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TEAM8™

The Emergence of TaxTech - A New Era of FinTech

March 2022

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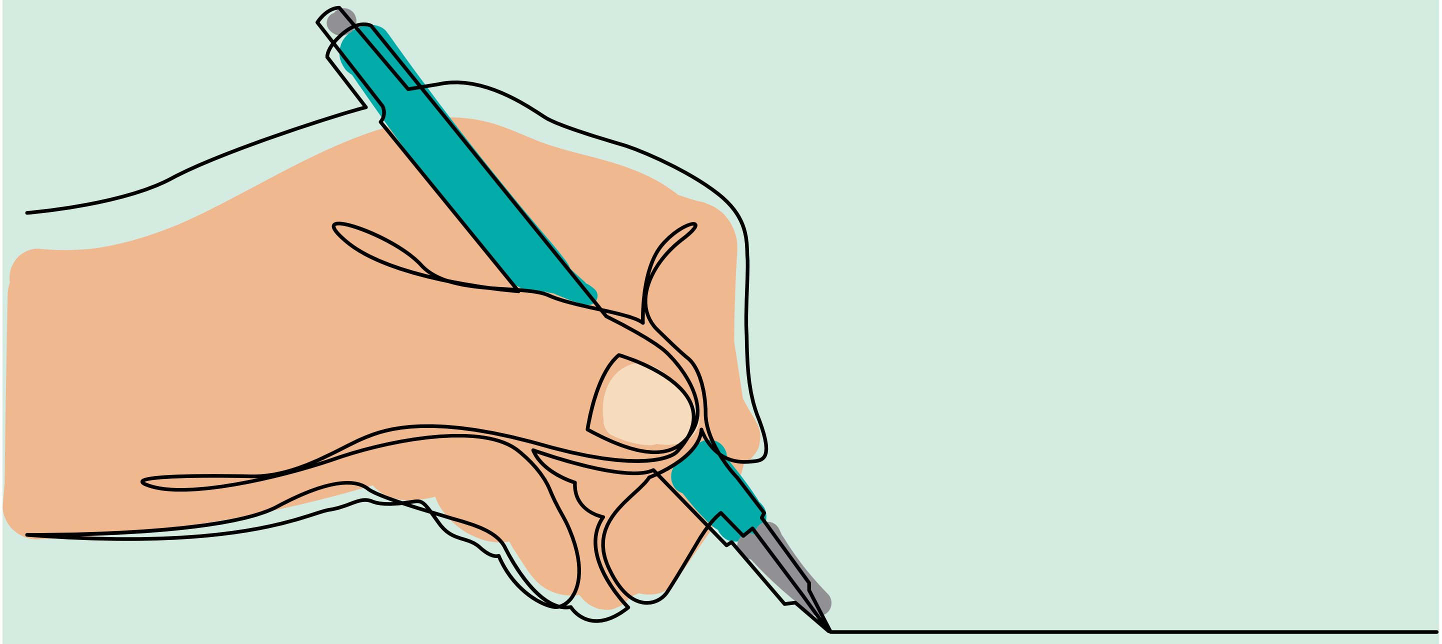
Foreword



Foreword by Team8

Throughout the rise of fintech and its numerous sub-verticals, it seems as if the tax domain has been left behind, which makes little sense, considering that nearly every financial decision has a tax implication, and every individual and business has tax liabilities.

For professionals moving jobs every 2-3 years, using several banking and financial apps, participating in the gig economy or exploring the crypto world, dealing with taxes has become a minefield. While also navigating an increasingly complex tax code, taxpayers are burdened with managing, gathering and reporting tax data from dozens of siloed accounts.

The antiquated tax solutions built for their grandparents' generation simply don't cut it anymore. But the tide is turning – fintech is warming to the tax space and we're about to witness massive disruption across the industry. That's why we've teamed with Deloitte to produce this first-of-its-kind TaxTech report.

In the following pages, we'll provide expert insights on how taxes fit into the embedded finance landscape and discuss the second-order effects of tax innovation on the ever-changing contours of the global economy and the financial wellness agenda.

At Team8, we focus on identifying industry trends, exploring new market opportunities, and partnering with entrepreneurs to build innovative companies in the financial sector.

Our company-ideation process is focused, to a large extent, on exposing new verticals that are ready for inclusion within the broader embedded finance landscape, and Tax clearly falls within this parameter. Indeed, this was our inspiration for building and funding April, a TaxTech startup that develops an intelligent tax platform to provide a fast frictionless, and more rewarding tax experience for US taxpayers, as well as IVIX, that develops a platform to help tax authorities use publicly available information to assist with their compliance efforts. We look forward to uncovering more of the industry's challenges and opportunities shaping the next generation of disruptive fintech companies.

Ronen Assia
Managing Partner,
Team8

"Fintech is warming to the tax space and we are about to witness massive disruption across the industry."

Foreword by Deloitte

As a leader in Tax services, Deloitte deeply understands the financial and operational impact taxation has on businesses and the direct impact of taxes to the financial lives of individuals and corporations. Although taxation will never be simple, technology innovation increasingly serves an important role in improving how businesses and individuals fulfill their tax obligations.

Technology firms companies specializing in tax management solutions, known as 'TaxTech' companies, are focused on shifting manual, repetitive tasks of tax reporting to automated systems. In the process, they strive to create more transparent, accurate and streamlined processes to simplify the complexities of the multi-tiered, global tax environment. This is especially true in addressing the emerging areas covered in this report like remote work, the gig economy, crypto assets, and more and doesn't just focus on businesses, but individuals as well.

Deloitte takes a holistic approach to serving our clients, relying on our tax technical specialists to understand the complexities of tax laws and relying on technology to provide our services efficiently. Deloitte also assists our clients in bringing technology to their tax departments. Accordingly, we welcome innovative start-ups and more mature TaxTech companies, such as Thomson Reuters and Vertex, driving innovation in the tax industry and have made significant investments in developing technology as well. For example, Deloitte has developed a comprehensive tax technology platform called Intela, that allows Deloitte and its clients to collaborate seamlessly in supportingregarding matters involving tax reporting and planning. Deloitte was also named International Tax Review's Tax Technology Firm of the Year and Tax Innovator of the Year in 2021.

Deloitte has teamed with Team8's FinTech Fund to better understand the opportunities within the market and potential solution that may impact players in the markets, and facilitate these changes. This joint TaxTech report by Deloitte and Team8 will examines the intrinsic link between TaxTech and Fintech; will defines, categorizecategorizes, and demonstrates where TaxTech innovation is already happening; and then offers observations about where TaxTech innovation could be headed. This report includes some of the current startups operating in the market, does not intend to be exhaustive and is clarified that Deloitte does not endorse any specific software or technology firm in this report, but recognizes that technology is rapidly changing in the tax industry and we are embracing innovation in this area. Further, Deloitte and Team8 have a strategic marketplace business relationship specifically in fintech – with this publication serving as a demonstration of our joint value and impact.

Zachary Aron
Principal, Deloitte Consulting LLP
Consulting Fintech Leader

"We are now seeing the development of capabilities that will significantly change the way we deliver services."

02

Introduction

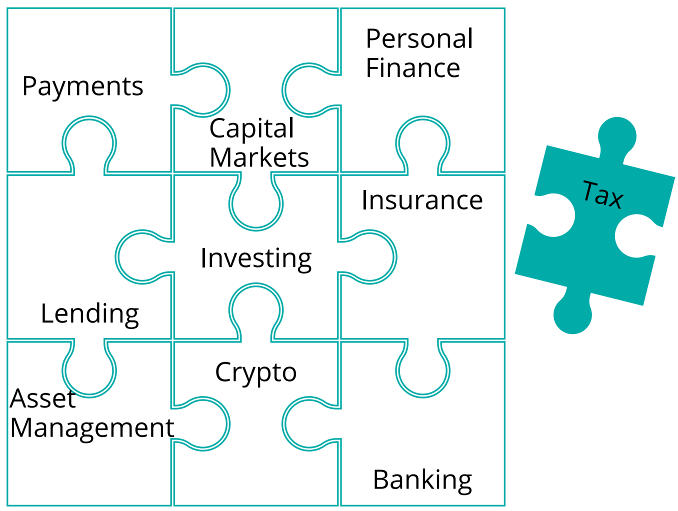
It seems like taxes have been with us from the beginning of time, and indeed, historical and biblical references indicate they have existed since the age of the Egyptian pharaohs.[1] By nature, taxes are levied by economic regimes and, as global economies developed, taxes evolved as well. Corporations were formed, global trade blossomed and new work models were adopted. This evolution is characterized by complex tax structures that aim to address all scenarios, all the time. Indeed, over the last thirty years alone, the US tax code has nearly tripled in length – from 26,000 pages in 1968 to almost 75,000 pages in 2018, according to Forbes.[2] Because it is so poorly understood by the general population, mastering the tax code has become a profession of its own. Surprisingly, despite the impact that disruptive technology has had on most industries over the past several decades, the tax space has largely been left untouched. Well, no more.

Recent technological and economic trends – such as digitization, the rise of cryptocurrencies, a massive surge in e-commerce, and a flourishing gig economy – all have massive tax implications. They have – for the first time – prompted an alignment of interests among tax authorities, who are dealing with a hyper accelerated economy, corporations which are digitizing and modernizing systems and processes, and entrepreneurs who are eager to disrupt the tax industry. A great example of this shift can be found in the US administration's "Build Back Better" plan which commits a budget of $80 billion to help the IRS implement new technologies over the next ten years. Tax authorities are starting to see technology as a tool to improve reporting accuracy, relevancy, and even enable real-time reporting – areas that affect both businesses and individuals.

Tax innovation is frequently overlooked in the fintech conversation, but this shouldn't be the case. Taxes directly impact the financial lives of individuals, as well as the financial performance and bottom lines of businesses. Taxes are, in fact, a critical consideration in most financial services and transactions. We hold the view that TaxTech is a new fintech vertical with far-reaching potential. This report will examine the intrinsic link between TaxTech and fintech. It will also define, categorize and demonstrate where TaxTech innovation is already in use, and offer some predictions about where it is heading.

The report highlights possible technological opportunities for businesses exploring the possibility of digitizing their tax compliance processes, as well as for businesses looking to expand their business offerings into the field of taxation.

And, when the stars align, as they have, what happens? Welcome to the era of TaxTech. In this report we aim to shed light on a young and vibrant ecosystem that is driving disruptive innovation in the tax sector. This nascent ecosystem has attracted significant interest from VCs. Over the last year, investment activity in this space rose by a factor of 3.6, from $240 million in 2020 to $864 million in 2021.[100]



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Deloitte Catalyst connects you to a global community of players that accelerate the way your business is influenced and adapts using innovation. In addition to our established teams in the US and Israel, Catalyst is part of an expanding network of Global Deloitte Innovation Hubs.

For further information, please visit - www2.deloitte.com

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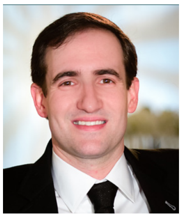

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About Team8

Team8 is a venture group that builds and backs cutting-edge technology companies in the fields of cybersecurity, data and fintech. Team8 rethinks venture to provide entrepreneurs with an unfair advantage, bringing expertise, experience and resources to accelerate success in an increasingly competitive landscape. Its extensive network of global leaders uniquely positions Team8 as the venture partner of choice with a deep understanding of industry-wide challenges.

Team8's world-class Fintech team comprises leaders of large financial organizations, multinational company executives, and seasoned Fintech startup founders, with unparalleled collective expertise across a range of verticals. The Group's Fintech foundry partners with top tier entrepreneurs to identify new market opportunities and build cutting-edge fintech companies that aim to redefine the financial services landscape.

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03 Executive Summary

Executive Summary

The field of taxation has always been impacted by business and regulatory-related changes, but the slow pace at which with exponential acceleration recentlythe industry has evolved is now accelerating exponentially. Due to technological, cultural, sociasocietall (including the impact of COVID-19), and business dynamics, taxes have undergone remarkable and disruptive transformations, similar to other fields of fintech. Today, the tax industry operates within an extremely complex ecosystem where conflicts disparities often arise due to discrepancies incongruity between at the state, national, regional, and global legislation. Technology in combination with professional tax services are necessary to fulfill taxpayers' reporting and planning needs.

In this report we aim to surgically unpack these new phenomena, first by highlighting some of the major macro tax trends and tax implications that global economies are experiencing, and then by covering and analyzing the existing landscape of TaxTech solutions. We also assess ways in which we believe companies and individuals can leverage these technologies and solutions to improve and optimize the tax process. Finally, we explore what we consider to be the next big thing in the Fintech industry – embedded tax.

Macro Trends

Global Regulations

Although Base Erosion Profit Shifting (BEPS) is not a new thing, the Two-Pillar Solution developed by the Organization for Economic Co-operation and Development (OECD)/Inclusive Framework project is trying to address the new challenges of the digital economy and drive reform in international tax rules as we know them today. Tax regulations and tax policies adopted by tax authorities are increasingly influenced by the rules and guidance developed multilateral bodies, such as the OECD. Globalization is challenging tax authorities to think more broadly and expand multilateral efforts to develop more comprehensive tax policies.

A recent agreement among G20 countries to adopt a 15% minimum corporate tax for large multinationals. If implemented by countries around the world will mean that countries will no longer be able to participate in the competitive "race to the bottom" over corporate tax rates. This will force businesses to change how they think about profits and cost optimizations within their own supply chains and operating structures.

The Changing Nature of Work I: Remote Work

The recent surge in remote work opportunities and the employment of workers from other states or countries has been significantly accelerated due to the COVID-19 pandemic. This trend has opened new opportunities for businesses to hire workers from outside of their tax jurisdiction, where they have tangible or intangible operations, but it has also created a complex web of tax liabilities for both employers and employees.

The Changing Nature of Work II: Gig Economy

While self-employment is not a new trend, growing numbers of gig workers and participants in the sharing economy do not fully appreciate how their current work environment may impact their tax liabilities. While traditional employees are covered supported by their employer with regard to tax liabilities and benefits, gig workers carry their own as a self-employed worker. This creates a reporting burden on individuals as they seek to timely and accurately meet their tax reporting requirements. Hence, regulators are increasingly turning to gig worker enablement platforms in search of accountability and transparency, creating the space and the need for these platforms to help their customers comply with tax regulations by embedding tax reporting solutions directly into their offerings.

