## IMPACT OF TECHNOLOGY ON ACCOUNTING—CHALLENGES FACED BY FUTURE ACCOUNTANTS

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Cross-historical review of finance literature has examined accounting as a pillar of economic sustainability and reliability as well as in microeconomic dimension – as the main reflection of financial performance in each enterprise. Thus, accounting has become a specific language for business providing financial data comprehensively, consisting a necessary element for the economic decisions which must be made. [3, p. 15]

Nowadays, accounting-related professions go along with a conviction of combining prestige, horizontality and refinement, which makes the occupations being desired on labour market. However,

potential candidates for a position of an accountant are required to possess multiple qualifications and competences towards ensuring high quality of value made. To fulfil modern needs, accountants have to adjust the role, which may they play for the changeable economic world. Primarily, in small enterprises, accountants are supposed to concentrate on data collection, entry and report generation, when in case of middle to larger sized businesses, the profession may oscillate within advising and financial interpretations. Besides, it is considered that the profession includes dimensions like:

- financial data management— it concentrates on implementing, developing and maintaining financial data bases and furthermore monitoring and establishing control procedures;
  - regulatory and reporting compliance—it supports taxation and coordination of an audit process;
- external business affiliations— those provide data to public accountants as consultants, auditors or tax service professionals. [2]

Considerable changes in accordance with a development of innovations and high technology have been influencing the economic market likewise directly the profession of accountants. The modern economic rhythm imposes new rules for success in business through reshaping the outlook of profession's requirements due to globalization, internationalization etc. New light has been put on abilities such as a proficiency of English or an attitude of an entrepreneur. The English has become an indispensable communication's connector between foreign companies, which makes being urgent to obtain technical command of this language for a future accountant. Regarding to an entrepreneur's attitude, forecasts provide suppositions of necessity to acquire abilities like creativeness, leadership or innovativeness towards ensuring great efficiency in work. [5]

Even though it is impossible to predict the future with a great certainty, however economic turnover estimates some trends connected with innovations and high technology. Among factors indicated are: mobility, cloud, social collaboration, digital service delivery, big data, payment systems, cyber security, robotics, augmented and virtual reality, artificial intelligence [1, p. 3–14]. Other review of scientific sources distinguishes also the FinTech industry, bitcoins, blockchains and the drone technology. [4, p. 5–8]

Perhaps those elements will create brand new standards for accountant's position. Anticipations consists claims that the future accountants will be obligated to improve their knowledge of new accounting software programs or other business applications as well as reskill practical appliance of technology. [6]

As the mobile connectivity widespreads the scope of availability and utility, accounting notices mobility as a tool which integrates the workspace and attracts customers or candidates by breaking classical geographical boundaries. From accountants will be required to identify and implement mobile solutions, which can push the work ahead, manage to obtain full mobility in a safe manner and focus on interconnecting internet and mobile devices to things such as cars or an industrial equipment. [1, p. 4]

The revolutionary network system connecting millions of computers called as "the cloud" ensures flexible and effective data sharing and collaboration. To make better tactical and strategical decisions towards to gain competitive advantage accountants will need to explore establishing actual costs, educate in area of financial functions on complexity of total cost calculations and demand more specific price details and data from cloud clients. Similar situation concerns social collaboration, which affects removing communication's barriers, enhance productivity and open new routes for investing. Accountants will have to develop new skills of better control and education to enforce socializing by the tools like social media. [1, p. 5, 6]

Digital service delivery provides high technologies to web-based processes in companies by e-commerce, mobile commerce as well as cloud-based software or internet-related services. Accountants will be required to develop digital literacy and technical skills and obtain qualifications in implementing connecting and exchanging data automatically. [1, p. 7]

Each day world creates 2,5 quintillion bytes of data as an effect of the increasing importance of transforming analogue technology to digital. Hence, big data has become an opportunity to improve understanding of market, increase business effectiveness and cut process costs. According to adaptation for using vast amount of data, accountants may need to apply analitycal skills to establish a wider data usefulness, obtain management abilities to control a complexity of the information needed to be audited and explore ways for estimating cost and return on investments.[1, p. 8]

Changes across the technology affect also payment systems, especially electronic banking. Due to implications of those systems in business, companies can increase a transparency of transactions and simplify payment process by an automation. Accountants will need to obtain expertise in area of new money paradigms, virtual payments and methods of exchange. Along to payment systems goes cyber

security, which may provide a protection upon the sensitive data, progressively transmitted in online systems. Evolving cyber in profession of accountants will obligated to acquire proactive attitude, take an integrated approach in case of cyber security and control security procedures under new emerging threats and risks. [1, p. 9, 10]

Moreover, impact on a system of accounting may have robotics containing control systems, sensors or manipulations working together as the multiple tasks. Those issues can ensure more capacity and distribute work more effectively. From accountants will be required to devise new methods to improve robot performances and return on investments. In case of augmented and virtual reality, to enhance a real environment with online interactions, accountants will need to explore new ways to applicate cyber reality in accounting towards optimization of business activities. [1, p. 11, 12]

Implications of artificial intelligence consist providing behaviour imitable to actions of human brains. It can help with repetitive processes and automatic routine. Accountants to stay on the track are supposed to explore possible automate tasks and procedures and up—skill to provide higher value of work. [1, p. 13]

To competing on the market, companies use high technology and innovations, what is characteristic for FinTech industry. This industry is influencing systems of other companies meanwhile also the accounting. Thus, it allows accountants to focus on other value—added services while FinTech companies provide activities like asset management or fraud protection. Furthermore, bitcoin provides online payments from one part to the other without going through a financial institution. Other advantages are the speed and security of transactions. Blockchains, as a technology supporting bitcoins, increases the scope of influence gradually. Blockchain's data can support accounting with a verification of each transaction, what doesn't have to be no longer consideration of accountants. Hence, it would lead to significant time reduction towards to concentration on other relevant aspects in work of accountants. Drone can be used as a way of enhancing tasks of auditing or assets' assessments also to conduct stocktakes. [4, p. 5–7]

To sum up, findings of the work itemized relevant factors, which may have significant influence on the work and expectations related with profession of accountants. Thirteen trends, presented above, reflect convictions of the future with comprehensive overview on sections and zones of potential impact. Hence, simultaneously necessary and significant becomes the aspect related with awareness of young people considering accounting as a career path. Perhaps, acquiring qualifications connected with high technology, innovations, fluency in English or entrepreneur's attitude on university's times already can ensure success in this branch. At least surely constitute the fact, that those abilities will make candidates more competitive on labour market.

## Literature

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