# **Domesticissues**



# BEING DISRUPTED BY TECHNOLOGY?

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### **QUOTES:**

"THE RELENTLESS ADVANCE OF ROBOTICS HAS HAD AN IMPACT LARGELY ON MANUAL LABOUR. THE **GROWING CAPACITY** OF MACHINE LEARNING SOFTWARE MEANS THAT SOME WHITE-COLLAR JOBS COULD BE SWEPT AWAY BY DIGITAL CHANGE" ROBERT WRIGHT REPORTED IN FINANCIAL TIMES ON 30 SEPTEMBER 2019.



Furthermore, a professor of international economics at the Graduate Institute Geneva, Richard Baldwin, was quoted in *The Globotics* Upheaval to predict that white-collar jobs will be swept away faster by digital change than in any previous economic transformation<sup>1</sup>.

Traditionally, the work of a professional is often accompanied by a steady income, a promise of job security and a steady career progression. Some professions have seen the most highly remunerated individuals in society.

These jobs have always been known as a "job of a lifetime". Many people have this mindset that "Professionals will never be out of a job". However, will technology change this mindset? Will professionals be replaced by artificial intelligence in the future?

Professionals who have specialist knowledge and are accredited by professional qualifications are often regarded as performing white-collar jobs. Typical white-collar jobs include doctors, architects, lawyers, accountants, financial and insurance agents, consultants, computer programmers, and many others.

The technology revolution is entirely different from the previous industrial revolution. As Stanford University academic Jerry Kaplan writes in Humans Need Not Apply, "Today, automation is blind to the colour of your collar. It does not matter whether you are a factory worker, a financial advisor or a professional flute-player: automation is coming for you."

Briefly, technology transformation can happen in two important modes, namely automation and innovation:

### (i) Automation

Most professionals often associate the relevance of technology to their jobs with automation. Automation is mostly focused on routine, repetitive and mundane tasks which can be replaced by more efficient machines. Clayton Christensen refers to this automation as "sustaining" technologies which support and enhance traditional ways of operating in an organisation or an industry<sup>2</sup>.

Perhaps someday in the future, we will have a super Google search that can search the most relevant result to any tax query. Perhaps, an even more sophisticated artificial intelligence (AI) engine can advise on the best way to solve a tax problem. Tax consultants may only be needed then for very complex tax challenges3. Having said that, automation does

<sup>&</sup>lt;sup>1</sup> Baldwin, R. (2019). The Globotics Upheaval: Globalization, Robotics, and the Future of Work. Oxford University Press. ISBN 978-0190901769; Also being reported in Financial Times on 29 September 2019 where it says that "Workplace Automation: How AI is coming for your job. Advances in machine learning software means some white-collar jobs could be swept away by digital change".

<sup>&</sup>lt;sup>2</sup> See Clayton Christensen, The Innovator's Dilemma (1997).

not necessarily replace jobs, rather, jobs will be redefined.

### (ii) Innovation

On the other hand, Christensen<sup>4</sup> refers innovation as "disruptive" technologies which are those that fundamentally challenge and change working practices. Globally, the "disruptive" technologies have been instrumental in displacing traditional ways of working. Examples of the "disruptive" technologies are robotics in factory and digital cameras.

According to Susskind (2015), "If you are required to perform a job three (3) times repeatedly, that job function can be disrupted<sup>5</sup>." Robotics process automation (RPA), blockchain, AI, the Internet of Things (IoT) and smart contracts are among the many disruptive technologies which will reshape the existing business models of many businesses.

The most crucial question to ask is - will the jobs of tax professionals be redefined or replaced? Before we answer this question, let us examine some of the key features of a professional, in particular, in the context of a tax professional.

### WHAT ARE THE FEATURES OF A TAX PROFESSION?

By way of definition, "professionals" are human specialists, whilst "the professions" refer to the occupational groups and institutions to which professionals currently belong.

Generally, the four (4) key features<sup>6</sup> of a tax profession are:

### (1) Expert knowledge

All professions have specialised technical knowledge that lay people do not have. They are called "experts" in a particular field. In the context of the tax profession, the knowledge of the professional is acquired by way of formal education. Formal education entails graduating from university

with an accounting or a taxation degree, masters or even a Doctor of Philosophy (PhD). Alternatively or additionally, as the case may be, professional examinations<sup>7</sup> may also be undertaken to qualify aspirants as a member of certain professional bodies.