The E-commerce Arena

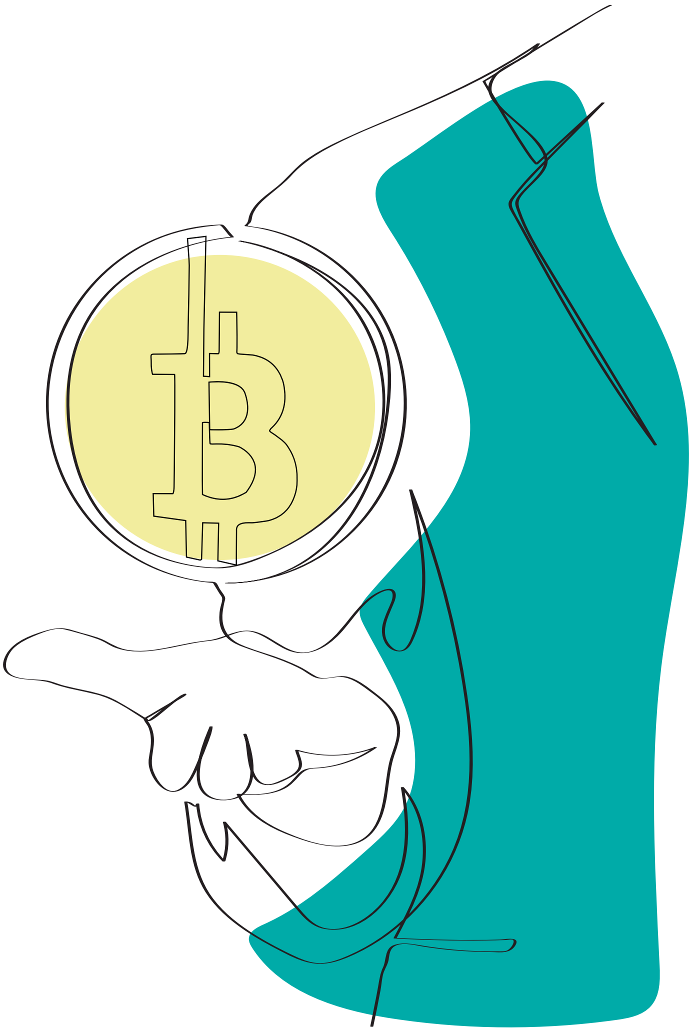
By the end of 2019, e-commerce was maturing rapidly, with consumers adopting more digital-centric shopping habits. Bolstered by the pandemic, the global e-commerce market is slated to grow by $10.87 trillion from 2021 to 2025, representing an impressive CAGR of 29%.[3] US e-commerce sales are anticipated to pass the $1 trillion milestone in 2022, previously expected to reach this threshold by 2024.[4] Marketplaces and e-commerce platforms have paved the way for anyone to become an e-commerce seller and transact with customers across the globe. Because the digital economy has enabled e-commerce to seamlessly take place across jurisdictions, sellers need to contend with complex tax liabilities imposed by different tax types, rules, and rates – from sales tax in the US and VAT in Europe and the UK, to international customs and duties. The need to manage this exposure creates a huge demand for TaxTech solutions.

New Asset Class: Crypto Assets

Following a surge in mainstream crypto adoption over the past several years, regulators are now grappling with new frameworks for taxing crypto transactions. Since 2014, US regulators have treated crypto like property, that is, holders owe standard capital gains taxes on the appreciated amount of their assets when and if sold, used, exchanged or transacted.[5] However, these tax rules have given rise to a new challenge: how to ensure the proper reporting of crypto transactions and associated payments of tax.
Outside of the investment management space where some reporting obligations fall on those who manage the accounts of a taxpayer's investments, the responsibilities for reporting fall on individual investors or users, who may not understand how their crypto transactions create tax obligations. The evolving NFT space, coupled with the emergence of Central Banks Digital Currencies (CBDCs) and Decentralized Finance (DeFi) activities, also have tax implications that authorities will need to address in the future.

Driving a Sustainable World through Tax Strategy

The sustainability agenda has become a priority for governments around the globe, prompting new regulations aimed at reducing carbon emissions. While there are still disparities in the tax measures and carbon-curbing regulations to be levied, two key heavy emitters are largely on board – namely the US and the EU. These regions have recently implemented "green tax" initiatives through various tax credits, incentivizing multinational companies operating in their jurisdictions to be aware of their environmental impact.[99]



The Age of TaxTech

Certain segments of the tax industry, may be reliant on analog processes and slow to adopt new technology. Better tech-enabled tools that can integrate systems and automate operations to streamline taxes can further help digitize the industry. As this report dives into the technologies that define the age of TaxTech, key requisites for TaxTech solutions are the broad **digitization** of financial tools, improved **automation** through machine learning (ML) capabilities, and the ubiquity of **cloud-based platforms** including **cloud-based ERP** solutions. In addition, TaxTech leverages transformative capabilities, such as artificial intelligence (AI), natural language processing, (NLP) and blockchain to potentially transform the industry. Although still considered a young ecosystem, TaxTech is already implementing solutions considered science fiction in the past, including real-time reporting and data wrangling.

TaxTech is FinTech

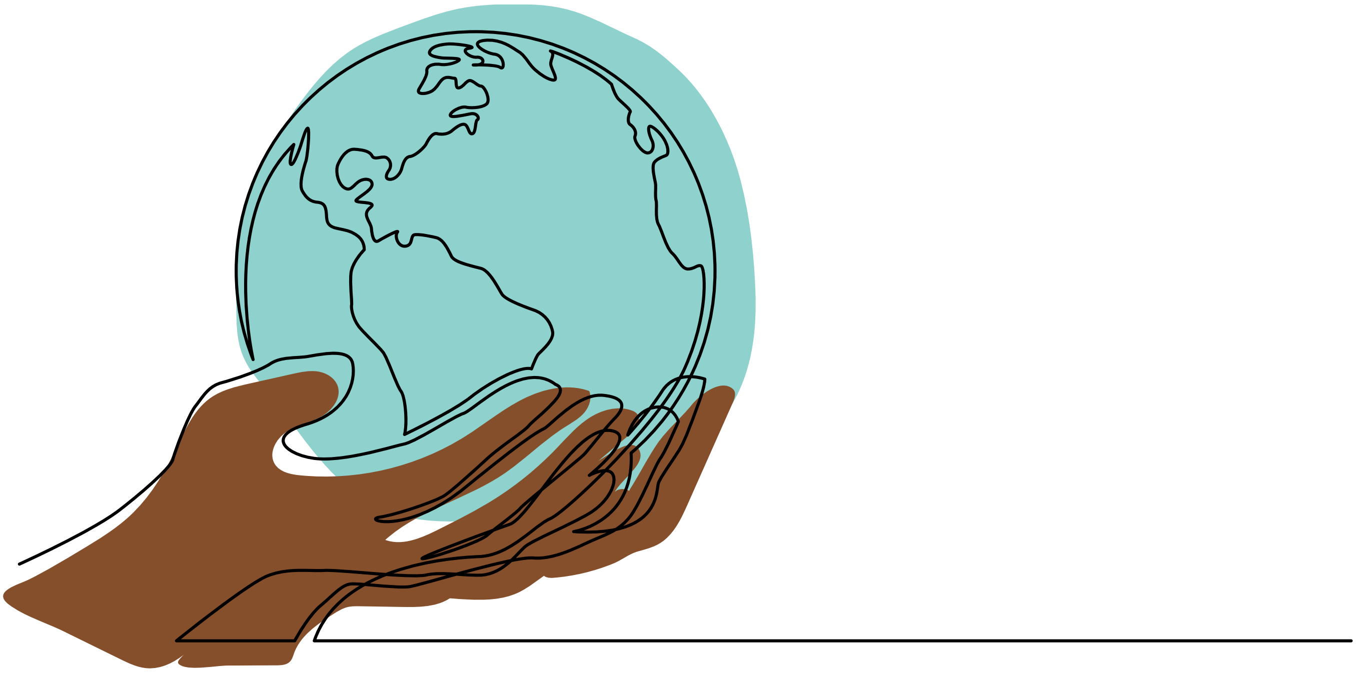
The report culminates with an explanation of our realization that TaxTech is part of Fintech. We explain why fintech and taxation are highly connected and how the fintech trend is driving TaxTech innovation. We examine the business model of embedded tax, which is an extension of the embedded finance movement. We also outline how taxes may well be at the forefront of the next wave of embedded finance, as it is a highly appealing proposition to incorporate taxation within digital services. Finally, we provide examples of new TaxTech companies and showcase fintechs that are implementing this strategy.

The TaxTech Map & Investment Trends

The TaxTech Map, at the end of the report, outlines different companies focused on developing TaxTech solutions, segmented by their niche offerings and relevant stakeholders. We also analyze the investment trend of the TaxTech vertical.

04

Macro Trends



Globalized Regulation

Digitalization and globalization are presenting new and renewed challenges for tax administrations around the world not only from physical presence, while encouraging and supporting trade and economic activities.

Global Tax Reforms

Multinationals and Taxation

Tax policy has historically been the prerogative of sovereign states over the territories they control and consider to be within their respective tax jurisdictions. This worked in the past, as businesses historically were physically present in the same jurisdictions as their customers. This is being challenged today with globalization and the increase in digitization, which has led to exponential growth in businesses selling goods and services globally where they may not have any physical presence in the jurisdictions in which they operate.

At the same time, this led to governments claiming they were losing out on tax revenues they should be owed. The OECD reported that the erosion of the tax base and shifting profits has resulted in countries losing out on approximately $100-240 billion annually, roughly equal to 4-10% of global corporate taxation.[6]

In an effort to level the playing field and recapture at least some of the tax revenues generated from sales, between 2015-2020 a number of countries, led mainly by European countries (including the UK), began discussing and implementing a unilateral gross revenue based tax known as a Digital Service Taxes (DST).[7] Due to their unilateral nature, the scope of each DST regime varied, but mainly targeted large multinational businesses operating in specific industries such as online advertising and intermediary marketplace platforms.

OECD Base Erosion Profit Shifting (BEPS) Action 1 "Two-pillar Solution"

From 2019, the work on taxing the digital economy gained traction in earnest, culminating in a 2021 G20/OECD/Inclusive Framework agreement among approximately 140 countries. Assuming the proposed rules are brought into law, this will represent the biggest multilateral tax reform in decades, demonstrating the desire and willingness of nations to work together to draft policies that transcend their immediate sovereign areas.[8]

The proposed tax implications of the OECD tax reform on BEPS are two-fold:

Pillar One focuses on a reallocation of taxing rights to jurisdictions where businesses have a market presence, regardless of physical presence. This will likely result in some very large multinationals paying additional taxes.

In addition, the establishment of a minimum effective corporate tax rate, may increase the global effective corporate tax rates for multinationals,. Under the new draft legislation and premise, countries will be less impacted by varying sovereign tax rates. However, governments will still be able to compete on corporate tax rates above the 15% minimum and will also be free to explore non-tax incentives that do not conflict with the agreed minimum tax rules. This may cause businesses to change their approach to their own supply chains and operating structures.

This may/could force businesses to change their approach to their own supply chains and operating structures.

After various changes to the proposed Pillar One rules, which ultimately will bring more companies into its scope, the Biden Administration agreed to support the two-pillar approach. According to the Congressional Research Service and US Trade Representative, the unilateral DST legislation implemented by a myriad of countries primarily target US multinationals, as a significant number of the tech-giants and profitable multinational companies included within the scope of the DST rules are headquartered in the United States.

While countries are free to retain their DST regimes until the new global rules on reallocation of taxing rights come into effect, the Biden Administration did negotiate agreements with several DST jurisdictions such that companies subject to the new rules on allocation of taxing rights might be able to credit some DST taxes against future amounts due under the new rules.

The Digital Revolution – Industry 4.0

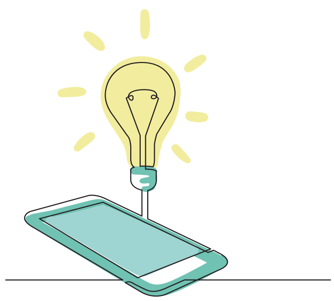
The current international tax system was broadly established roughly a century ago in tandem with the circumstances and development of the Second Industrial Revolution and has been added to in a patchwork fashion over the years in response to changing economic, social, and market factors. Over the following decades, and through the Third Industrial Revolution, tax reform was sparse.[10] This all changed with the rise of "Industry 4.0", a term coined in 2015 to express the convergence of data technologies with industrial mechanisms and processes.[11] Industry 4.0 is presenting new challenges for tax regulators who must work with businesses to determine what and how to tax cross-border digital services.[12] One example is companies' ability to perform value-add or "additive manufacturing" (AM) tasks remotely, thanks to advanced technologies such as IoT and AI Robotics; until now, it was not possible for businesses to identify these value drivers in their manufacturing processes, and this may create an opportunity for jurisdictions to tax for these.

It is conceivable that in the future, governments will look to determine how to tax these remote value added functions, that can be performed remotely. This may force businesses to consider where value-added functions are performed and how much of the resulting profit should be left in the jurisdiction where manufacturing or extraction happens.

For example, businesses may choose to employ workers using remote access tools in lower tax jurisdictions to guide industrial or manufacturing robotics processes in a higher tax jurisdiction to minimize the tax burden associated with the value-add portions of the delivery of the service.

Ultimately, this signals a shift for businesses, which must more closely align their tax strategies and business operations to drive greater efficiencies and profitability in digital, globalized economies.

As data plays a larger role in business functions, its analysis requires human intervention or automation processes such as robotics and smart automation. This factor may pose a challenge for businesses that must determine where and how they want these functions performed.



Innovation in Global Digital Tax Management

Loc.tax

Founded in 2020, Loc.tax developed a project management platform that empowers tax teams to collaborate on global tax projects, helping achieve higher levels of compliance, efficiency and corporate social responsibility. The platform enables the collection and the maintenance of tax-relevant data in one centralized place.

The Changing Nature of Work I: Remote Work

The COVID-19 pandemic left no choice but to start working remotely, stimulating the appetite of employees and businesses for a variety of creative solutions, often crossing geographies. As with many creative solutions, there are also complexities – in this case, new tax implications.

Remote work is becoming increasingly common for the self-employed and freelancers, as well as for company employees. Enabled by rapid progress in data communications and workflow management tools and accelerated by the COVID-19 pandemic, companies are less subject to geographical constraints associated with hiring and maintaining their workforces.
It was predicted that remote workers will represent 32% of all employees worldwide by the end of 2021, with more employees having the tools and flexibility to operate from anywhere in the world.[14]
However, these reduced geographical limitations for hiring come with tax liability considerations. Generally, companies are responsible for the withholding and reporting their employees' payroll associated taxes, thus must be aware of the locations and associated tax requirements of the jurisdictions where they have workers. This creates a challenge for businesses which must maintain tax compliance, as different jurisdictions can have disparate tax regulatory environments.

Employees working remotely may also affect a company's corporate tax obligations.[15] In fact, states and countries from which the organization and its employees operate could have conflicting regulations or no mutual tax agreement, creating a double tax situation.[16] Though some countries have established income treaty agreements that may exempt both employer and employee from tax obligations, an employee's work abroad can create a "permanent establishment" that can invalidate the treaty protection.[17] In the United States, employing remote workers, even in hybrid work models, may create a taxable presence for the employer organization in the state the employee works from, carrying subsequent corporate tax responsibilities.[18]

Employees who relocate raise similar compliance issues for employers regarding their corporate tax and employer reporting and withholding tax obligations. An employee may desire to work in a location where the employer has no taxable presence and is not registered to administer payroll. There is no universal set of laws to determine the basis for taxation in each taxing jurisdiction; it is governed by local law and negotiated treaties, thereby creating complexities. However, awareness of these complexities is relatively low, and many employers lack the knowledge and processes to manage these issues when they arise. Therefore, there is an increasing need for multinational and multi-jurisdictional tax strategies, even for small companies.

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Strategizing Remote Work (and Relocation)

Companies may not anticipate their taxation exposure when employees work remotely in higher tax jurisdictions. They must decide in which locations they will, or will not, allow their employees to work, and they need to enforce their policies to the best of their abilities. Companies unaware of the full scope of their tax liabilities are more likely to run into situations where tax obligations are higher than anticipated. Therefore, tax considerations should be considered when planning employee relocation or remote work models. Clearly, there is a need for multiregional and multinational planning and reporting tools.

