

OPINION PAPER
TAXTECH:
ARE TAX EXPERTS
ABOUT TO
BE REPLACED
BY ROBOTS?

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Augmented Law Institute

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ABOUT THE AUTHOR



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She prepared her PhD thesis on the subject of taxation of partnerships under the guidance of Maurice Cozian. A lawyer by training, she joined EDHEC Business School in 2009 to teach law and tax in a highly personal teaching style developed over the years to respond both to the specific needs of first-year students and to the expectations of professionals, whatever their profession.

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INTRODUCTION

Tax is a particular subject that stands at the crossroads of law, accounting and economics... without forgetting its links with strategy and ethics. As proof of this trans-disciplinarity, there is no specialist tax school, with the result that tax experts, with their rich and complementary profiles, frequently originate from various backgrounds: some trained by law faculties (sometimes with complementary business school studies), others emanating from chartered accounting channels or from the tax administration itself. But a new route could provide a way to join the ranks of tax experts, namely data science training. Will data scientists actually become the tax specialists of the future?



THE EMERGENCE OF A STILL-EMBRYONIC MOVEMENT

Although the term TaxTech is rarely used in France at the moment, two TaxTech-related movements can be observed. Firstly, the still-discreet recognition of the growing place of Tech in Tax by a small part of a profession that is struggling to fully embrace the issues of tax digitalisation. And still in France, the emergence of the first TaxTechs, although these remain low on individual visibility, if not hidden in the back row of the class photo behind their LegalTech cousins.

The second movement can be seen outside France where the concept of TaxTech is more advanced. Outside France, genuine momentum to structure TaxTech can already be seen, whether in the emergence of the first TaxTech-oriented organisations, the already recurrent conferences on the subject or ad hoc training programmes. In Austria, for example, the University of Vienna has inaugurated an LLM in Digitalization and Tax Law for a first intake. Taxtech.at is organising its third conference on the subject this year, while the Digital Economy Taxation Network is inviting the various stakeholders in tax digitalisation – whether companies, consultancies, technology providers or even governments themselves – to come to the same table to discuss the issues of digitalised tax management.

Proving that France lags behind on these subjects, a search for the term “TaxTech” on Google or for the terms “tax digitalisation/digitalization” or “tax technologies” on LinkedIn throws up only a few results. As far as in-house tax specialists are concerned, these search results are highly instructive if not disappointing. For consultancies, however, the movement is more visible, with service providers attempting to reach out to their customers in evangelistic mode, to borrow a term common to entrepreneurs. This situation underlines the still highly-embryonic recognition by tax experts of the issues of digitalisation for their professions.

LARGE VARIETY OF SITUATIONS

The degree of contact with the practical realities of digitalisation clearly varies according to the specifics of the field of tax concerned.

The first criterion determining this degree of contact is obviously the **nature of the operations concerned**: faced with repetitive tasks, the need for industrialising processes becomes obvious. On this basis, it's hardly surprising that the tax function of restructuring activities has not been greatly automated to date. The same is true for consulting activities in highly-technical tax niches. However, areas like VAT or transfer pricing are a lot more advanced in this respect. In areas like these, the **volume of operations** enters consideration as a criterion. The greater the volume, the more investment in the industrialisation of processes becomes relevant in terms of generating profitability.

The second criterion concerns **proximity with the company's other functions**. For example, the fact that the logistics function rests entirely on information systems these days, explains why customs duties appeared as a natural playground for automation, sometimes dragging VAT along in their wake.

The diversity in terms of the degree of tax digitalisation is also explained by the **human factor**. Depending on their appetites and capabilities, certain members of tax departments have chosen to act as genuine free agents. Whether merely tolerated by their hierarchy or, for the luckiest of them, actually encouraged by managements, they have taken the initiative and demonstrated proactivity on the subject, whereas others, working in the same areas, either through lack of time, courage or incentives or due to the fear of the possible consequences of failure on their careers, have simply followed the natural course of things.