### (2) Credentials

Before aspirants are recognised as full-fledged practitioners who can work independently, professionals are generally required to undergo



extensive education and training, are able to demonstrate that they have gained sufficient knowledge and practical experience along the way, and that they have received adequate supervision. Traditionally, this may be called "apprenticeship" or "pupillage" working under a master to learn a particular trade.

# (3) Regulated

Broadly, tax practitioners can be summarised into two (2) categories: tax agents and tax lawyers. As for tax agents, they are specifically mentioned in the Income Tax Act 1967. In particular, Section 153(1) of the Income Tax Act 1967 states

that "no person holding himself out as a tax agent, a tax consultant or a tax adviser (or under any other like description) shall be permitted to act in Malaysia on behalf of any person for any of the purposes of this Income *Tax Act unless he is a tax agent as* defined in this section".

Contrastingly, lawyers are bound by the Legal Profession Act 1976. For the purposes of a tax appeal to the Special Commissioners of Income Tax (SCIT), Paragraph 14(b) of Schedule 5 of the Income Tax Act 1967 states that "the appellant may be represented by an advocate or a tax agent or by both an advocate and a tax agent".

> From the above, it is noted that the tax professions are strictly regulated by either the Income Tax Act 1967 or the Legal Profession Act 1976, as the case may be.

### (4) Bound by a common set of values

Finally, the tax professions are bound by a common set of values or ethics over and above any formal regulations that

apply to them. All professionals are expected to display the highest form of professionalism; honesty, trustworthiness and commitment in serving and reassuring others that they are at the heart of their work. Any misconduct or malpractice will be dealt with accordingly via the respective professional institute's Disciplinary Committee.

### **TAX PROFESSION – WHAT DO WE DO?**

Tax is an unavoidable fact of life, like the famous saying "nothing is certain but death and taxes8".

Although "taxes" are certain, how certain are we that the tax profession will not be disrupted by the disruptive technologies? Historically, tax collectors were found to have existed during the Roman Empire (27BC - 476AD) where the famous phrase was coined "Render



therefore unto Caesar the things which are Caesar's...".

Inevitably, tax affects every individual, company and organisation. However, due to constant changes in the tax law, not every lay person is conversant or updated with the latest tax requirements. A tax professional is therefore sought after by everyone who wants to save money on his tax bill within the legal limit of the law.

Basically, tax professionals have three (3) main roles: compliance, consultancy and tax dispute resolution.

# (i) Compliance

Generally, tax compliance involves progressing forward through rules driven by the facts and the law9. In simple terms, tax compliance involves completing the income tax returns based on the latest tax regulations and filing them on time. It is often referred to as the nittygritty of tax because it involves a lot of paperwork.

### (ii) Consultancy

Next, tax consulting entails reasoning backwards through the rules in search of legal and factual premises that can justify a target tax liability. In simple terms, tax consultancy is the problem-solving side of the tax profession.

### (iii) Tax dispute resolution

Lastly, tax dispute resolution involves the resolving of any contention by the Inland Revenue Board that a liability to tax may arise or that a relief may not be available. Generally, a tax dispute will arise during a tax audit, an investigation or a tax appeal to the Courts.

How will these tax functions be affected by technological changes?

### **WILL THE TAX PROFESSION BE DISRUPTED?**

Tim Steel, UK and Ireland tax markets leader at EY in his article10 "How technology is transforming tax" said that, "Digital technology transformation is the single biggest disruptor in the tax profession." The tax profession, just like all the other professions, will have to accept the fact that technology will disrupt their jobs. However, there is no reason to worry about it. The tax profession has embraced change from the days where taxes were computed manually after consolidating pages of ledgers and accounts to online computerised tax preparation software.

In the 1980s, an enormous amount of manpower was needed to prepare a

set of tax computations. Later on, the computers came along and nothing was done by hand anymore. So, all those jobs became extinct instantly. Computers destroyed all these jobs but we still need more tax professionals. But now, their job description is redefined. Tax professionals will no longer be required to perform the manual, redundant processes in a tax reporting framework. This will enable them to focus on the more value added kinds of job, while leaving the computers to do the more time consuming roles like collecting data.