The Changing Nature of Work II: Gig Economy

While self-employment is not a new phenomenon, the last decade has seen an acceleration of new forms of employer-worker relationships around the world as a result of digitalization and in workforce demands and habits. Today, more than ever, workers want more flexibility, freedom and autonomy in their work and want to decide for whom, when, where and in what capacity to work.

The upsurge of digital platforms such as ride-sharing services and short-term lodging rentals that connect employers with independent workers looking for third-party work, has enabled the growth of both the gig, freelancing, and sharing economy.[19] Gig workers, or independent contractors, sometimes referred to in the US as "1099 workers" after the year-end tax Form 1099 contractors submit to the IRS, are usually independent contractors who are not considered employees.[20] Participation in the gig economy has been accelerated by digital platforms, that centralize and facilitate the provisioning of work and payment for gig workers. Common forms of gig work include ridesharing, short-term home rentals, and parcel delivery, as well as long-term projects.

An increasing percentage of the global workforce is pursuing gig-employment opportunities, either as a primary and/or secondary means of income. According to a 2020 millennial survey, nearly 44 million Americans were self-employed at some point during 2019, roughly 28% of the workforce.[21] A separate survey from July 2020 indicated that in the US, one in six workers in an organization is a gig worker.[22] Gig economy employment has been expected to continue to grow globally at a compound annual growth rate (CAGR) of 17.4% from 2018 to 2023.[23] Due to the prevalence of digital platforms enabling gig work, worker expectations prioritizing independence and autonomy, as well as structural changes forced by the COVID-19 pandemic, it is highly likely that growth of the gig worker-oriented economy is inevitable and will continue to evolve and flourish.

The Employers' Perspective: New Forms of Work Relationships

Today, businesses can have traditional employees, also known in the US as "W-2 employees" or, third-party, self- employed independent contractors.[24] (The determination of whether someone is an employee or an independent contractor has many variables and is beyond the scope of this report).

When a business hires a W-2 employee, it typically has more control over them and also has tax withholding obligations and may provide other benefits, such as healthcare, pension, and paid vacation. Conversely, when a business hires an independent contractor, the business is usually not responsible for their tax withholdings or employee benefits, only for ensuring the proper payment is provided for the services that they deliver, and reporting the payment to the worker and IRS. Subsequently, a business' overhead is relatively limited, shifting more fixed costs to variable costs that ebb with demand.

By hiring independent contractors, businesses can enjoy greater flexibility, speed, cost-efficiencies, and access to workers with talents and skills that do not exist within their organization. In exchange for these benefits, businesses have significantly less control with regard to establishing worker expectations.[25]

The Independent Contractor's Perspective

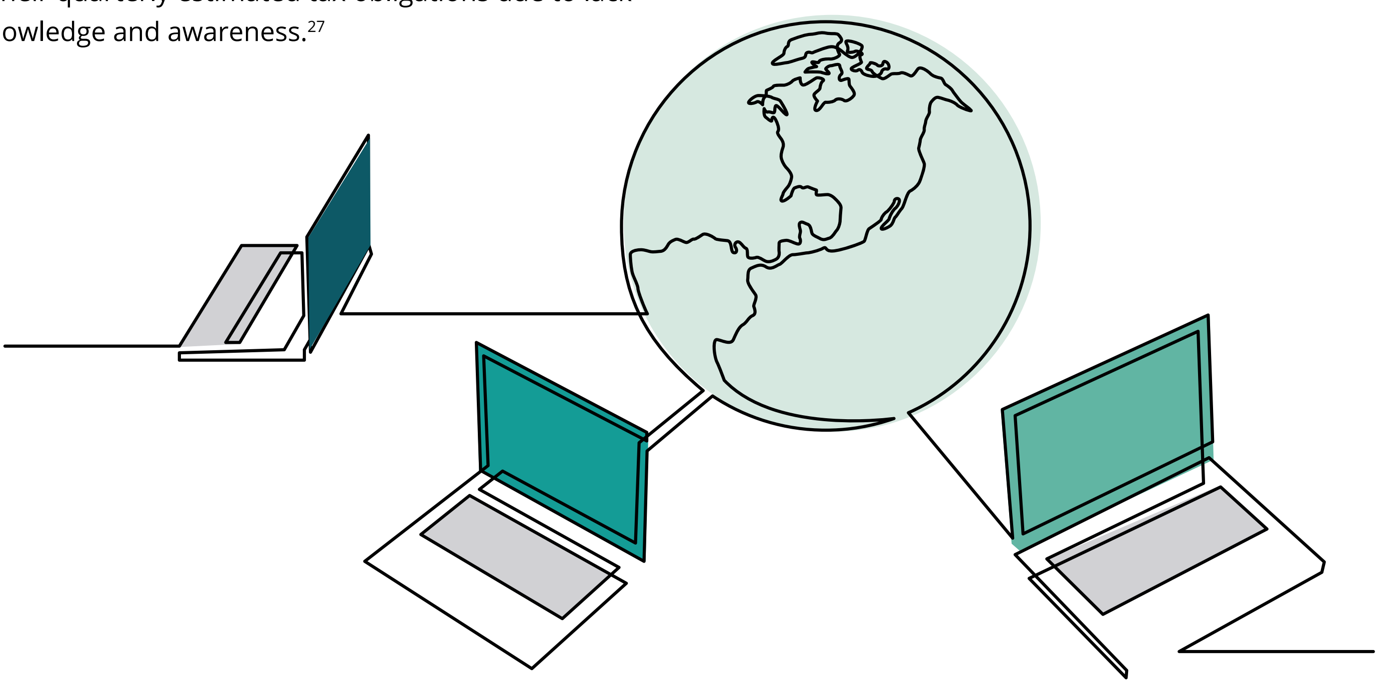
Independent contractors can benefit from increased independence, flexibility, and autonomy related to who they work for and how they choose to work. Gig workers can perform contracted labor services for multiple clients in parallel with each other, which may enable them to maximize the efficacy of their time and resulting income. The drawback to gig work is that they need to be on top of their financials - from managing fluctuations in cash flow, to complying with their financial obligations. When it comes to taxation, they are responsible for their tax payments - both estimated tax and self-employment tax, for reporting cash payments, correctly managing their deductions, and filing taxes to the relevant authorities. Since gig workers can work multiple jobs across different platforms simultaneously, it quickly becomes very complicated.

Additionally, independent contractors, who do not have their tax withheld by their employer, are more reliant on the estimated quarterly tax payment process. Therefore, it is critical that they proactively allocate and plan for their tax obligations throughout the year, This similarly shields them from the risk that they overspend their required tax amounts throughout the year and protects them from substantial tax penalties for under-reporting and remitting.[26] According to a survey by Abound, a digital platform for the self-employed enabling them to manage taxes and benefits, 42% of the independent worker respondents say they do not pay their quarterly estimated tax obligations due to lack of knowledge and awareness.[27]

Another challenge for independent contractors is that they may not even be aware they are obligated to pay additional self-employment taxes to cover Social Security and Medicare taxes as well as Federal income tax.[28]

Independent contractors can reduce their overall personal tax burden by claiming tax deductions but those who do not meticulously track their personal and work-related expenses for tax deduction are more likely to either overpay taxes by not taking advantage of the maximum deduction opportunities or underpay taxes and risk being noncompliant with tax authorities.[29]

These gaps generate opportunities for great innovation in this space. Such opportunities may include tools to simplify or automate the calculation of deductions, the tracking of invoices, and the calculation and aggregation of withholdings and e-filing.[30]



Governments' Perspective

The changes in employment trends can also impact the tax revenues available to governments as some countries' tax policies have lower minimum levels of social security contributions for nonstandard labor contracts. This fact, alongside the growing population of gig workers, may concern tax authorities, as it can potentially lead to tax revenue challenges.

The Digital Platforms' Perspective

Governments are trying to tackle the challenge of the gig worker trend by placing the onus of reporting income on the digital platforms that facilitate the transactions. Today there are a few initiatives that require these platforms to report information on their users to national tax authorities.[32] In the US, the IRS considers typical online hiring platforms as "third-party settlement organizations".

As such, the platforms are required in most cases to report payments and file a 1099-K directly to the IRS.[33] The understanding by the IRS that the reporting of tax liabilities by gig platforms increases collections, alongside the growing population of gig workers, has led to stricter regulations. Beginning Jan. 1, 2022, third- party payment network providers, such as Zelle and PayPal, are required to send users a Form 1099-K, Payment Card, and Third-Party Network Transactions for transactions made during the 2022 tax year by mail or electronically, above US $600 (previously it was US $20,000).[34]

In the European Union (EU), the DAC 7 requires digital platforms to collect and report information on the income realized by sellers offering certain services, whether the platform is a tax resident in the EU or not.[35]

Innovations in Gig Economy Tax Management

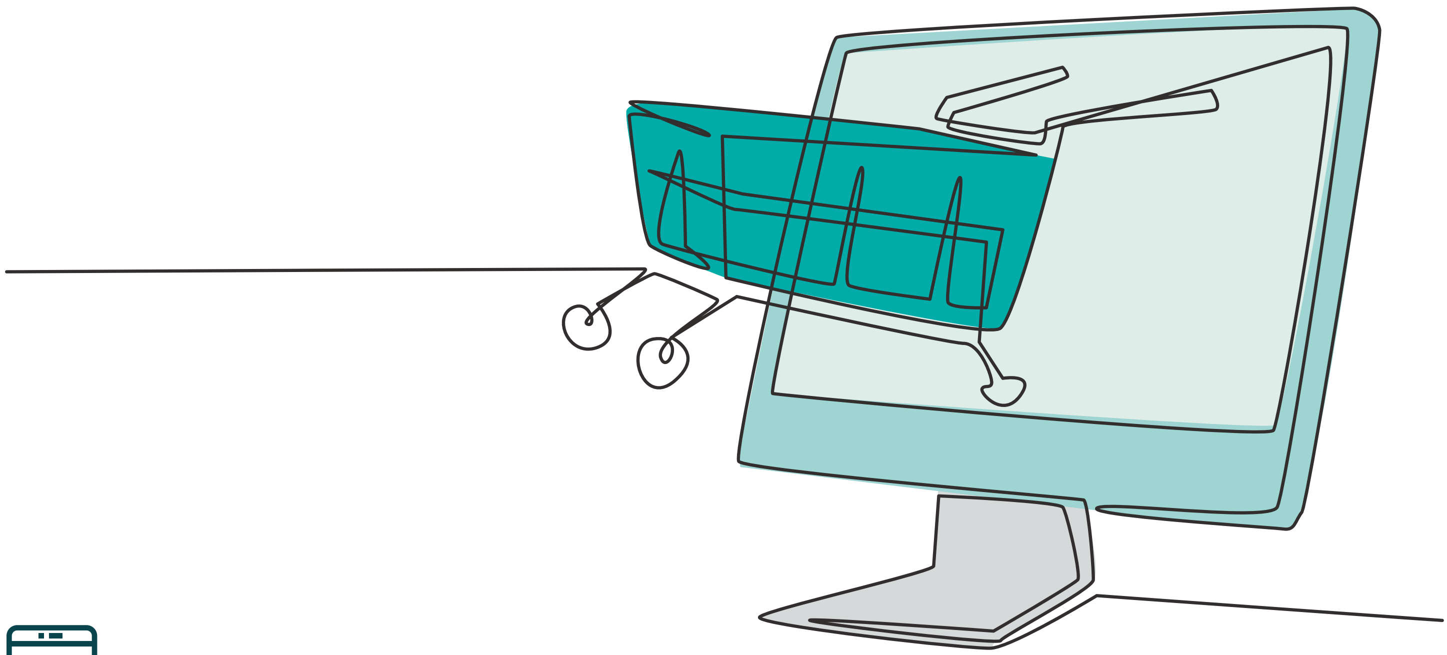
Formations

Formations, a US-based startup founded in 2019, offers to take the cumbersome accounting processes related to self-employed workers' business activities off their hands, while ensuring benefits are leveraged to maximize financial potential.

As part of the onboarding process, Formations helps its customers incorporate their businesses, and seamlessly open a designated bank account. Customers can then enjoy accounting services such as automated bookkeeping (book reconciliation and expense tracking), balancing payroll, and profit distribution. Formations offers products suited for savings plans and retirement benefits, as well as creating tax documentation and filing tax returns.

Hurdlr

Hurdlr, a startup based in Washington DC, helps realtors, drivers, hosts, and other gig workers track their deductible expenses. With an app-based product, Hurdlr integrates all potential resources of income and expenses and tracks customers' business activities, whether it is the mileage traveled by a vehicle, residence renting, or any other type of expense that can later be categorized as work related. Based on this data, Hurdlr can help the customer make the categorization, know up front the financials, and send their tax filing and reporting to an accountant.



The E-commerce Arena

As e-commerce and digital sales continue to take market share from brick-and-mortar retailers, tax authorities are forced to grapple with new challenges as they seek to capture tax revenues for their local jurisdiction from abundant and rapidly increasing cross-border and cross-jurisdictional transactions.[36]

Economies globally have experienced a surge in businesses offering digital services and e-commerce offerings in the last few years. Bolstered by the pandemic, the global e-commerce market is slated to grow by $10.87 trillion from 2021 to 2025, representing an impressive CAGR of 29%.[37] US e-commerce sales are anticipated to pass the $1 trillion milestone in 2022, two years ahead of the previously projected date of 2024.

There are two main sales channels for online commerce - marketplaces and direct-to-customer channels, usually via platforms enabling e-commerce sellers to easily create their own online store. A marketplace (or "a marketplace facilitator" as defined by law) is a business or organization that contracts with third parties (e-commerce sellers) to sell goods and services on its platform and facilitates retail sales.[38]

Marketplaces have paved the way for the e-commerce we all know today. By providing merchants the infrastructure to sell online and generate demand for their merchandise, marketplaces created a situation where anyone could start selling products online.

The emergence of digital platforms, such as Shopify – that facilitate and enable the launch of a branded online store, alongside the professional e-commerce sellers – and the availability of social media to support demand creation, enable anyone, from anywhere, to start their own online business and sell products to almost any customer in the world.

But this phenomenon comes with complex tax considerations and compliance obligations. As e-commerce and digital sales continue to take market share from physical retailers, e-commerce sellers will have greater ability to grow their clients, creating new challenges for tax authorities to grapple with, as they seek to capture tax revenues for their local jurisdiction from increased cross-border and cross-jurisdictional transactions. According to a recent survey of 500 online European businesses, two-thirds of those businesses say managing tax compliance holds back their growth, with a majority saying they would launch more products and expand into more countries if relieved of the associated tax burden.[39]

Sales Tax in the United States

Sales tax compliance related to e-commerce businesses can be complex since tax rules and rates can vary between jurisdictions. Physical goods are taxed in all states that impose a sales tax. Digital goods are taxed in a majority of states. In addition to state level taxes there are numerous localities that tax physical goods and/or digital products. There are over 11,000 different states and local sales tax jurisdictions in the United States.[40] E-commerce sellers and marketplace facilitators must constantly remain up-to-date on any tax policy changes within the jurisdictions where they do business to ensure compliance with applicable tax obligations.