This leads on to the last factor explaining the degree of digitalisation: **regulatory constraints**. Public authorities play a real role in this respect. Most tax administrations have understood at their level the virtues of digitalisation over the long term: lower costs, faster processing and even the hope of real-time taxation or the wealth of possibilities digitalisation can open up for international control. They have consequently embarked on extensive digitalisation projects and some have joined forces to exchange their best practices (for example, the Intra-European Organisation of Tax Administrations which periodically publishes reports of its work or the Inter-American Center

of Tax Administrations). A comparative analysis of the priorities that individual tax administrations have decided to focus on in the field of tax digitalisation is also highly instructive. Italy, for instance, is well ahead in terms of electronic invoices, with issues relating to VAT fraud having driven the tax administration to make them its top priority. Another example warranting mention is Chile, which exempts persons with disabilities from VAT. The Chilean tax administration solves any possible digital illiteracy, by enabling the taxpayers concerned to be reimbursed instantly on their way out of the grocers by taking a photo of their receipt on a dedicated app. Because they handle the taxation of both individuals and businesses, tax administrations are key players in the digitalisation of tax management.



FRENCH SPECIFICS: ELEMENTS FOR REFLECTION

Without claiming to provide a 360° view of the state of tax digitalisation in France, it's clear that the French tax administration has also been proactive in this respect.

For example, capitalising on the pre-existing declarative obligation for employers, the French tax administration is now well advanced comparatively as regards income tax declarations by individuals. Most individuals now only have to click a few times to complete their declarations. This clearly helps to explain the small number of TaxTechs that exist in France for the benefit of individuals. Whereas start-ups offering digital solutions to help with tax declarations are flourishing in neighbouring countries, the simplified process introduced by the French administration limits the potential for entrepreneurial growth initiatives in this area due to the lack of a market.

Another major ongoing digital project concerns digital invoices. The DGFIP (France's tax administration) has launched several working groups on the subject, in order to bring the interested parties together around a wide-ranging project that seeks to introduce an obligation for large groups to issue invoices in digital format as from 2023. Is this going to be a genuine tax big bang that transforms future relations between taxpayers and the tax administration or, conversely, a simple administrative measure handled technically by the IT Department or – at best – one that interests a few VAT experts? Our view is that the tax big bang theory is more likely to hold sway. Henceforth, the data will be in the hands of the administration, thus meaning it no longer has to ask for it and thereby leaving it free to run its algorithm on this immense national database, without encumbrance from the GDPR, given that the data concerned is business data and not personal data. The lack of interest or indeed the complete absence of information from the majority of tax experts on this subject is striking. But then again, is digital invoicing really a TaxTech subject?

DEFINITION OF TAXTECH

In order to agree properly on the subject being discussed in this paper, we need to define TaxTech. In the absence of a pre-existing definition, students on EDHEC Business School's LLM in Legal & Tax Management were asked individually to say how they would define TaxTech. A number of common characteristics emerged, so much so that it's possible to venture, on a provisional basis, that the term **TaxTech can signify any technology employed for tax management purposes**. In longer form, TaxTech may be defined as a technical solution geared to making tax information more accessible in digital form in order to facilitate relevant visualisation and/or permit automated processing for the purposes of good tax management; this includes, for example, increased compliance via the detection of errors and risks or more acute knowledge of the realities of the tax situation so as to assist with strategic decision-making.

Consequently, TaxTech can just as well be a database solution that groups together the prevailing regulations consulted by the tax expert, as the use of artificial intelligence to develop a bot tasked with feeding tax information into the information systems already used by the company. The reality of TaxTech starts with a slightly-sophisticated Excel file and can go as far as the use of blockchain to collect VAT in real time, for which electronic invoicing is the pre-requisite.

DATA AT THE HEART OF THE TAX DIGITALISATION ISSUE

Whatever the technology used, an essential pre-condition is **access to the data**. In this respect, digitalisation of the tax function is no different from other big digitalisation projects: everything starts with the identification of the relevant data, the introduction of procedures for collecting and digitalising this data, as well as the cleansing of the data sets obtained and the combination of these sets, so as to enable processing that allows for the data to be interpreted before it is declared and/or stored.

Following on from this question of data access, **circulation of the data** is an even more sensitive issue. Should the tax data be allowed to leave the company in order to be processed, compiled and analysed externally, or should all the tools needed to do this be made available in-house so as to ensure data considered overly sensitive does not leave the company? In reality, the question is one for the players involved in the digital transition market.

