addition to the lowest prices and access to the best resources, clients are also now demanding specialization. This is a trend that disruptive technologies have caused across all industries. For example, cable providers are moving from an all-encompassing package of channels to customized packages the customer creates based on their interests. The same customization also takes place in the form of apps and social media, which curtail content based on a user's specific interests. Accounting clients are following this trend by requesting a package

of accounting services that only cover the specific areas they need. This will mean the client spends less money on unneeded services and less time away from their primary business functions working with accountants.

Another effect of disruptive technologies on a non-quantitative area is the demographic shift taking place at the upper levels of accounting firms. In 2019 there was an increase in the number of firms that had mandatory retirement provisions. Despite this increase, there was also an increase in the number of partners over the age of 50 at firms in the small category [17]. The implementation of a mandatory retirement provision signals that firms are looking to replace older partners with younger individuals who have experience, but at the same time may be more willing to embracing disruptive technologies. Additionally, the increase in partners over the age of 50 may also be a contributing factor to the growing disparity between large and small firms. It is possible that these older partners are less inclined to spend money on disruptive technologies because these radical changes would be much different to how they have previously done business for decades.

3.2 Governments

Like the private sector, governments and their accounting functions are also being subject to the rapid changes caused by disruptive technologies. According to a Deloitte article, “Governments around the world are harnessing innovative technologies that involve the digital collection and analysis of tax data. Governments are going digital at a rapid pace, and companies have no choice but to match this pace of change and comply-or face stiff penalties. [18]” This adoption of disruptive technologies by governments has resulted in lower costs, less tax avoidance, and less corruption.

From the previous paragraph it is clear to see that both the public and private sector have enjoyed the benefits of disruptive technologies providing increased productivity at a lower cost. Despite the similarities in application between these two sectors, the government's goals typically differ from these for-profit organizations. It is left up to the government to decide how these technologies should be regulated and taxed, in order to best serve its people. The biggest issue for these governments regarding this subject is how to regulate increasing productivity, caused by automation, with the correlating decrease in jobs and wages that automation causes. The simplistic answer would be to have a so called "robot tax" placed on companies who use automation. Theoretically this tax would then be dispersed to the consumer, who possibly could have had their job or wages displaced by this automation. This of course is theoretical and might cause the rate of technological adoption and innovation to decrease. Additionally, determining how to allocate taxes based on the extent of a company's utilization of automation would be difficult and subjective.

Another suggested solution is the idea of universal basic income (UBI). UBI would seemingly account for the difference in productivity and wages being earned by giving all citizens a sum of money either monthly or annually. As with the robot tax, there are economic and ethical rebuttals to the idea. However, this does not change the fact that these disruptive technologies are greatly impacting and complicating regulations and taxes. In fact, 66% of accountants polled in a study believed that tax laws will become more complex [19]. Despite how these disruptive technologies are handled, it can be assured that accountants and accounting firms will have to deal with the ensuing complexities.

4.1 *Standards and Principles*

With new technologies comes new questions and issues for accountants, especially those operating under the guidelines of U.S. Generally Accepted Accounting Principles (GAAP). U.S. GAAP features many specific rules pertaining to items such as revenue recognition. There are general rules that have to be met for this recognition of revenue, but then there are also additional criteria for recognition and recording that must be followed depending on the industry that is being dealt with. Since disruptive technologies lacks precedent and offers unique services and products, it can be difficult to know what GAAP guidelines should govern these technologies. This has caused standard setting bodies, like the Financial Accounting Standards Board (FASB) and International Financial Reporting Standards (IFRS), to create new standards to apply to these technologies. New Standards such as ASC 606 and IFRS 15, which largely deal with software and cloud computing contracts, have been made to ensure that revenue is being recorded in a manner that is consistent and fair [20].

The addition of the ASC 606 and IFRS 15 standards and similar standards are intriguing for reasons beyond their practical application. Both of these standards are principle based, a characteristic of the IFRS, which differs from the rules-based approach of U.S. GAAP. The transition from U.S. GAAP to IFRS has long been a point of discussion, especially in today's age, where technologies have made foreign markets and foreign investment so accessible. Perhaps the influx of standards being created as a result of disruptive technologies will cause

U.S. GAAP to finally transition to IFRS or at least start to shift U.S. GAAP to a more principle-based approach.

Such a change would likely be beneficial for accountants and the industry. The most obvious outcome would be a more interconnected business world, where foreign investment is more approachable due to the homogeneity of standards and reporting. However, the biggest impact may be on the roles that accountants have. The principle-based approach of IFRS is much more subjective than U.S. GAAP, therefore decisions are less black and white. This allows accountants to apply critical thinking and decision making rather than having their job be automated. Accountants would be able to focus on providing advisory services, which certainly appears to be the direction that the industry is going.

4.2 Conclusion

Disruptive technologies have affected nearly every facet imaginable in the world of modern accounting. Every level from the individual to the very standards that govern the discipline are being rapidly shaped by these astounding and perplexing technologies. Ultimately, the key to success during times of such rapid change, is to gain an understanding of the change that is taking place. By doing so, individuals can gain the skills necessary to make themselves indispensable from automation, firms can more effectively cater to the changing demands of clients, and accounting standards can be revised to better guide this dynamic profession.

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