VAT in the European Union

In the European Union alone, there are 27 Member States, each with their own respective value-added tac ("VAT") rates. However, under Article 96 of the EU VAT Directive, EU Member States are required to apply a standard rate of VAT of at least 15%, with the EU average standard VAT rate being approximately 21%. At the same time, EU Member States are entitled to apply a reduced rate of VAT of at least 5% to certain goods and services listed in the EU VAT Directive, however the VAT Directive also allows for EU Member States to apply low or zero VAT rates in certain situations (e.g. grandfathered VAT rates). For these reasons, even within the EU, it is hard to calculate VAT due to the differences in rates between Member States and the unilateral application of VAT rates on goods or services [42]

Customs & Duties

Customs compliance is a major pain point for many international e-commerce sellers as they are required to meet local customs compliance requirements. For e-commerce sellers selling all over the world using marketplaces and e-commerce platforms, tracking and classifying goods according to each region's coding system is a complex and cumbersome task. Every type of product has different code (usually 6 digits and above) representing different tax rates, which vary from country to country. Failing to accurately classify products can violate compliance and lead to surcharges, penalties and shipping delays.[43]

Taxing Marketplaces

The United States

As mentioned above, legacy US sales tax policies determined that third-party sellers were only responsible for collecting and remitting sales taxes in jurisdictions where they had a sales tax nexus in the form of a physical presence in the jurisdiction (e.g., employees or property). This nexus standard was changed in 2018, following the ruling of the US Supreme Court in South Dakota v. Wayfair. In Wayfair, the Court overruled prior precedent to hold that a physical presence in a state is not a prerequisite for nexus.[44] Following the Wayfair decision, every state has enacted legislation modifying its sales tax nexus standard to reflect the holding in the Wayfair case.[45] Accordingly, e-commerce sellers and marketplace facilitators can be required to collect and remit sales tax based on revenue derived from or the number of transactions with customers in the jurisdiction, without regard to a physical presence.[46]

In the majority of states, marketplace facilitators have an obligation to collect and remit applicable sales tax on third party sales facilitated through their platforms. The intent being to shift the tax obligations to the larger platform operators and generally relieve the smaller seller entities from sales tax compliance obligations for sales facilitated on these platforms.

Europe

In Europe, marketplace facilitators are similarly responsible for VAT reporting associated with e-commerce sales enabled through their platforms. Previously, the rule for VAT reporting in the EU was that it was only necessary on imports from a third country into the EU if the value of the goods exceeded €22. Since July 1, 2021, when the EU VAT Digital Package came into force, every shipment from a third country to the European Union must be electronically declared to Customs by the marketplace facilitator. [47]

The former €22 threshold has since been abolished, and all imported goods must now be taxed; yet, it is important to note that independent operators now supply the consumer directly and not the retailer registered on the platform, meaning the marketplace becomes liable for the tax and must pay it to the respective national tax authority.

Innovations in the E-commerce Arena

A representative cohort of newer entrants to the marketplace include the three startups listed below.

TaxJar

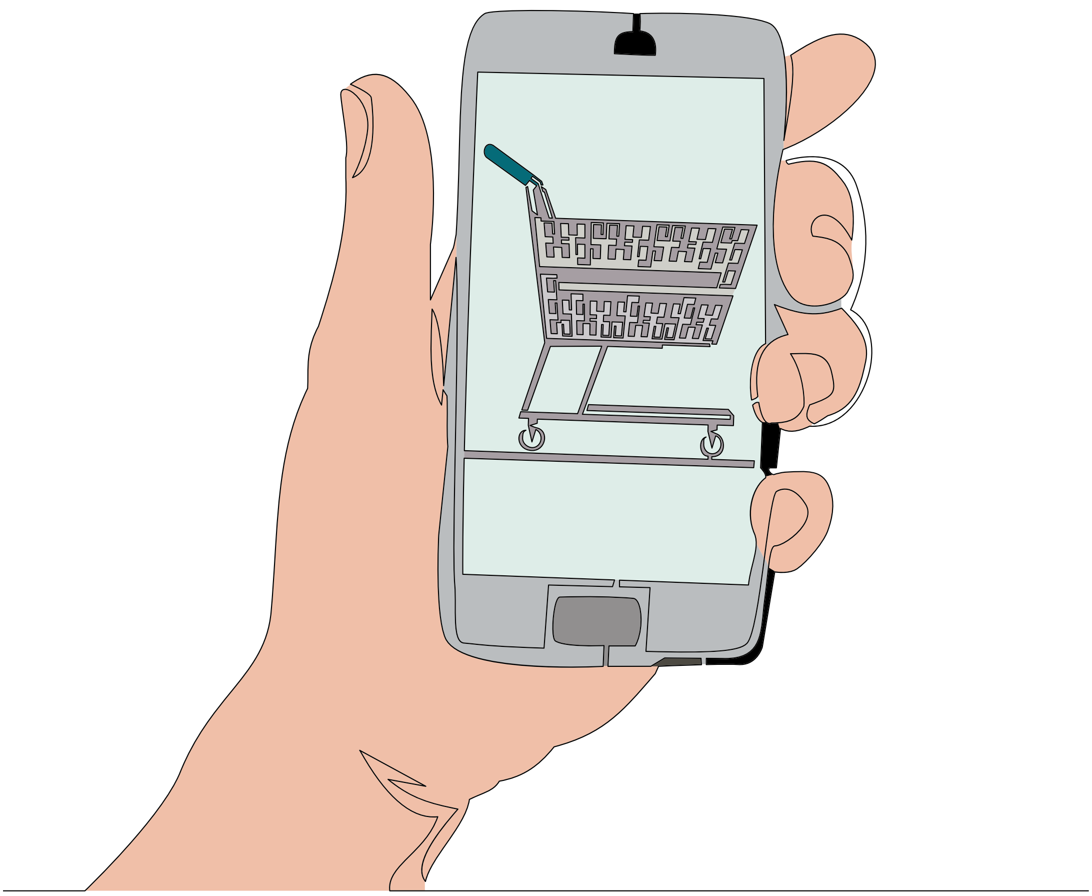
TaxJar created a cloud-based platform to automate all sales tax across all sales channels through an API integration, from calculations and nexus tracking to reporting, filing and remitting, so the e-commerce merchants can stay compliant and on track. TaxJar enables the e-commerce merchant to plan their sales tax and collect the right sales tax rate on every product sold.[48]

TaxDoo

TaxDoo, connects directly to online marketplaces, shops, and ERP systems, through APIs, to aggregate and track transactional activities and associated tax liabilities. Using TaxDoo, marketplaces and retailers can detect tax liabilities across Europe, take care of VAT registrations and filings, and easily transfer all documentation to financial accounting.[49]

eClear

eClear, founded in 2016, offers payment service for tax clearing in cross-border e-commerce. eClear's database provides e-commerce companies with the current VAT rules, rates and tax calculations to determine correct product prices and integrate them within the system. eClear's customs products cover e-commerce to and from third countries by managing such factors as the calculation of all import duties and fees of the destination country for real-time display in the shopping cart online, the cashless collection of payments, registration, customs declaration, fiscal representation, and the monthly reporting to the assigned tax authority.[50]



New Asset Class: Crypto Assets

With the rise in crypto assets, regulators around the world have begun to place more stringent reporting measures for cryptocurrency investments and transactions, as they seek to capture more tax revenue streams associated with the use of crypto assets.[51]

Crypto assets have seen rapid growth and adoption by both retail and institutional investors over recent years. In 2021, the market capitalization of global crypto assets crossed $3 trillion with hundreds of millions of crypto owners and users worldwide.53 The adoption of crypto assets by institutional investors trailed that of retail investors mainly due to the increased regulations and oversights associated with the financial industry. Despite this early hesitancy, of the top 100 banks measured by assets under management, more than 50% are already investing in cryptocurrency and/or blockchain-related companies either directly or through subsidiaries.[54]

In recent years, many businesses and individuals have begun experimenting with purchasing and holding crypto assets. Many individuals may lack the expertise or resources necessary to understand their crypto asset-related tax liabilities and what types of activities and uses of crypto constitutes a “taxable event”. By and large, individuals are usually responsible for managing their own capital gains and income tax reporting and settlements related to their reporting thresholds heighten the non-compliance risks for these individuals. Due to the industry’s relative newness and the lack of comprehensive tax policies surrounding how to regulate crypto assets, the laws surrounding crypto assets are constantly evolving.

Another gap is around tax efficiency, whether for capital gains taxes or loss deductions. Tools that can help investors understand how to minimize capital gains taxes, while maximizing the use of net-loss carry forwards, may improve investors’ profitability.

Many individuals may lack the expertise or resources necessary to understand their crypto asset-related tax liabilities and what types of activities and uses of crypto constitutes a “taxable event”.

Crypto and the US Capital Gains Tax

Recently, the IRS has determined how the taxation should be handled of convertible cryptocurrencies – a cryptocurrency (like bitcoin) has an equivalent value in fiat currency, such as the US dollar or may be used to buy goods and services, and as a result might have tax liabilities and implications.

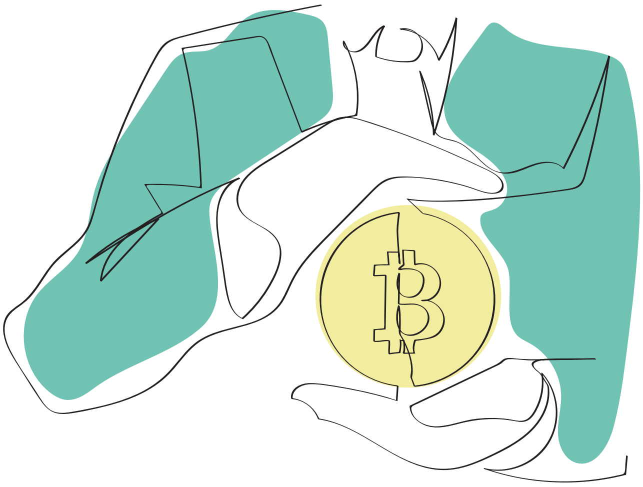
According to the IRS, convertible cryptocurrency is treated as property and not currency. Therefore, general tax principles that apply to property transactions apply to them.[55]

Cryptocurrencies are subjected to capital gains considerations like common stocks, bonds and funds.56 Capital gains tax is calculated based on the difference between the fair market value at the time a crypto asset is used or exchanged and the cost basis at which time the asset was acquired.57 Crypto holders are required to report their gains or losses, on their annual tax return, associated with any taxable event, which includes trades, uses or sales of crypto assets.[58] Any realized income from appreciation in the value of the crypto asset when sold is taxable as a capital gain.

The value of crypto assets can be volatile. This volatility creates challenges for individuals and businesses who must know the exact value of their assets at the very moment of their sale. The duration that the asset is held also affects the capital gains tax rate. Crypto assets held for less than one year when sold, and with an associated capital gain liability, are subject to short-term capital gains rates (taxed as ordinary income), while crypto assets held for more than a year are subject to lower long-term capital gains rates.[59]

Crypto and the US Income Tax

When crypto assets are not traded, but rather earned or received they are taxed as ordinary income and not as capital. Usually, an income tax event occurs when receiving crypto as payment for providing a service, earning rewards from Decentralized Finance (DeFi), receiving crypto via airdrop and hard forks, and crypto mining income from transaction fees and block rewards.[60]



Non-fungible Tokens (NFTs)

Take note here: the NFTs market is significant, having grown from approximately $500 million spent on NFTs in 2020 to $41 billion in 2021 – an increase of 8,100 percent!61 NFTs differ from fungible convertible cryptocurrency in the fact that they are unique digital assets rather than fungible and are not normally used as a method of payment. An NFT's value, if any, is based solely on what someone is willing to pay the seller to buy it.[62]

NFTs have lots of different use cases - from digital art and gaming, collectibles, music, and movies, and even for supply chains use cases. People who create NFTs are often referred to as "creators".[63]

Although the IRS has not addressed the tax character of NFTs, it is likely that NFTs are regarded as property for tax purposes. It stands to reason that if convertible cryptocurrency is not treated as currency for tax purposes, other digital assets, including NFTs, will not be treated as currency.[64]

Tax treatment of a purchase or sale of an NFT depends on several factors, including whether the seller created the NFT; whether the seller is a dealer, trader, investor, collector, or personal user; and how long the seller has held the NFT.[65]

NFT tax obligations are very similar to those of other crypto assets. While NFTs are less fungible in the crypto asset ecosystem, they are subjected to many of the same rules as more fungible crypto assets.
As of today, NFTs investors are subjected mainly to capital gains or capital losses. However, in the hands of creators and dealers NFTs may be viewed as ordinary income producing assets. For example, a creator of an NFT may pay ordinary income tax on the original sale of the token. NFTs may also generate ordinary income if they are designed to be "used" by others with payment of royalties or commissions back to the creator.

What's Next for Crypto Taxation?

It is increasingly clear that crypto represents an asset class comprised of many different types of property. While we should expect additional clarity on the tax treatment of crypto transactions, the pace of innovation in this space will continue to require the users to make a tax determination based on the most relevant analogies. Further, the emergence of CBDCs may inspire some crypto to be regarded as actual currency, actual legal tender, creating new considerations in crypto asset taxation.

Innovations in Crypto Assets

TaxBit

TaxBit is a unified crypto tax and accounting platform, providing digital-asset tax automation to enterprises, consumers and government entities. Recently, the IRS selected TaxBit to provide data analysis, tax calculation and examination support for crypto taxpayers. TaxBit's products include the TaxBit Tax Center Suite, which automates Form 1099 and other regulatory reporting requirements for exchanges and their end-users. The TaxBit Corporate Accounting Suite automates the ingestion, data normalization, and record keeping of all transactions across all sources so businesses can view their positions in real time.

Lukka

Lukka is a crypto firm providing data services and enterprise software tools. The company's middle and back-office platform transforms decentralized and distributed data into operational and audit-ready financial information, enabling funds, market makers, and exchanges to automate office processes while improving operations, financial analysis, and control. Lukka manages crypto portfolios and organizes the crypto data into tax lots, facilitating capital gains reporting with extreme accuracy. Essentials also provide support for income from mining, staking and other types of transactions.

Driving a Sustainable World through Tax Strategy

Governments are more aware than ever of their immediate climate risks and have begun taking more multilateral actions to set more effective global standards for supporting the transition away from fossil fuels and non-renewables to more sustainable and eco-friendly renewable energy sources. As many countries aim to become fully carbon neutral in the coming decades, new tax legislation is emerging to incentivize markets to support this transition.[68]

The World Bank estimates that only one-fifth of all carbon emissions globally are subject to any carbon pricing mechanism.69 Taxes are one of the most powerful mechanisms that governments can leverage to incentivize or deter market behaviors. In the context of sustainability, “green tax” initiatives include direct carbon taxes, cap-and trade programs, and other forms of tax credit mechanisms or deductions to support green businesses.

Green businesses are those placing a high degree of importance on how their operations impact the environment. While definitions may vary to some degree, green businesses largely operate either fully carbon-neutral or carbon-reductive operations. To achieve either outcome, businesses often implement processes qualifying them for certain tax credits or deductions. The full scope of these benefits is dependent upon the tax jurisdictions where the business operates. (see "Green Tax Initiatives").