PLAYERS INVOLVED IN THE TAX DIGITALISATION MARKET

In the tax advisory field, the historic players are well known. **Legal firms, notaries, chartered accountants** and **big consulting firms** occupy the ground. But none of them really possess the mass of tax data belonging to their clients. As a result, technology providers, whether software vendors or cloud service providers are in a privileged situation, in the sense that they already assist companies with the day-to-day management of their digital needs, in areas other than tax.

The question is therefore to decide whether it's going to be simpler for tax consultants to find the digital capabilities they currently lack, in order to provide their clients with more comprehensive assistance tomorrow. Or, conversely, if technology providers can manage to broaden their offerings faster and add an integrated tax module to their solutions already in place with their clients.

In addition to this confrontation between tax consultants and technology providers, the possibility of new players emerging needs to be considered. One example of this concerns the arrival on the market of **digital tax pure players** (such as Algonomia in France). It might also be that certain players other than technology providers take advantage of their **privileged business relationships** with clients to move into the tax digitalisation market. Amazon, for instance, has capitalised on its status as an intermediary possessing all the business data of its sellers to develop a new offer to assist them in declaring their VAT. We can also consider the central role played by tax administrations. In certain countries, tax administrations have imposed themselves as the sole and exclusive suppliers of software. In others, it has meant **tax administrations** exploiting the electronic receipts they centralise to advise taxpayers on, say, the best times to avoid queues at cash desks or to notify them of the outlets where masks were still available during the early stages of the pandemic.

Given that digitalisation breaks down silos, there is no doubt the movement is opening up new opportunities and dealing out a fresh deck of cards. Traditional tax-market players and new entrants both have a role to play.

There is plenty to be gained by creating effective synergies. On this point, co-building is undoubtedly the best solution as regards the development of tools. In practice, no tools can be developed without a data set on which to test them. No tools can be developed either without solid expertise, whether in terms of the technicalities of tax or the technicalities of IT... The key to tax digitalisation is therefore to be found in complementarity of knowledge and capabilities.



THE ISSUES FROM THE POINT OF VIEW OF AN EDUCATIONAL INSTITUTION

As an educational institution, it is fundamentally important to be in contact with the practice of tax and to observe it in order to identify trends and prepare students for the tax function they will exercise in the future.

The first requirement is obviously to possess **solid knowledge of tax from the technical angle**. For a long time, our students have been trained in the Office suite and are proficient in Excel. They meet professionals in their class rooms and do internships. Nonetheless, we are convinced this baggage is far from enough to prepare them for the tax function they will exercise in the future. In this respect, digitalisation brings many challenges, but we will limit ourselves to citing the two biggest.

The first challenge concerns **the entry of students to the professional world**. We well know that during an initial period at the start of a career in a company, or more so in a consulting firm, the tasks assigned are low value-added and fairly repetitive ones, and are subject to close supervision. But for a young professional, these tasks also provide the opportunity to discover, observe and learn, for example, and to make mistakes without the risk of them having any great impact, thereby enabling young employees to gain confidence and strengthen their powers of reasoning and analysis. The issue here is that the first tasks that are being (or will be) affected by automation are precisely those that occupy and train juniors. Consulting firms and companies therefore share a responsibility with educational institutions to find solutions to offset the impact on young professionals at this stage of their development. Our view is that educational institutions and companies need to get together to create professional-skills oriented modules that bridge the gap between academic training that cannot allow itself to cut back on tax theory and managers who are short of time to provide support to juniors in terms of tax practice.

The second major issue with the digitalisation of tax management is **anticipation** which, in practical terms, breaks down into two main challenges.

The tax digitalisation movement is still at an emerging stage; it is our duty to

prepare students for it, even, if it means, and this is the risk, that they arrive on the job market over-prepared with futuristic visions that are out of synch with the reality of the operational structures they join. And more or less consciously, that's what the latter expect from us. We often hear: "to manage digital, I'm going to hire a young person, because they're good with all that stuff". We consider this a mistake. Young people are very good consumers of technology. But the ability to develop technological solutions and products is something that needs to be learned. This learning must not be restricted to new entrants to the job market. The subject of tax digitalisation must dissolve the boundary between academic education and executive education, so as to give everyone the chance to upgrade their skills and become an active player in this major societal transformation.