As many tasks become computerised, the daily work of tax professionals is changing. In the case of Brazil, the original accounts (and not completed tax returns) are submitted. This has reframed what leading Brazilian tax advisers now do. They no longer help clients prepare tax returns, instead they help clients prepare their original accounts. In doing so, they use software that is similar to that which the tax

- <sup>3</sup> Alvin Toffler, Future Shock (1970) said "There is an unending scare around AI, cognitive, and other advanced systems taking away jobs from human beings. In the case of virtual reality, people are entranced by engaging with virtual objects as if they are real. It's fun, until they realize the negative impacts it can have on their day-to-day lives. And, instead of assuaging such fears, the technology industry continues to create use cases to replace human tasks with robots".
- <sup>4</sup> See Clayton Christensen, The Innovator's Dilemma (1997).
- <sup>5</sup> The Future of the Professions, Richard Susskind & Daniel Susskind, 2015, Pg. 257; Isaac Asimov, Robot Visions (1990), 341 says that "any job that is so simple and repetitive that a robot can do it as well as, if not better than, a person is beneath the dignity of the human brain". "The tasks that are least threatened by computerization, and so are likely to compose the majority of tomorrow's jobs, are the non-mundane tasks".
- <sup>6</sup> See Richard Susskind & Daniel Susskind, The Future of the Professions (2015).

authority will eventually use to calculate the tax due. The advisers then test what tax will be due for a given set of original accounts, and make appropriate changes to the accounts where possible.11

### **HUMAN TOUCH IS STILL REQUIRED**

Although AI may be disrupting many jobs, certain elements of a human touch are irreplaceable which are further discussed below.

- (i) Accountability and ethics These technologies can never replace the accountability element that is required when a job is done. Only a human can provide the accountability and ethics aspect of a job. A machine is unable to determine what is right and wrong in a morally and socially responsible manner. This is also where humans are more valued as compared to machines.
- (ii) Judgements and relationships with clients Further as reported in the Financial Times on 30 September 2019 on "AI eyes your job", Ben Allgrove, head of global research and development for Baker McKenzie, the law firm, acknowledges that lawyers increasingly rely on machinelearning systems capable of scanning huge numbers of

their chances of a success in a given case. But he insists the best lawyers' judgements and their relationships with clients still trump such software. In the context of a tax dispute (i.e., a tax audit, a tax investigation or a tax dispute resolution) with the Inland Revenue Board, a natural person (either a tax agent or a tax lawyer, as the case may be) is required to be present physically to handle or conduct the matter.

(iii)Professional Indemnity Insurance Professional indemnity insurance is generally encouraged to be undertaken by the professional(s) to carry out his practice. This is because providing a tax service may have certain implications to the client(s). In the event of a wrong or an inaccurate advice, the professional(s) may be sued for negligence. Any actual loss suffered by the client(s) may be recovered by the client(s) from the professional indemnity insurance of the professional(s). The pertinent question to ask is if an AI tax adviser provides a tax advice and due to certain reasons (e.g., software bug, viruses, etc.) which result in the advice being provided to the client(s) to be inaccurate and the client suffers

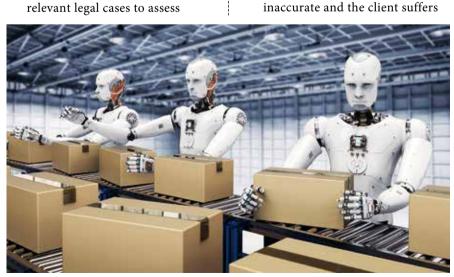
a loss by relying on that advice, is there recourse by the client(s) against the AI tax adviser? Will this type of AI tax adviser be insured under the professional indemnity insurance?

### **HOW SHOULD THE TAX** PROFESSIONAL ADAPT?

The automation of routine and repetitive jobs will eventually lead to an increased need for tax professionals who possess information technology (IT) and data analytic skills. For example, the RPA, a machine learning system which can streamline routine and error-prone task may be useless if there is no element of analysis embedded in it. Here is where a human element is needed because the value of the job is, extracting the meaning from all the data. With artificial intelligence doing the number-crunching part of the job, tax professionals will have more time to focus on the more "value creation" aspect of the job such as consulting, data analysis and problem solving. Based on this, tax professionals of the future should have both tax technical and technology skills.