Green Tax Initiatives

Carbon Taxes:

The EU was the first regulatory body to establish the widely accepted carbon tax, which directly taxes companies based on the amount of carbon they emit in their business operations.[70]

Carbon Capture:

Similar tax credit incentive structures are evolving around the trend of investing in and deploying carbon capture, also known as sequestration technologies, to remove carbon-based greenhouse gasses from the atmosphere. These practices may take the form of industrial enterprises sequestering the carbon they themselves generate, or non-polluting businesses investing in carbon-capture technologies or natural remedies, such as the preservation of dense forest areas.[72] In either case, governments are beginning to discuss how to value sequestered carbon emissions per metric ton and how to implement tax credit systems to incentivize market behavior.[73] Technology companies like Shopify[74] and Stripe[75] are investing in their own initiatives.[76]

"Green" Incentives for Individuals

As declared by the IRS, available tax incentives for individuals related to green-energy initiatives include solar electric installations, solar water heaters, geothermal heat pumps, small wind turbines, fuel cell property,[79] and electronics recycling deductions.[80] Individuals, and even businesses, looking to take advantage of these deductions must implement such infrastructure on their property to become eligible for the associated tax benefits.

Despite these opportunities, many lack an understanding of the full scope of the available tax advantages and tax tools that can enable them to identify and properly file for such deductions on their annual income taxes.

Innovations in Sustainability

Sinai Technology

Sinai is a San Francisco based technology company offering an automated way for companies to monitor, price, analyze risk, and reduce their carbon emissions. Sinai's platform enables the collection of all operational data across the global supply chain of the business and leverages these aggregated data to provide insights on where to reduce carbon emission to meet internal and external goals enabling companies to increase capital growth.[81]

05
The Age of TaxTech

The Age of TaxTech

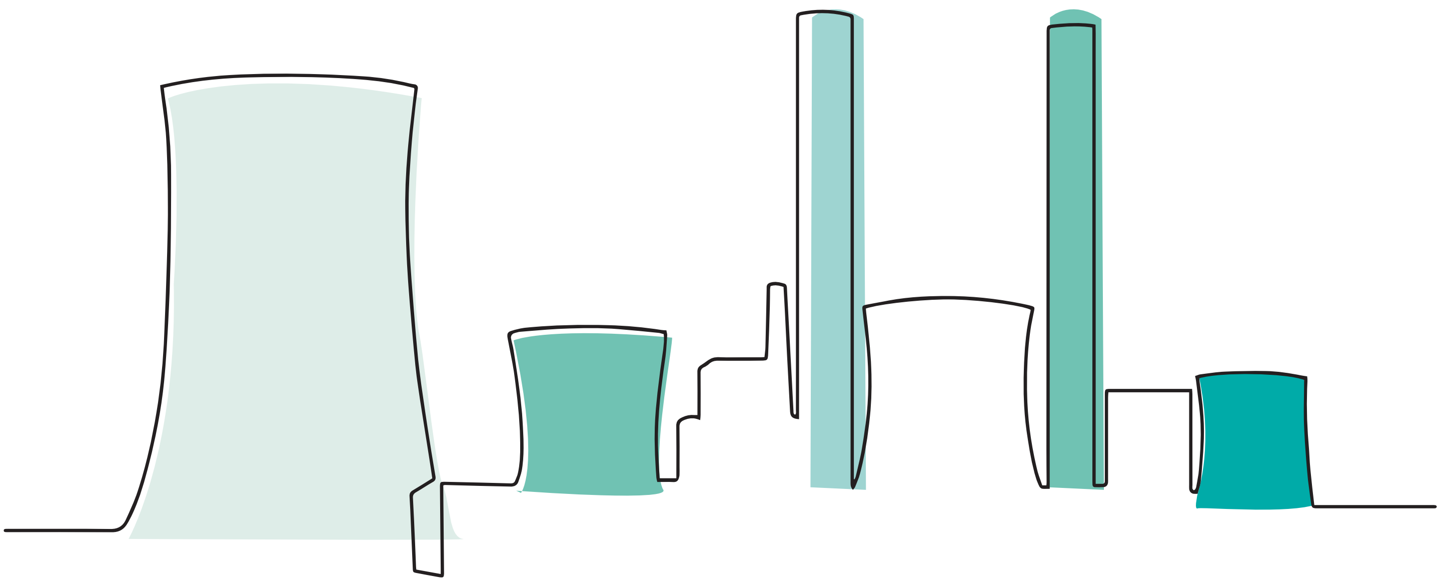
As mentioned in previous chapters, participants in the tax ecosystem – regulators, technology companies, users and advisors – are poised for change. Regulators are responding with new policies, data and automation tools, the possible shift into real-time (or near real-time) reporting, and a will for visibility into new, emerging economies. As the burden of tax compliance has become so heavy on businesses and individuals (resulting from the rapid changes mentioned in the previous chapter) the need for solutions, including tax automation, is a high priority. Technology companies are forthcoming with new, exciting solutions to enable automation, compliance, ease of use, and transparency. This chapter highlights the recent advanced TaxTech developments, as well as the current dynamics promoting this trend.

Despite the close association of financial transactions and tax, technology-enabled tax innovation has not only been a late bloomer, but it is also regarded as a sector of its own. Well, no more. A close examination reveals that TaxTech leverages maturing technologies such as artificial intelligence (AI), machine learning (ML), natural language processing (NLP), blockchain, etc.

These advances are enabling TaxTech companies and professional services providers to develop sophisticated value propositions, lowering the barriers to market expansion and growth, and supporting the emergence of new applications and solutions, such as real-time tax reporting, data wrangling, and above all - embedded tax.

TaxTech – a New Sector within the FinTech Industry

FinTech innovation has been reshaping the way individuals and businesses manage financial processes for more than a decade.



Why is Tax Technology Critical Now?

The recognition of the value to the organization of engaging tax in this area has advanced – including the acceptance and adoption of the three fundamentals for widespread technological transformation: digitization, automation, and cloud. The potential payouts for these advances are significant, paving the way for promising solutions in this space.

Digitization

While more and more business-critical information is being digitized, tax compliance largely requires significant human involvement, professional advice, spreadsheets, and data siloed in logically, separated databases. The separation of tax strategy from core operations within many enterprises, has resulted in limited digital transformation efforts around tax-related processes or reliance upon Finance to fill the gap for tax-aligned financial data.

Why is it important?

Tax compliance processes broadly require accurate and timely data inputs to determine correct obligations. These include transactional data, location of the point-of-sale, relevant local tax rates, available deductions/tax credits, etc. Digitization is the first step toward improving automation, leveraging tools that can limit the necessary degree of human involvement in basic tasks, and driving the development of better predictive analysis tools that can be used to facilitate strategic decision-making.

Automation

Legacy robotic process automation (RPA) tools and other attempts to automate tax compliance processes have fallen short of their overall goals, due to the fixed logic-tree methodologies of binary systems that are not suitable for complex business, market, or regulatory considerations. Such tools were created on a company-by-company basis and require constant human intervention and error checking while the technology was more broadly evolving along-side both emerging technology and “legacy” or mature technology. Data wrangling is used to transform the data for use in downstream tax processes, while new technologies such as AI, ML, and NLP will help facilitate the development of “smart” tax tools can assist with making tax decisions based on provided learning (or programmed criteria).

Why is it important?

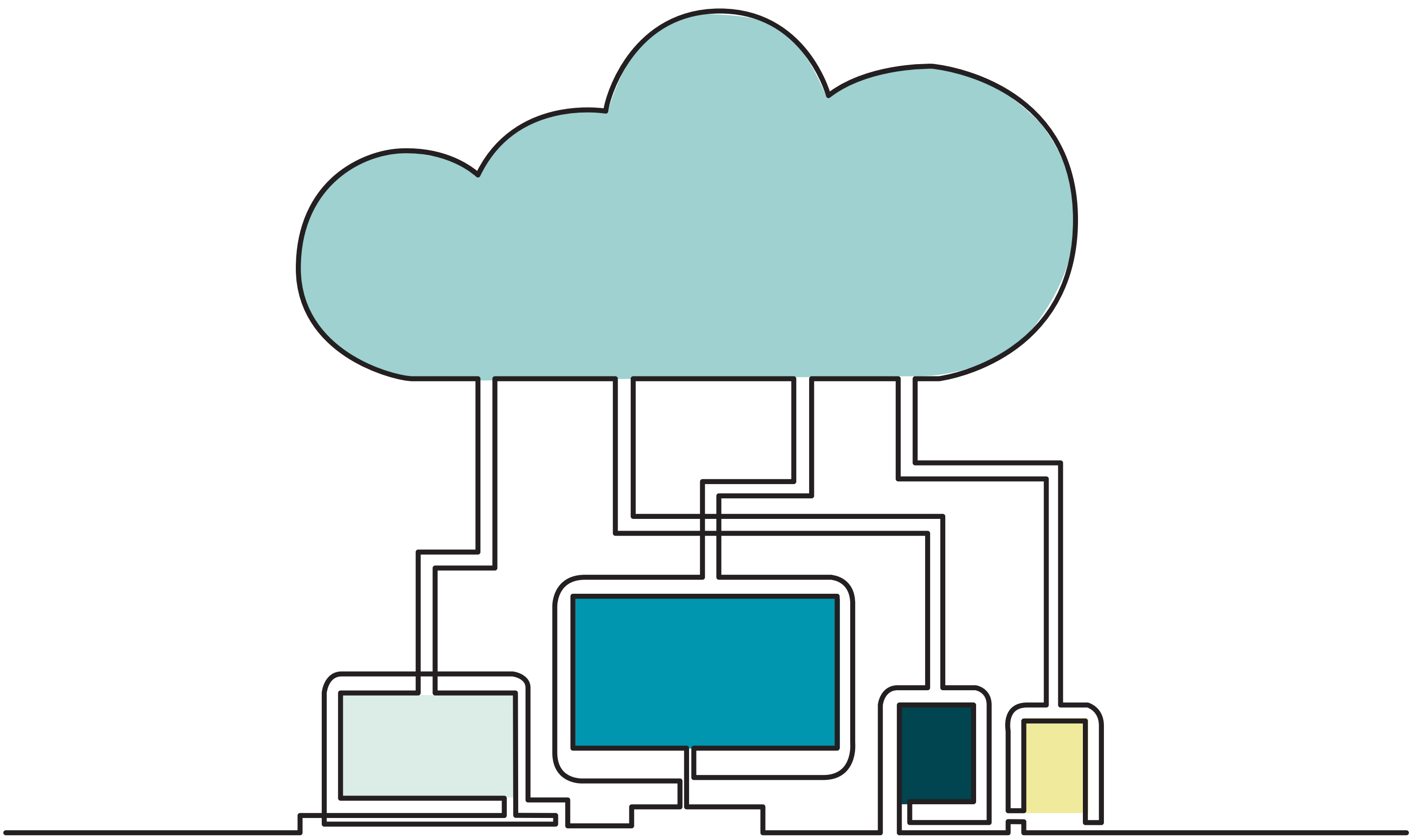
Greater automation in the downstream value chain of the tax compliance process will enable companies to save time on manual spreadsheet management and will offer tax professionals time to focus on growth-enhancing tax strategies.

Cloud

Besides network connectivity and communication tools, the cloud may be the most significant enabler of business today, driving IT performance and cost efficiencies, as well as allowing greater workforce mobility. Yet, the cloud is being widely leveraged in the tax industry currently.

Why is it important?

Tax compliance processes rely heavily on sensitive information and spreadsheets guarded closely by tax specialists/accounting teams. As cloud-based Customer Relationship Management (CRM) and Enterprise Resource Planning (ERP) systems evolve and businesses adopt more digital tools to manage their operations and data, the cloud will likely play a critical role in securing the proper file-sharing and integration capabilities necessary to enable tax automation, which will also contribute to reduced costs and human-error.



The Technologies Empowering TaxTech

Artificial Intelligence and Machine Learning (AI & ML)

AI and ML will be employed to dramatically improve the capabilities of traditional RPA tools through "intelligent automation" of compliance within the tax industry. Earlier iterations of RPA were based on standard logic rules explicitly defined by the users, thus requiring constant human intervention to alter the system in response to changes in business operations, market considerations and regulatory environments. AI and ML improve through an iterative learning process by which enabled applications are fed large amounts of data, which they automatically process for the desired function and are either validated or corrected. As more transactional services are digitized, more data is created, which may also be fed back into the AI and ML models, thus constantly improving tax processes with increasing accuracy and consistency. Deloitte's 2020 global automation survey indicates that 73% of respondents are deploying some form of intelligent automation, a 58% jump from 2019 – and the expansion and adoption of these tools in the tax industry is already underway.[82]

Predictive Analytics

The predictive analytics capabilities of AI can be used in almost any facet of the tax compliance process. In addition to item-tagging, such tools may be used to file taxes much more easily. AI, ML, and NLP tools can be integrated with e-invoice and e-billing software, bank accounts and CRM tools to discern differences between revenues and expenses associated with third-party work. This will greatly help companies manage tax compliance in real-time.

TaxTech & AI/ML

Blue Dot

Blue Dot offers cloud-based platforms enabling the digitization and automation of the management of VAT, employee benefits and corporate income tax compliance. The platform integrates itself with an enterprise's ERP system or accounting software, enabling it to sync with relevant accounts payable data, reconciling the tax obligations in real-time. To create value by providing context for this data, Blue Dot leverages AI and NLP methodologies to enhance predictive analysis and insight capabilities by studying both historical data generated internally, as well as historical and contemporary data from external sources.[83]

Boast.ai

Boast.ai uses artificial intelligence to help companies maximize their access to available R&D tax credits. R&D tax credits are an important tool used by companies to offset some of the additional risk assumed in the innovative and time-consuming process of researching and developing new products. However, the application process for such credits is arduous, includes large amounts of costly audit work, and can take up to 16 months to receive the cash refund. Boast.ai integrates multiple data sources from accounting and HR software, ERP and CRM systems, and GitHub to aggregate the relevant information necessary to apply for such credits. It then uses its AI algorithm to manage the validation of data and the proper documentation of the application.

Natural Language Processing (NLP)

As more accounting and finance tools become digital, NLP can play a larger role within an organization seeking to leverage intelligent automation to manage the analysis of dense and complex tax regulations and applicable laws, receipts and invoices, as well as other written text. While in the past, many bills and invoices were sent as physical paper by mail, more enterprises are now using e-invoice and e-billing software to facilitate management of their accounts payables (AP) and accounts receivables (AR). While scanning physical bills to capture the relevant information would be an arduous and slow method of documentation, by combining Optical Character Recognition (OCR) and NLP algorithms, digitized invoices and bills can be run as scripts in the development processes, making NLP a far more realistic and capable solution for downstream tax compliance work.

Tagging Goods and Services Tax Codes

One of the simplest implementations of these technologies would be for item tax-code tagging. When a business reports its finances to relevant tax authorities, it must identify to the authorities the types of goods or services being purchased by and delivered to customers, as well as the types of goods and services purchased by the business to support its own operations. Items are uniquely identified using differing tax codes, which importantly distinguish the relevant tax rates a business is liable to charge customers or pay on its purchases. Without these technologies, this process is typically managed periodically, around the tax filing deadlines, relying heavily on accountants performing manual entry in massive spreadsheets under a great deal of pressure. With these technologies, businesses can feed in relevant e-invoices, e-bills, bank statements, etc., which can be read and processed via NLP, enabling ML processes to self-tag each item in the list and AI to help improve performance and predictive analytics.

