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Introduction

The fourth industrial revolution, related to the systematic use of information technologies through the development of automation and the processing and exchange of significant amounts of data, means that technology for managing all processes has become a fact. The main elements of this new reality are artificial intelligence, the Internet of Things and the Internet of Everything, 3D printing, nanotechnology, quantum computers, cloud solutions, as well as cyber-physical systems and modelling, i.e. a virtual representation of physical reality. This latest industrial revolution fundamentally changes our perception of reality and our functioning within it. The basic consequence of the revolution will be the progressive marginalization regarding the role of human labour, which means that the creation of new jobs may not be balanced by the loss of existing ones, and increases in the amount of human labour may not lead to a significant increase in production. This also means that there may be a class of people who will not have the opportunity to work because of their skills are lacking or inadequate for current needs. This can lead to social tensions and will be a huge challenge for economic policy, which will have to deal with the growing social expectations of people brought up in prosperity and not accustomed to the concept of saving, especially in the case of job loss. Meanwhile, there are powerful overlapping problems relating to climate protection, decarbonisation, mass migration, aging populations and the global economy's shift in focus towards Asia. It is difficult to estimate the real consequences of the processes taking place today, due to their unprecedented nature. Obviously, the processes do not necessarily mean mass unemployment, because, as in the case of previous revolutions, new processes may generate a demand for new jobs in sufficient numbers to ensure balance in the labour markets. Certainly, robots and automation will push tens of millions of people out of work, but at the same time new technologies will generate a demand for new skills. Regardless of whether predictions of mass unemployment and people being forced out of the job market by robots come true or not, it seems indisputable that the world is facing revolutionary changes.

Therefore, the key problem facing the world today is what competencies will be needed by the generation that will enter the labour market in a few years' time; that is, the one which has just begun its university education. At the start of the century the digital revolution began a new age; which seemed it would shape reality and the labour market for many decades to come. At that time, it seemed that the key competences were those resulting from computer skills or programming knowledge. Until recently, it seemed that humanities graduates would not be able to find a (well-paid) job; but today they are irreplaceable if they are well versed in the digital world. The development of technology has accelerated significantly and today it turns out that the key competences are those that can stand out from the background of widespread automation and robotization, i.e. those in which a machine will not be able (for some time) to replace a human being.

Competency in the future is going to be, above all, a combination of:

- a) Solid digital and technical competences,
- b) Social competence, ability to empathize and cooperate,
- c) Cognitive competences, commonly called thinking competences (creativity, but also the ability to solve complex problems).

Thus, one can assume that the following skills will be indispensable in the future: active learning, analytical thinking and innovation, critical thinking, creativity, emotional intelligence, mentoring, leadership and social influence, management of material resources and HRM, manual dexterity, endurance and precision (desirable for cooperation in multicultural complex environments), cooperation in virtual teams, spatial abilities, persuasion and negotiation, reasoning, problem solving and ideation, resilience, stress tolerance, flexibility, systems analysis, technology design and programming, as well as visual, auditory and speech abilities.

The fundamental question therefore arises, are universities prepared today to teach such skills and to transfer knowledge that will prepare new generations to find their place in a changing labour market? The whole of the nineteenth and twentieth centuries were a time when school was to instil in students' discipline and compliance with the rules, and thus the virtues needed for mechanized factories as well as for inter- and multinational corporations. In the post-industrial age, in the information society era, the catalogue of necessary skills is different. The linear way of acquiring knowledge by acquiring further diplomas and moving to higher and higher positions in the process of career progression has also been negated. So, are teaching institutions keeping up with the pace of change, in particular large public universities, which are characterized by inertia resulting from the large scale of their activities? After all, are the methods that are used by large universities adequate for the expectations of the Z-generation brought up in the digital world, used to tablets and computers, as well as accustomed to information noise? This book is intended to contribute to this important discussion in the field of entrepreneurial and sales competences that are still needed in the market, but it seems that for effective and efficient operations they must be accompanied by a number of other, soft skills.

The collected articles enable two parts in the book to be distinguished: the first covers the theoretical aspects related to the formation of entrepreneurial and sales competences in the higher education sector.

The first chapter refers to constructivist education which puts the student at the centre of the educational process. This paradigm change has to entail a completely new organization of the teaching process and the tactics used in the classroom. Teachers have to acquire new competences and universities have to support them in this process because it is not an easy task and will take a long time. The first chapter generally discussed the education process, while the second and third relate to education on entrepreneurship. The second chapter characterises the edutainment as the modern approach towards teaching the entrepreneurship. The advantage of edutainment is its high efficiency in the transfer of knowledge and skills. The author presents his own experience with the implementation of the integrated teaching technique in the Erasmus+ project, containing various teaching approaches, including movie education. In the third chapter the authors present the results of studies covering the role of universities and higher education in creating, shaping and maintaining entrepreneurial intentions among the younger generations, especially among students. There is a growing interest in the subject of entrepreneurial education, although it is difficult to find unequivocal confirmation of the impact of education on the development of entrepreneurial intentions among young people.

The next chapter addresses issues related to the digitization of sales and marketing. Modern technologies are changing the world and the business approach to sales planning and the use of sales support tools. The art of the sale is the subject of the next chapter, and the author reports on the results of a survey at the Cracow University of Economics relating to sales competencies. The results enable some recommendations regarding programmes and course contents to be presented.

The second part of the book is devoted to some practical aspects of acquiring competencies in sales as well as various aspects of running a business, along with covering the practical aspects of transferring knowledge at universities and thus the tools and techniques used.

Charity is not a fancy or easy product to sell. Therefore, the example of a university initiative described in the next chapter – a store that promotes the re-use of products – can be a good example of how entrepreneurship education in practice can be combined with care for the environment and human needs. The phenomenon of moral hazard in entrepreneurial activity is presented in the following chapter. The authors performed an experiment whilst using a business simulation programme and provided evidence that moral hazard leads to riskier behaviour among nascent entrepreneurs. Moral hazard is correlated with overinvestment, excessive costs, lower sales revenue and the reduced financial effectiveness of a company. These conclusions are very important for teachers educating future generations of entrepreneurs and sales agents. On this occasion it should also be emphasized that business simulations are an extremely valuable and modern form of entrepreneurship education, appreciated by students. Entrepreneurship

teaching makes more sense when combined with tools and techniques that increase student engagement and are based on practical examples. A good example is the video case studies presented in the subsequent chapter. In an era of digitization Generation-Z students expect more interactive ways of teaching, and video case studies certainly provide many advantages over the traditional written case studies. In the last chapter another teaching tool has been described – gamification. As research reveals, implementing game-based elements into education can increase the effectiveness of the learning process, but it should be rigorously combined with the content of the course and the skills and competencies required in a given syllabus.

This textbook is intended for an academic audience (teachers, researchers and advanced degree students) as well as a professional business audience of trainers, top managers, directors and developers. Due to the issues raised, it can also be useful to entrepreneurs interested in the best preparation for enabling the younger generations to perform roles in modern companies in the era of the 4th industrial revolution.