Furthermore, tax professionals cannot always wear the "Tax hat". With their roles evolving, tax professionals should be aware of the business strategy of an organisation and build the tax strategy from there. There will be a need for the tax function to interact more closely with other functions in the organisation. For this, a key component of future tax professionals is communication skills. A tax professional should be able to explain tax related issues to their non-tax counterparts and collectively the team can help an organisation's business strategy.

The education model should also be updated to satisfy the changing needs of skills and qualifications in the workplace. Universities and colleges must look at incorporating technology and data science learning into the tax curriculum. Traditional business schools should also explore new teaching models,





such as online teaching and consider offering new course modules, such as cybersecurity, blockchain, RPA, IoT and data analytics.

# TAX AUTHORITIES ARE USING DATA **ANALYTICS, TOO**

Tax authorities around the world are employing technology in all their systems. Quoting an example from the Financial Times article, "The Taxman's Digital Dream" published on 30 July 2019, "The future of tax administration is digital, real-time and with no tax returns." Governments are investing heavily in software and technology to digitalise their tax processes as an effort to combat fraud. With all transaction being real-time, tax authorities are able to monitor each and every movement of the cash flow. Tax authorities are using various digital tools like e-assessment and e-audits to move in line with these technological changes.

In the Malaysian context, the Inland Revenue Board of Malaysia introduced the submission of Tax Computation Working Sheets using the XBRL submission system named as Malaysian Income Tax Reporting System (MITRS). XBRL is the acronym for 'eXtensible Business Reporting Language', which is a language for digital business reporting. This is following the adoption XBRL

for the annual and financial filings by the Companies Commission of Malaysia through the introduction of the Malaysian Business Reporting System (MBRS). So, is Malaysia moving in the same direction whereby in the future, instead of taxpayers filing a tax return and estimating their tax liability, the government will dictate what the tax liability is? If that is the case, this has just opened up an opportunity to the tax profession to move upstream instead of currently focusing on the tail end of the downstream tax work.

### CONCLUSION

As a positive response to technological advancement, the tax professionals must reposition themselves and realise that "change" is inevitable<sup>12</sup>. Clearly, the tax world is going through a daunting revolution stage. "If you don't like changes, you will hate extinction<sup>13</sup>." The entire profession and firms of all sizes must adapt innovation or risk being left behind. With the existence of these technologies, the profile and job description of people working in the tax department is expected to change. Tax professionals should utilise the technologies and other tools available to be better at their jobs. This is the time to obtain all the IT and database management skills needed to advance

into the future. With changes, a range of new opportunities will emerge. As we look forward to the future, the tax profession will find new and better ways to share their expertise in the society. The tax professionals should accept the existence of technology as an enabler, not a disruptor<sup>14</sup>.

- <sup>7</sup> These may include, amongst others, Chartered Accountants, Certified Chartered Accountants, Certified Public Accountants, Chartered Tax Institute of Malaysia, etc.
- <sup>8</sup> Benjamin Franklin, in a letter to Jean-Baptiste Leroy, 1789 stated "Our new Constitution is now established, and has an appearance that promises permanency; but in this world nothing can be said to be certain, except death and taxes."
- <sup>9</sup> See Page 89 on "From the Vanguard" in the Future of the Professions by Richard Susskind & Daniel Susskind 2015.
- <sup>10</sup> The Telegraph on 18 August 2017.
- <sup>11</sup> See Page 88 of The Future of the Professions, Richard Susskind & Daniel Susskind (2015)
- 12 Heraclitus, a Greek Philosopher has been quoted as saying "Change is the only constant in life".
- <sup>13</sup> Ross Shafer, Author of "Nobody Moved Your Cheese" 2003
- <sup>14</sup> World Economic Forum on 15 July 2019 regarding "Is AI going to be jobs killer?" says that "automation will displace 75 million jobs but generate 133 million new ones worldwide by 2022."

Disclaimer: This article does not seek to address all tax issues associated with the disruptive technologies to the tax profession and all views expressed are purely the personal opinion of the author.

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