TaxTech & NLP

Taxy.io

Taxy.io develops an NLP and AI platform that enables tax and legal consulting by reading through large amounts of digitally stored text. Tax consulting services can be costly for businesses, especially smaller startups and SMBs. Similarly, due to the rate of change in different tax regulations, as well as the risk of either being non-compliant or leaving cash on the table in the form of credits and deductions, companies require the syncing of this expertise and associated tax strategies with their overall business operations. NLP is an especially relevant tool for these sorts of problems as it is capable of sifting through huge amounts of data as well as consistently and accurately identifying the key information relevant to the user. NLP is a far cheaper, scalable, and more consistently accurate tool for such tasks than humans.

Data Collection, Wrangling, and Analytics

There are significant strategic advantages to collecting and digitizing the rapidly accumulating historical and real-time internal and external financial data, which can dramatically contribute to the business decision-making process and, consequently, to the bottom line. As a result, technology is better equipped than ever to collect, store, and analyze such data.[84]

To effectively utilize this data, solutions require robust data collection and wrangling capabilities. Data wrangling describes the processes of removing the silos that separate the many sets of data created or sourced internally or externally. This requires integration tools that can effectively aggregate broad and relevant data into a single usable data set.

Once aggregated, effective AI-based data analysis tools can leverage the unified array of data to draw key insights that may not have been apparent when the information was separated.

Data collection and wrangling is especially relevant in tax processes, as there are many types of transactional (sales tax, VAT, etc.) and non-transactional (customer and workers location, supply chain, etc.) data that must be collected for an organization's tax processes. Tax data analytics will be the critical tool that helps lead the convergence of tax planning and business strategy decision-making, as well as tax enforcement and reducing tax evasion.

Blockchain

Blockchain has the potential to serve the tax industry as a conduit for facilitating easier, cheaper, and more transparent tax processes for individuals, enterprises and governments. Its distributed nature effectively enables multiple parties to push, pull or view data simultaneously and in real time. At the World Economic Forum in Davos in 2016, 800 attendees took part in a poll on blockchain-based taxes, and 73% of respondents expected that the most developed countries will create blockchain-based tax systems by 2023-2025. It's no longer an 'if'. The Government of Estonia has enabled its citizens to pay taxes online with its decentralized solution.[86] It also uses blockchain broadly as a tool that underpins its e-Governance system.[87] In Argentina, blockchain reinforces its Single Tax Registry – a federal registrar mechanism that facilitates serving taxpayers and government agencies in different jurisdictions. Finland is using blockchain to track taxes owed on real estate transactions and Sweden uses blockchain to manage the settlement of non-resident income and customs taxes. In addition, the EU is discussing using blockchain tools to track VAT compliance, enabling regulators to identify and ensure the compliance.[88]

TaxTech & Blockchain

Aleph Zero

Aleph Zero is a public blockchain that offers private smart contracts to enable enterprises large and small to transition file and contract storage, access, and distribution to a secure, transparent, and easily accessible ledger. With Aleph Zero, tax processes can be optimized while maintaining the most robust security safeguards including encryption and immutability. With all transactions held on Aleph Zero, it can automatically calculate and charge applicable taxes, providing a comprehensive tax management system. These automatic tax payments could enable seamless cross-border VAT settlements, or sales tax calculations and remitting. Similarly, with greater blockchain implementations, such a product could facilitate end-to-end billing to income tax and deduction calculations.

Real-Time and Digital Compliance

Real-time and digital compliance are the combined applications of several prerequisite technologies and governmental willingness – sometimes eagerness – to adopt visibility and compliance enhancing technologies. Regulators in the UK and EU are spearheading a paradigm shift from tax reporting being managed periodically, or "during tax time," towards real-time reporting and settlement facilitated by greater digitization and the use of technology that can establish greater foundational efficiencies in the tax compliance process.

Some countries in the EU have begun imposing more stringent rules regarding the window of time post-transaction for VAT compliance. In addition to real-time reporting for VAT purposes (mandatory in April 2022), the UK has implemented a fully digitized tax reporting framework, requiring enterprises to prepare, format, and submit their corporation tax returns digitally. In the coming years, the UK is looking to expand the digitalization of its tax system with certain individuals (sole traders, landlords, and certain partnerships) and eventually enterprises being required to implement a fully digitalized tax process (note that certain exemptions may apply).[89]

Soon, tax filers will witness a world where cloud enables the distribution of tax-related data, and NLP and intelligent automation help facilitate automated reporting in real time, potentially operating on a blockchain backbone. As these technologies converge, the nature of tax settlement will change, with tax authorities shifting from being passive recipients of payers' tax information to active participants able to inquire about individuals' or enterprises' tax outlays and standings in real-time.

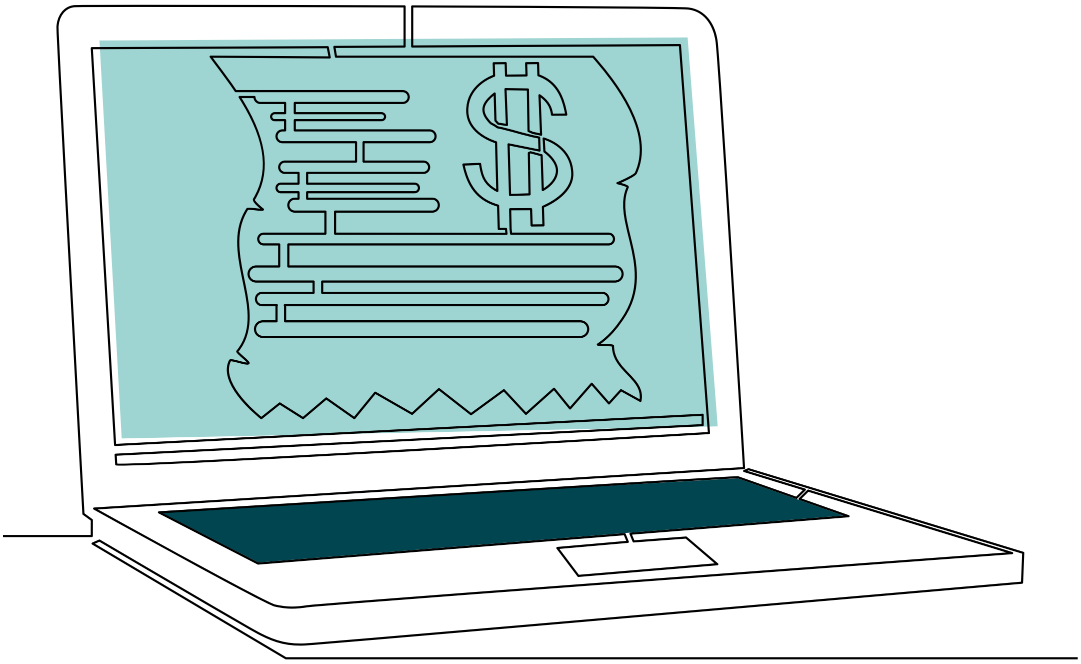
TaxTech & Real-Time and Digital Compliance

Summitto

Summitto is a developer of a triple entry accounting system intended to reduce VAT carousel fraud. The company's system created a real-time reporting software that helps in combating the VAT fraud aspect by central clearing of invoices using new cryptographic signature schemes, transaction amounts, origins, and destination, thereby enabling companies to maintain confidentiality and authenticity of invoice.

06

TaxTech is FinTech



Tax and Fintech are Well Connected

Tax innovation is frequently overlooked in the fintech conversation, but this should not be the case. Taxes directly impact the financial lives of individuals, as well as the financial performance and bottom lines of businesses. Taxes are, in fact, a critical consideration in most financial services and transactions. We hold the view that TaxTech is the new, as yet untapped fintech vertical, with far-reaching potential.

The burgeoning of digital-data acquisition, the availability of open APIs, data aggregators and open banking initiatives have made the mission of tax automation far more feasible and the dream of taxation on "autopilot" more realistic today than ever. Given the users' consent, consumer financial data are now more accessible than ever. This "new world" has created opportunities to form new businesses and new business models – with embedded tax among them. In parallel, the increasing consumer demand for a great user experience and end-to-end, holistic solutions from their financial service providers, is pushing fintechs to expand into TaxTech solutions.

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Taxation is highly complex, however in the next chapter, we examine how fintech technology solutions expand into tax propositions, how different TaxTech companies enable this trend, and why we believe the field will grow during the coming decade.

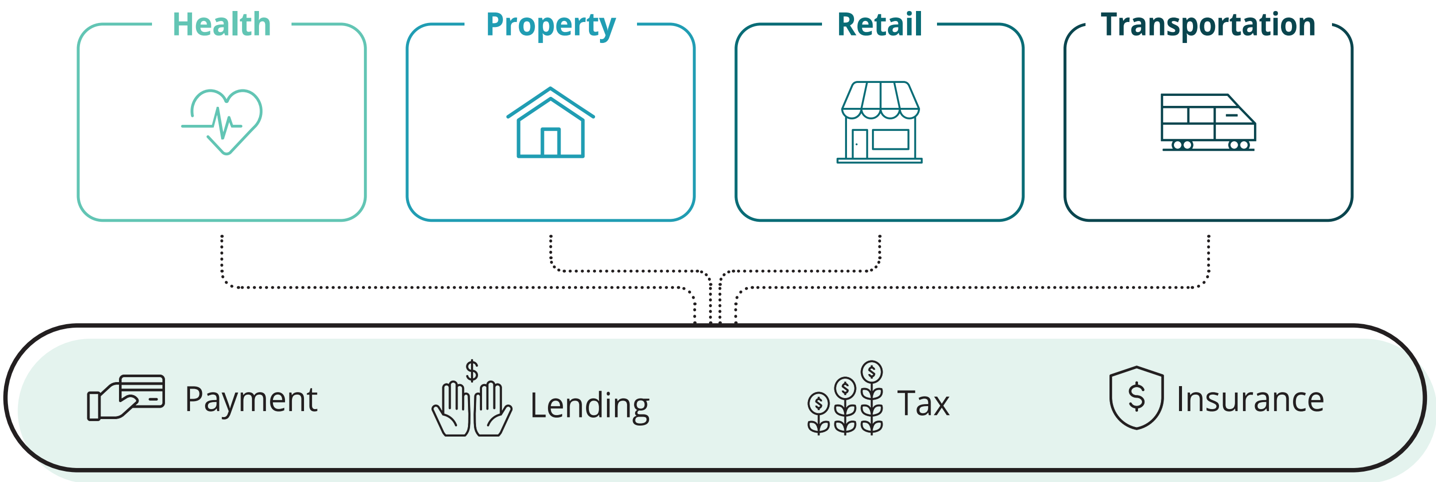
From Embedded Finance to Embedded Tax

Embedded finance is a concept that refers to the seamless integration of digital financial services by enterprises. Although both financial and non-financial companies are leveraging the embedded finance trend, we often refer exclusively to non-financial enterprises incorporating financial offerings that are not their main line of business. For instance, we have seen an increasing number of retailers, such as department stores and supermarkets, issuing their own credit cards, offering loans and payments in installments.

Another example of a non-financial player could be an international electric car manufacturer offering auto insurance through its proprietary sales platform, providing a more streamlined process for prospective buyers who would otherwise have to procure such services themselves.

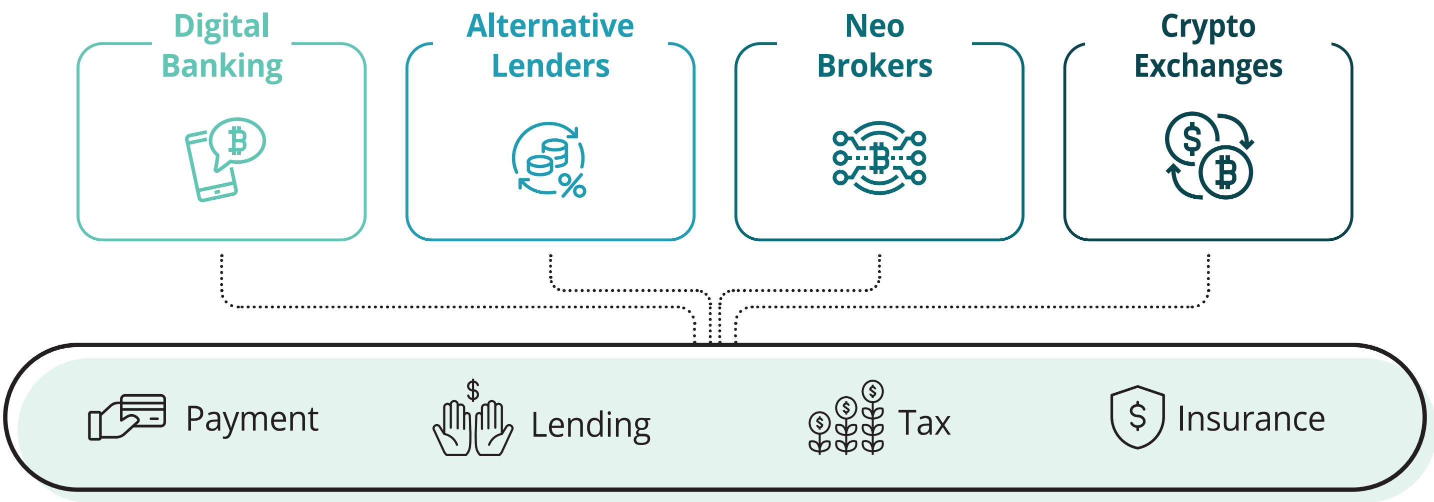
From a non-financial company perspective, expanding into financial services can strengthen customer loyalty and offer businesses additional revenue streams, while capitalizing on their existing customer base. From a consumer perspective, this has opened up the world to a diverse set of players, not necessarily emanating from the financial industry, which will likely provide improved financial products.

Non-Financial Embedding Finance



Fintechs can also leverage embedded finance solutions. Many fintech startups are born every year and they usually need a license to offer financial services, such as banking, lending, and insurance. To gain rapid market access, they partner with financial service providers that have the required license. For example, regarding bank accounts, they can partner with banking partners or leverage Banking-as-a-Service solutions (BaaS), like Evolve and Unit, offering them this infrastructure.

Fintechs Embedding Finance



New Kid on the Block: Embedded Tax

While the integration of embedded financial solutions in verticals like banking and payments has been around for some time, huge opportunities remain, both in these and other verticals. Consider taxes for example: taxes are an integral part of every transaction. As such, it would make sense to incorporate digital tax offerings within existing financial services.

Embedded tax specifically describes the implementation of tax-related solutions within an existing digital platform. Clearly, embedded tax is a logical extension of the embedded finance trend, which we believe is beginning its next wave of innovation. Embedded tax will, in the near future, help streamline tax reporting, filing and payment processes.

B2C and B2B fintech companies have four main incentives for expanding into tax offerings:
1) competitive advantage; 2) stickiness and loyalty; 3) granular data on their customers; and 4) increase assets under management while supporting the financial strength of their customers.

Competitive advantage

In the early 2010s, fintechs were focused on unbundling specific services – like payments, loans, and wealth management – which were ripe for digital disruption. Within less than a decade, these specialized fintechs unbundled the services, faced increasing competition for market share, increased customer acquisition costs, and drove to keep consumers on-platform indefinitely.

Combined with end-users' preference to concentrate their transactions on a handful of financial platforms as opposed to many separate applications, has led fintechs to re-bundle solutions; fintechs are now striving to add more value propositions to their offerings by building new solutions, collaborating with existing solutions, or propositions to their offerings by building new solutions, collaborating with existing solutions, or acquiring them in order to meet their client's demand for tax functionality. We have already witnessed the rapid expansion of fintechs into lending, investing, savings, insurance, bookkeeping, crypto, and many other areas.