Anticipation is also a challenge: we have to prepare EDHEC students for 40 or 50 years of careers for jobs that in many cases are yet to exist. We will cite just one example, which is inspired from the trend seen in the LegalTech area. Legal Operations (Legal Ops) positions are now flourishing. Legal Operations Managers handle the operational management of a company's legal function. They also have the task of disseminating a legal culture to all the company's other departments and even to its customers and suppliers. This is aimed at ensuring a higher quality, more efficient and more productive legal function. Consequently, their job now involves digitalising processes that are identified as overly time-consuming, through the use of tools that they select and subsequently oversee to ensure they are effectively implemented. It's easy to understand what a **Tax Ops** job description would look like. In France, for the moment, LinkedIn doesn't seem to list any Tax Operations Managers and only one Tax & Finance Operations Manager. Nonetheless, it's undoubtedly a job of the future for which we all need to prepare, whether students or professionals already in practice.

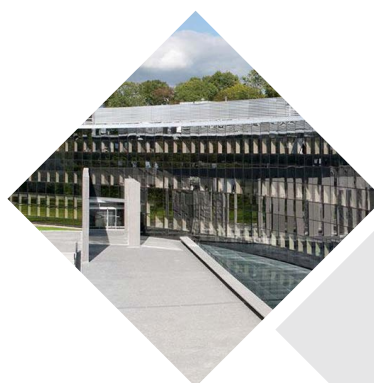


THE ISSUES AS A RESEARCH INSTITUTION

Our mission is not to restrict our scope of action solely to teaching our students, but is also to ensure our research serves the profession. In this respect, the **Edhec Augmented Law Institute** conducted a survey of 100 legal leaders with the aim of building a skills repository for augmented lawyers. One of the major conclusions emerging from the survey was that soft skills were widely identified in the top 15 priority skills for being recruited.

Using the same survey model, it would be highly interesting to **build a skills repository for augmented tax experts**. It seems safe to say that soft skills like 'Listening and observing', 'Creating confidence' and 'Accepting one's errors positively and progressing', would feature highly in the list of skills that make the difference for augmented tax experts as well.

The mission is therefore to question tax professionals, so as to work with them to observe the changes and decrypt the trends in the profession and thereby offer the tools for developing the behavioural, technical, business and digital skills needed by today's tax experts. They will then become the augmented tax experts of tomorrow, active players in digitalised – automated and simplified - tax management and thus be in a position to exercise their profession of expert in full and to concentrate on what really matters: **creating value**.



THE CONSTRUCTIVE ROADMAP

The digitalisation process is a journey in several stages. And each stage needs to be thought through from three angles: yourself, others and technology.

The first stage has to entail an **audit** to identify what digitalisation means for you, your organisation and your day-to-day professional activity. Identify your ecosystem: your hierarchy, your employees, service providers, customers and suppliers... What is your ecosystem's existing level of digitalisation? What data exists already? Who holds it? How are you going to situate yourself in this ecosystem: are you going to be precursors or have doors already been opened? Are you going to be supported in your task or does the culture of change rather need to be developed further? How can you be an active player in developing it?

The second stage involves allowing yourself to **dream**. Daring to imagine a better day-to-day professional situation: what do you dream of being free of? What would you automate? What data do you dream of having? Where does your real value-creation lie and how would you organise yourself to concentrate solely on that in the future? Where could your added value of tomorrow come from?

The third stage is that of **operational pragmatism**. A stage of planning with an optimistic scenario and a realistic scenario. Think big, but start small. Start by identifying your needs and resources, always with this triptych in mind: yourself, others and technology. Which skills do you have and which do you lack? How to acquire them? Train yourself? Recruit? What technologies are available? How to keep yourself informed? Anticipated budgets? What are the realistic timescales? What data is available? What data to use? How to set up new data collection streams? How to centralise these streams?

The last stage is obviously that of **quality control** and after-sales service, the aim being to grow from your mistakes, celebrate your victories and trigger a new cycle.

But at each stage, it's especially important not to neglect **exchanges between peers**. In this crusade into ill-known territory, one man's experience must become another's competency. This is the importance of collective

expertise. Although tax experts come from different training and professional backgrounds, and have different areas of expertise and day-to-day activities, and operate on different perimeters or even in different jurisdictions, they're all tax experts.



So tax-expert friends, no one is better equipped than you to embrace the subject of tax management digitalisation.

[Contact us](#) to see how we can work together to build projects that give greater value and meaning to the profession, thus enabling you to become augmented and fulfilled tax experts.





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