**Launching into Computer Science** 

## **Unit 05 Formative Discussion**

Use of technology in accounting field: Other than office automation, Is it possible develop artificial intelligence in the accounting field and will the accounting professions be replaced in the future?

The accounting field is a labour intensive industry and relied heavily on manual work and jugdement. This industry is traditional and prudent and therefore seldom makes proactive changes especially changes on their routines unless they are absolutely necessary. In the last decade, however, following the big jumps in the development of information technology and the robust grow of daily transactions, accountants realized that they need to make certain changes to cope with the changing world. That's how they started to employ office automations to handle daily paper works and utilized software for routine processing.

Hong Kong, being an international city, also following the global trend. Nowadays, almost all companies use accounting software to close their books. Some companies of larger scale implement Enterprise Resources Planning systems which are used for daily business control, management control and budgeting. The prudent accountants seem to adapt the changes quite well.

Recently, there is again another wave of development of emerging information technologies such as big data, cloud computing, artificial intelligence, etc. In particular, there are heavy discussions on the use of artificial intelligence ("Al") by the professional industries such as medical practitioners, lawyers, and accountants. While people generally think that employing AI in such industries is highly unrealistic, the COVID has tought us a lesson. Previous we never think of consulting doctor on web, now we chained doctor alliances offer online services. Although it is not AI to do the diagnosis, but on-line consultation is already a big step forward. It rings the alarm that it is not so difficult to change people's mindset, provide that the technology is convincing enough and there is a good reason to do so. This again arouses the discussion of use of AI in the accounting field: whether the works of accountants could be replaced by the AI?

This paper intends to introduce briefly the information technology and the level of office automation currently employed by accounting industry in Hong Kong and the advantages thereof; to discuss and investigate the extend of use of AI in accounting industries and; the transformation of accountants in case AI are to be employed in the long run.

The target organization I employed in the case study will be one of the top ten accounting firms. The proposed structure of the essay will be:

- 1. Brief description of the accounting industries in Hong Kong
- 2. Discussion of the current use of accounting and auditing software and office automation in the accounting field in general. As to the selected accounting firm, detail descriptions of the changes in business atmosphere in term of interaction with clients and change in working and management styles following the use of software and office automation.
- 3. Review the current initiative of accounting professions to employ AI around the globe and analysis the advantages and the challenges of employing AI in the industry.
- 4. Investigate whether AI is applicable to the accounting professions in Hong Kong and the view of the management of the selected accounting firm. In case AI is to be adopted, what changes do the accounting professionals have to be made to in order not to be replaced.