Taxation, which has not until recently been bundled, is the natural new extension of this trend, finally addressing the most troubling pain point of them all. The addition of embedded tax will provide an advantage to the fintechs, who innovate most quickly, and early adopters who incorporate these efficiencies in their product offerings.

Stickiness and loyalty
In highly competitive markets, differentiation is a huge advantage. Financial-service providers offering solutions that address customers' biggest pains will increase transactions, while reinforcing their reputations as innovative leaders, problem-solvers, and customer-focused institutions, contributing substantially to brand value and customer loyalty. As taxes affect most everyone, from consumers to businesses, the benefits of automating tax processes are powerful.

Increase assets under management while supporting the financial strength of their customers
By adding tax propositions within the fintech offerings, financial service providers will essentially become integral partners in the tax management process of their users. By offering tax filing solutions, for example, fintechs increase the opportunity to receive refunds directly to the client's account on the platform, and by providing tax optimization capabilities, more money may remain in clients' accounts. These services may clearly benefit clients, while adding to higher assets under management or payments volume to the fintech.

Data
The financial data required to file taxes is highly granular, providing a 360-degree financial view of a client. Fintechs that offer a tax element can sometimes benefit from additional knowledge about their customers . Upon receiving consent, fintech companies can analyze this data and offer more personalized solutions.

The Case for Consumer Fintechs' Expansion into TaxTech

The complexity of tax filing and optimization is nearly universal, with hundreds of millions of people needing to file taxes every year. In the United States, for example, the IRS has more than 800 tax forms and each is linked with a few others. Tax filers must navigate between these forms, which can be a complicated task.

Innovation in TaxTech will make the process of tax filing less cumbersome. I In addition, creating more efficient and automated processes can reduce risk and prevent estimated tax payments in excess of the tax liability, while increasing accessibility.

From the fintech perspective, it may create the opportunity to serve a $300 billion refund market through an array of products.[101] These are only a few of many reasons TaxTech is so attractive throughout the fintech food chain. The value financial service providers can give their customers, stands to be monumental. In addition, the insights from customer data – and particularly the granular data needed for tax filing – will be game changing.

Embedded Tax – Meet the Players

Embedders and Enablers

The embedded tax world can be divided into two distinct categories: Embedders and Enablers. This chapter aims to define the two categories and to provide examples of key use cases and a representative cohort of newer entrants to the marketplace.

The Embedders

Embedders are companies seeking to expand their existing value propositions by adding tax-related services. They can embed such products within their proprietary solutions, by developing internally, acquiring companies with dedicated tax offerings, or by implementing third-party embedded tax solutions. Fintechs and digital platforms are likely in a good position to be embedders of tax solutions.

Fintechs, such as neo-banks, have access to real-time and comprehensive data generated by spending habits of their customers and have the opportunity to leverage better data aggregation and wrangling tools to provide additional tax compliance support for their clients.

Digital platforms are also well positioned to expand their value proposition by embedding tax solutions into their service offerings. E-commerce platforms are uniquely positioned with large amounts of real-time sales-transaction data, created by the purchase and sale of goods across their platforms, making it easy for them to streamline sales tax, VAT or GST rates and reporting across the different jurisdictions for their customers. By offering embedded tax solutions, these digital platforms improve their service offerings and can increasingly play a critical role in their customers' financial management, while facilitating regulatory compliance.

The Enablers

The Enablers of embedded tax are tax startups that build digital, standalone tax service platforms, tax engines, and tax APIs. They usually follow a classic B2B2C model and reach end-users via partners; they will be the 'brain' – the innovators and technologists – behind multiple Embedders. April and Abound are only a few examples.

Embedded Tax | Positioning and Opportunities

		The Embedders	The Enablers
	Positioning	• Fintech players with added-value tax propositions and digital platforms	• Dedicated tax solutions being offered directly to the end-user or as white label
	Strategic advantages	• Transactional and customer financial data • Customer base	• Technologically strong • Dedicated solutions • Tax savvy
	Opportunity	• Providing value to their customers • Improving customer experience and stickiness (end-to-end solutions) to reduce acquisition costs	• Expanding market reach as white label enablers and embedded components • Capturing unattended user market segments • Tailoring solutions to specific pain-points
Examples	Consumer	Cash App, Propel	april, Column Tax
	Gig Economy	Neo-Banks lili, lance, ANNA Financial Platforms: able	abound
	E-commerce	shopify, GlobalE Smart Cross-Border™, synder	TaxJar®, eClear TAX TECH TRUST
	Crypto	Bittax	TAXbit

Embedded Tax for Consumer FinTech

Embedders:

Filing taxes for individuals can be an extremely challenging process for many people. Banks and neo-banks are well-positioned to assist individuals or their tax preparers by embedding tax components as an integral part of their service offerings

We are starting to see the bundling of tax and banking within single product offerings, creating new and unique types of experiences in consumer fintech: Block (formerly, Square Inc.), a financial services platform. acquired Credit Karma Tax at the end of 2020, on behalf of Cash App, after the US Department of Justice forced Credit Karma to sell its tax unit to clear the $7.1 billion acquisition by Intuit. This tax filing product is planned to be integrated within the Cash App offering.[102]

Propel, a mission-driven fintech company, partnered with April (see more details in the “enablers”) to offer a simplified, integrated tax experience at an affordable price to Americans with limited income. Through April’s solution, Propel offers streamlined tax preparation that helps taxpayers make more informed financial decisions, while saving them time and money.

Credit Karma is leveraging the momentum and has launched a new tax experience to help its members in the US seamlessly file their taxes through Intuit TurboTax integration, expediting access to their refund through early deposit and refund programs.[90]

More broadly, Tax-preparation giants are launching their own mobile banking platforms targeted at low-to-moderate-income Americans.

Enablers

We are beginning to see an ecosystem of new tax startups in the DIY tax filing field, supported by increased interest and investment from venture capital firms. Among them, we see companies that will enable fintech and digital platforms to expand into tax filing.

April, a US-based company founded and funded in 2021 by Team8, is an intelligent tax platform targeting individual taxpayers that offers a fast, frictionless, and rewarding tax experience. Utilizing NLP and AI, April automates the tax filing process and provides users with personalized, actionable tax insights to help them make smarter financial decisions. April's tax engine can be embedded into 3rd party platforms to help fintech companies and financial institutions broaden their offerings to include tax-as-a- service and better serve clients across their ecosystem.

Embedded tax-as-a-service (TaaS) products range from enabling users to see their tax refunds in real-time to adjusting their tax withholding and getting that refund sooner. Further, April's offering helps eliminating financial barriers and allows users to see the impact of their activities and life events on their tax situation.

Embedded Tax in the Gig Economy

Embedders:

The complexity of filing and reporting for gig-economy workers creates an opportunity for fintech players and digital platforms. By providing end users with tax capturing, filing, and reporting capabilities, fintech companies can create efficiencies for taxpayers as they seek to comply with tax filing requirement

Lance is a dedicated neo-bank for freelancers and gig- workers. Lance helps self-employed workers improve their financial compliance by offering them all the services such as bookkeeping and accounting services, as well as automatic allocations to income tax, business expenses, and profit. Further, Lance offers tax services such as tax calculation and payments of quarterly taxes to the IRS.

Enablers

The gig economy is ripe for tax-native solutions that can help individuals manage their taxes. These solutions may integrate digital business banking, e-invoice, and e-bill accounting platforms, as well as a strong tax knowledge base to provide an end-to- end solution for the self-employed. Similarly, tax-native tools that can integrate with independent contractors personal bank accounts and digital accounting and billing tools may help manage multiple income streams, as well as associated tax obligations.

Abound, a US-based company, provides a white label solution enabling financial platforms to embed tax solutions that allow independent contractors to track, set aside, and pay their estimated tax payments based on their business income.

Abound integrates directly with banks, payroll, invoicing software, and other companies that pay or serve independent workers. Abound's clients include banks, fintechs, and other platforms.

Embedded Tax for E-commerce

Embedders:

E-commerce merchants often sell through multiple channels and may lack a holistic view of their earnings and tax-liable income. Fintech players are positioned to expand their accounting and banking offerings to e-commerce sellers due to their access to data on the combined earnings from the various sales channels.

In addition, the digital platforms themselves present opportunities for embedded tax service integration. Third-party sellers are ultimately responsible for collecting and paying sales tax in the US and VAT in Europe, and thus must be privy to the prevailing tax rates in the jurisdictions where they generate sales.

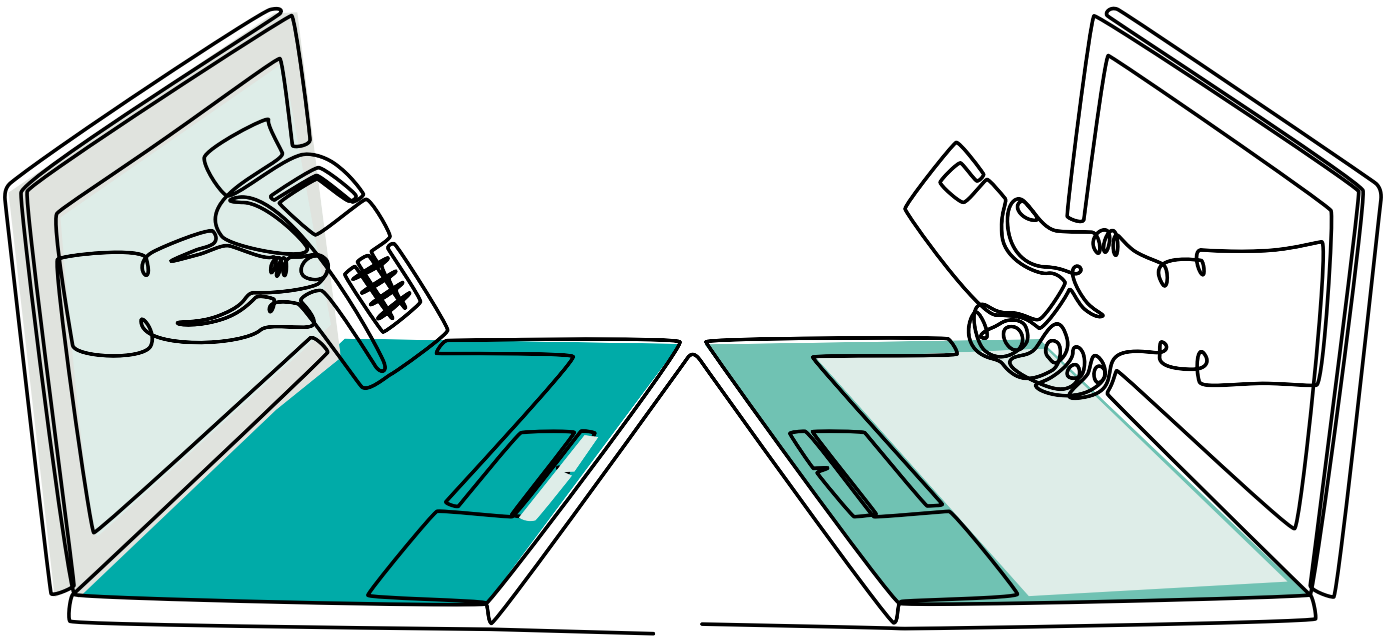
Shopify has implemented a solution allowing its merchants to automate sales tax collection for third-party sellers across its platform.

ANNA Money, a UK-based SMBs neo-bank, targets small e-commerce merchants by helping them do their invoicing, track expenses, and sort the company taxes, including VAT returns.

Enablers

Opportunities for tax native digital solutions in the e-commerce space will mainly rely on services that can help third-party sellers aggregate transactional data and automate the reporting and filing of sales tax and/ or VAT to the relevant tax authorities.

TaxJar, a US-based company, is an end-to-end sales tax software, created as a B2B solution for digital businesses to manage their sales tax compliance processes from real-time calculations of associated tax liabilities at the point of sale and nexus tracking to reporting and filing. TaxJar integrates with a seller's ERP system, as well as many of the most popular online marketplaces. It was recently acquired by
the financial services company, Stripe, which has embedded the TaxJar into their offering to help its customers using its payments and enterprise-finance platforms.



Embedded Tax for Crypto

Embedders:

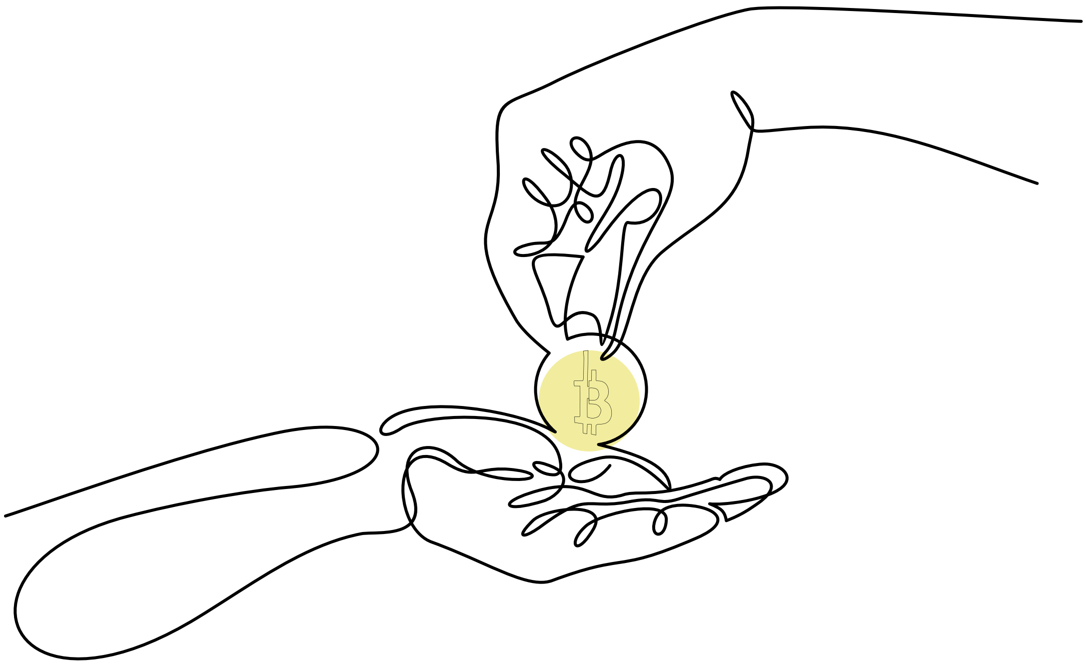
Brokers in the US must submit the appropriate year- end form, a 1099-B form, to the IRS, as well as send a copy directly to every customer who sold stocks, options, commodities, or other securities during the tax year. Although a purchase and sale of a cryptocurrency may be taxed as capital gains in many cases, crypto exchanges may not yet be obligated to provide their traders with such forms, and crypto traders are responsible for calculating their crypto capital gains and losses.

Certain fintech companies and digital platforms are offering support to their customers. Cash App, for example, provides US tax form 1099-B for the sales of Bitcoin on its platform. Another example is BlockFi, which has partnered with TaxBit to provide its clients access to a full suite of tax tools natively within BlockFi's platform, including tax reporting, and tax planning.

Enablers

Crypto tax enablers provide a tax engine for crypto exchanges and other platforms that enable crypto trading. These engines give platforms the ability to help their traders optimize their trading activities, enable automated capital gains allocations and settlements, and automatically produce the needed forms for the annual tax filing.

