

# SHOULD LAWYERS BE CODERS?

## Introduction

Scratch, Python and C++, three of the world's most well-known coding languages, may not be familiar to many lawyers. In recent years, the coding phenomenon has taken the world by storm with coding being touted not only as "the most important job skill of the future",<sup>1</sup> but also for its benefits such as creative and logical thinking. Recently, it was announced that from 2020, coding classes would be made mandatory for all upper primary school children in Singapore.<sup>2</sup> If we had to choose one essential skill for future lawyers, coding would tick all the boxes for a future-proofing skill.

So should lawyers be coders? On the face of it, lawyers and coders are strange bedfellows. Lawyers are not known to "move fast and break things", which the coding culture epitomizes.<sup>3</sup> Quite the contrary, the orderly nature of law seeks to resolve differences and to heal relationships, hardly what you would associate with rule-breakers. At a deeper level though, there are broad similarities between lawyering and coding, such as the application of logical thinking and problem-solving techniques.

But what do we mean by coding? Literally, coding is a process of giving written instructions to a computer to carry out a specific function.<sup>4</sup> To allow humans to give instructions to the

computer, different computer languages were developed.<sup>5</sup> To learn how to code using, for instance, the Python language, one can take courses, watch videos or learn from books. It is in this sense that "coding" is commonly understood.

However, a wider perspective of coding entails going beyond learning how to code. For example, a "Coding for Lawyers" course introduced by a few professors in Europe and the United States teaches law students how "to think about [their] relationship with new technology and technology experts".<sup>6</sup> The course focuses on "understanding the basic concepts and power of coding" (such as the pros and cons of blockchains and smart contracts) from a multi-disciplinary angle, rather than the nuts and bolts of how to code.<sup>7</sup>

## The Four Possible Model Skill-sets

What skills should lawyers develop to thrive in the age of coding? As a starting point, let's look at four possible model skill-sets:

- 1) Lawyer as developer
- 2) Adapting to the changing nature of practice
- 3) Deciphering future laws
- 4) Using legal technology effectively

A note of caution: it is not practicable for a lawyer to adopt all four skill-sets. A lawyer should choose the model(s) that best fits his or her strengths and inclinations, practice area, client needs and time available.



## Lawyer as Developer

The first model skill-set, lawyer as developer, is perhaps the most difficult to achieve given the complexity of serious coding. Nevertheless, some lawyers today would already have picked up coding in their university days or at an earlier stage of their education. A number of lawyers may even be actively coding while practising law. From a commercial perspective, learning to code may give lawyers a competitive edge, in terms of providing value-added services to their clients through, for example, a website chatbot or an app.<sup>8</sup> Presumably for the majority of lawyers, learning to do serious coding is not something they can set aside time for, given the demands of legal practice. Realistically, for many lawyers, a basic understanding of what coding is and its applications would suffice.

## Adapting to the Changing Nature of Practice

In an age of digitalization and technology, legal practice will evolve with the use of technology and lawyers will need to adapt to these changes. Some practice areas may be driven by blockchain technology (e.g. the proposed pilot of electronic bills of lading in shipping practice),<sup>9</sup> while others by the use of AI (e.g. document review software in corporate practice). Online dispute resolution will also change the way certain types of disputes are currently resolved. It is important for lawyers to understand how their practice areas will be affected by the relevant technology and to be able to adapt to these changes by, for example, developing inter-disciplinary knowledge to gain a competitive edge by addressing their clients' needs holistically.<sup>10</sup>

## Deciphering Future Laws

With the advent of emerging technologies which will transform multiple industry sectors, it is likely that future laws will be drafted with reference to these technologies, for example, AI, blockchains and smart contracts. Interpreting such laws will require lawyers to have a good understanding of the relevant technology. Issues of legal liability arising from the use of robots and AI will also require lawyers to understand the problems of attributing fault in light of the specific nature of the relevant technology.

## Using Legal Technology Effectively

Most lawyers will use legal technology in one way or another in the course of their practice. Some types of legal technology (e.g. document assembly software) will require lawyers to develop expertise in "training" the automated system by exercising algorithmic thinking. Algorithmic thinking, which essentially entails developing a step-by-step set of instructions to solve a problem,<sup>11</sup> should not be alien to lawyers – in fact, lawyers apply algorithmic solutions regularly by developing or applying legal frameworks to their client's case.

## Conclusion

Lawyers need not be serious coders to future-proof themselves, but as some commentators have pointed out, "the ability to understand and communicate with coders is a necessary skill for the lawyer of the future".<sup>12</sup> The model skill-sets proposed in this article offer lawyers an opportunity to think beyond the traditional paradigm of the practice of law and assess how they can acquire the necessary skills to carve out their niche in the age of the algorithm.

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## Endnotes

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11. Paul Curzon & Peter W McOwan, *The Power of Computational Thinking* (London: World Scientific Publishing Europe Ltd., 2017) at p 4.
12. *Supra*, n 6 at p 5.

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