TaxBit has developed a platform that can integrate data between over 500 cryptocurrency sources to help individuals manage their crypto related tax compliance process across their entire portfolio from a single user interface. The solution automates the process of producing relevant tax forms when crypto assets are traded. Also, the platform provides real-time insights as to how assets are performing and a tool that allows consumers to view the gain or loss positions of a potential sale based on current market values.



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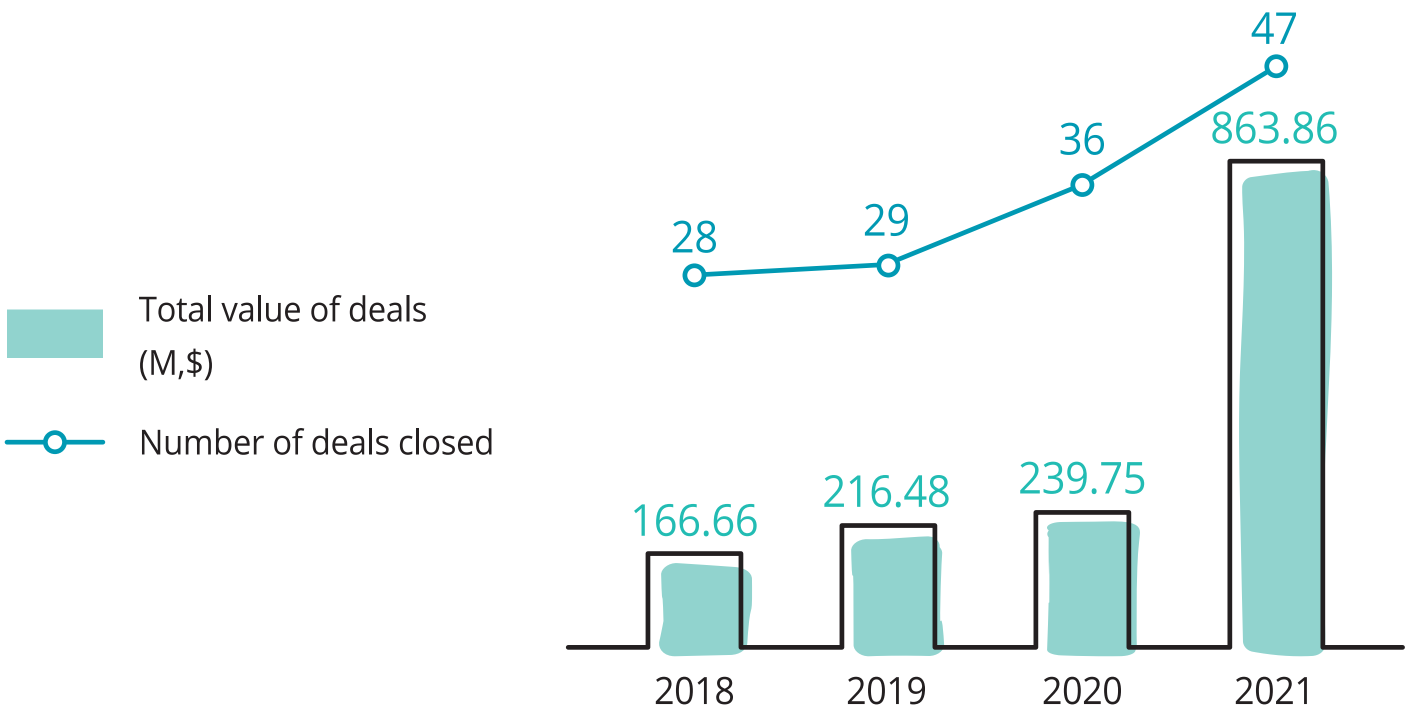
TaxTech: Investment Trends & Mapping the Ecosystem

Investment Trends

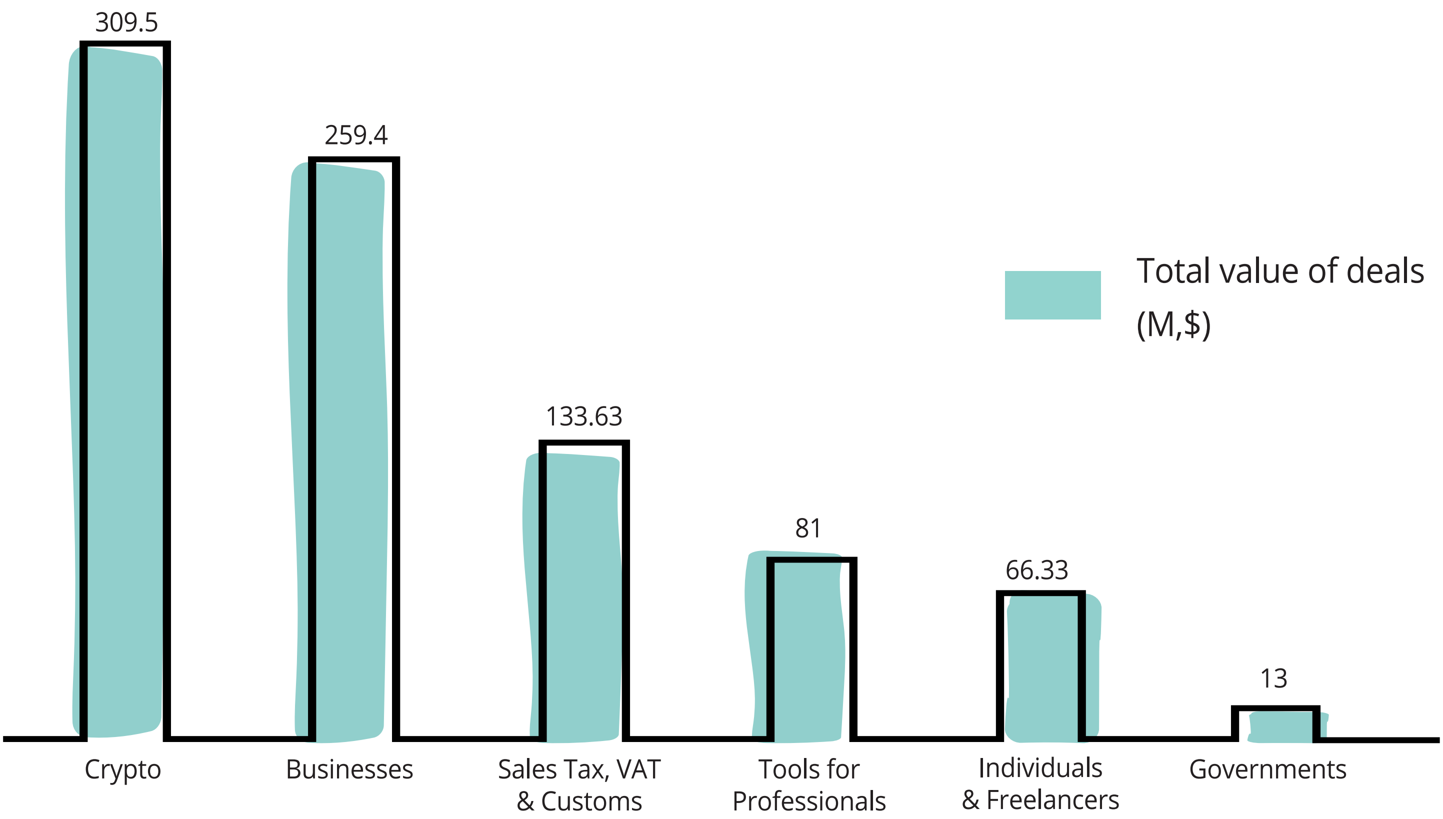
Following the momentum of fintech innovations, successfully and profitably implemented by diverse industries, the TaxTech sector established its presence with an impressive 28 and 29 deals closed in 2018-2019, respectively. Despite the onslaught of the COVID-19 global pandemic in early 2020, this growth trend continued and, in fact, more than tripled in deal value between 2020 and 2021.[100] Based on Q1 2022 indications, this trend will continue well into the decade,[100] giving rise to potential changes in the experience of complying with tax obligations worldwide.

Global VC-Backed TaxTech Deals 2018-2021[100]



TaxTech innovators are focusing intensely on solutions for digital management of crypto assets and business taxation. Interestingly, the rules and regulations for crypto taxation remain largely unclear, so it is curious that the mechanisms for digitally calculating and managing them are being created simultaneously. Business taxation – and especially multi-national and multi-jurisdictional taxation – is very complex; the benefits of automated TaxTech solutions could be significant. Sales Tax, VAT, and Customs is third in terms of the number and value of deals in 2021, representing a key tax area of tax compliance that can be simplified and automated, with the assistance of digital technology.

Segmentation of Global VC-Backed TaxTech Deals in 2021[100]



Because taxes relate to all financial services, it should come as no surprise that we are witnessing an increase in TaxTech acquisitions – a trend we anticipate will continue with verve in the coming decade. The companies making these acquisitions have a clear vision of the financial and administrative benefits of integrating tax automation within their offerings. As mentioned in the "Deal Incentives", these technologies aim to simplify financial management and taxation. It will be interesting to monitor the ROI on these solutions.

Selected TaxTech M&As

Category	Acquirer	Target	Deal Date	Deal Size ($m)	Deal Incentive
Consumers	Intuit (NAS: INTU) (Sasan Goodarzi)	Credit Karma	December 3, 2020	8,100	"Currently, 62% of consumers are living paycheck-to-paycheck, 75% of Americans have concerns about their ability to pay bills and loans, and 33% of Americans have lost income during the pandemic while household debt in the U.S. has reached $14.3 trillion. These challenges add even greater urgency to Intuit's and Credit Karma's shared goal of delivering a personal financial assistant to help consumers improve their lives by finding financial products to increase savings, pay down debt and access their money faster."[92]
Consumers	Square, Inc. (NYSE: SQ) on behalf of Cash App	Credit Karma Tax	November 25, 2020	50	"Cash App plans to offer [Credit Karma Tax's] free tax filing service to millions of Americans. The acquisition provides an opportunity to further digitize and simplify the tax filing process in the United States, expanding access to the one in three households which are unbanked or underbanked."[94]
E-commerce	Mirakl	Octobat	November 9, 2021	N/A	"Mirakl...[acquired] Octobat, a French startup specializing in invoice compliance for [global] enterprises. The acquisition... will make it easier for Mirakl marketplace operators to manage local and global regulations as they expand and operate across multiple geographies."[95]

Category	Acquirer	Target	Deal Date	Deal Size ($m)	Deal Incentive
Payroll	Gusto	Symmetry Software	July 8, 2021	N/A	"According to the IRS, over 40 percent of small and medium businesses (SMBs) are fined each year for late or incorrect payroll tax filings or payments. Penalties have become so common that business owners plan for those fines in their annual budgets.... [Symmetry's] innovations will push the entire payroll industry forward in helping businesses avoid costly payroll mistakes."[96]
E-commerce	Stripe	TaxJar	April 27, 2021	N/A	"Local sales taxes applicable to online commerce have proliferated in recent years, with more than 11,000 different sales tax jurisdictions in the United States alone. For internet businesses, accurately tracking, calculating, reporting, and filing taxes is a large and growing burden." "[TaxJar will help] internet businesses sell worldwide with minimal complexity."[97]
Payroll	Carta	YearEnd	March 25, 2021	N/A	"The tax impact of exercising options now, or in the future, have large ramifications for employees including many employees being surprised by a large AMT bill at the end of the year. Calculating and filing taxes is even more complex." "[YearEnd is] specifically designed to help startup employees navigate the tax impact of equity decisions."[98]

Conclusion

This report was inspired by the start-ups in the FinTech Industry, dedicated to one of the most complicated areas of finance: taxation. TaxTech appears primed to grow rapidly, with solutions already entering the market and service providers eager to evaluate and adopt them. Clearly, TaxTech is an integral part of fintech and may soon be embedded into banking, wealth management, insurance, investment, and other sub- verticals, contributing to automation, efficiency, and profitability for both financial institutions and their customers.

Macro trends in the global economy are fueling the need for an overhaul in the way we manage the complexities of taxation, helping us gain insights into how individuals and businesses can better plan to meet their tax obligations.

Among these macro trends, global tax regulations are evolving to address taxation of international e-commerce transactions, remote work, the gig economy, and the emergence of crypto assets, all of which are fueling cross-border transactions. The COVID-19 pandemic has significantly accelerated the growth of these activities.

The implementation of TaxTech will require much greater digitization of tax tools and will rely upon advanced technologies utilized in fintech solutions, such as AI, ML, NLP, and data-driven analytics.

Solutions with these elements will be embedded in existing fintech tools, potentially providing financial service providers with greater competitive advantage, customer stickiness and loyalty, and granular data to help provide customers with enhanced, personalized service.

TaxTech will impact the management of taxes on all levels, helping taxpayers comply in a world of complex tax laws and regulations, varying tax rates, and multi-level tax jurisdictions. Individuals will have access to a variety of tax management tools.

Emerging technologies in TaxTech will feature robust data collection, wrangling, and analytics capabilities, enabling vast amounts of data to be simplified into more than just payments, but insights into financial management, including the obligation of taxation.

It is becoming clear that TaxTech will disrupt the Tax and Financial industries, while having a major impact on global financial management. This may present opportunities to simplify the task of tax compliance, while providing enlightening insights into diverse aspects of taxation and tax utility.

TaxTech Map

Businesses

Tax Management Platforms, Filing and Reporting Tools

clear, TAINA, TAX SYSTEMS, ember, COMPLYANT

Global Corporate Tax Compliance

CrossBorder Solutions, AI BID IA, loc.tax, FourQ, TAXMODEL, INTERCOMPANY

Tax Credits

BOAST, TaxTaker, claimer, incentify, neo.tax

Benefits and Expenses

blue dot, benepass, Circula, heyday

Payroll Tax Engines

check, GigaPay

Tools for Professionals

Software for Professionals

canopy, blue J, LITTLENEWT, Precily, refundo, TaxTok, Taxy.io

Marketplaces of Tax Experts

taxfyle, Picnic, ZASTA, BRIGHT!TAX, taxhub

Sales Tax, VAT and Customs

Sales Tax and VAT Compliance

lumatax, TaxJar, TAXDOO, fonoa, Anrok, MAROSA, taxually

Customs

eClear, eurora, Hurricane

VAT Refund

Refundit, WEVAT, woonivers, STAMP, PIE VAT, REVENIR, Tourego, zapptax, W2V

Deloitte CATALYST | TEAM8

TaxTech Map 2022

Property

TaxProper, realAppeal, Rethink solutions, Just Appraised, Property Tax Detective

Individuals and Freelancers

Tax Preparation Filing and Reporting

Cash App, Finmo, simpletax, tacotax, taxdown, taxfix, TAX FORWARD, TaxScouts, wundertax, untied, Fibo

Planning, Optimization and Management

catch, Keeper Tax, Formations, Grid, hurdlr, Playbook, DECLARANDO, Everlance, interchecks, earnr

Tax-as-a-Service

april, abound, Column Tax

Governments

IVIX, G2LYTICS

Crypto

TAXbit, Lukka, Blockpit, zenledger, BITWAVE, Bittax, recap, BearTax, CoinTracking, CoinLedger, TokenTax, COMPUTIS, cryptio

Endnotes

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30 https://www.withabound.com/blog/what-are-the-top-tax-challenges-1099-workers-face
31 https://taxfoundation.org/gig-economy-workers/
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