Abstract: The professionalization of university management takes place in many countries and is part of the transformation of the higher education sector. Professionalization of university management in the USA, Great Britain, many EU countries and other parts of the world includes the implementation of the concept of strategic management of public and private universities, as well as strengthening and improving the administration and professional development of managers in the higher education sector.

The adoption of Law 2.0 creates an organizational space for the introduction of various management solutions. The basis of organizational changes is the increase in competition, diversification of the university's mission and internationalization. It can be argued that greater freedom in the application of various organizational solutions and increased competition will favor the professionalization of management. Numerous strategic, structural and managerial solutions will be tested at universities and adjusted to their needs.

Keywords: professionalization of university management, Law 2.0, universities, university organizational systems

JEL: I23, D73, M12

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Introduction

The passing of Law 2.0 creates organizational space for the introduction of various management solutions. The basis for organizational changes is increased competition, diversification of the university's mission and internationalization.

It can be argued that greater freedom of applying various organizational solutions and increased intensity of competition will favor the professionalization of management. Many strategic, structural and management solutions will be tested in universities and adapted to their needs.

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The analysis of university professionalization can be carried out on three levels. The systemic perspective should consider the composition of the organization as a combination of academic cultures, strategies and structures. The functional level, in turn, concerns various spheres of university activity, for example: human capital management, marketing and finance. The perspective of the four missions refers to the understanding of the interdependence between the research and educational mission, cooperation with the environment, and the culture-creating and civic role of the university.

1. Professional university management

When attempting to understand the issue of expansion of organizational concepts, methods and techniques in universities, we should start by defining the term ‘professionalization of management’. In the dictionary meaning, professionalization is ‘the process of the emergence of new professions or specialties in a given field, the transformation of some interests, activities into a profession or acquiring skills necessary to perform a profession’ (Wydawnictwo Naukowe PWN, 2019).

In the literature on the subject, there are a number of definitions related to the term professionalization, but only a few link this term with the area of university management. Two levels of the analysis of professionalization dominate in the nomenclature of management (Kafel, 2013). The first concerns the organization itself, which professionalizes itself through the effective allocation of its own resources, and thus gradually becomes more and more effective in achieving its goals. The other perspective focuses on the person in the organization who can act professionally and become a professional. A necessary condition for the professionalization of human resources is the increase in competences, including knowledge, skills and attitudes, allowing for permanent and effective operation in the organization. Professionalization of management may therefore mean the acquisition and use by the organization and its managers of competences enabling effective management of the organization.Professionalization assumes durability and organizational continuity and strengthens the processes of management improvement; it is reflected at different levels of the organizational system, so it concerns both the strategy and organizational structures and cultures. Responsibility, reliability, and the pursuit of goals are the characteristics of people, but also cultural norms that can be part of the organizational identity (Sikorski, 1995; Sułkowski, 2013; Sułkowski et al., 2016).

In the area of organization management, one can notice the development of methods and techniques strengthening the professionalization of management, which in the functionalist-system paradigm is perceived as a stage in the organization's pursuit of progress (Howorth et al., 2016), including the increase of performance of universities (Sułkowski et al., 2020). According to B. Fanning, the process of professionalization is complex and long-lasting, however, in the area of human resource management, a long-term trend can be observed strengthening this...
process (Fanning, 2011). In many organizations, human capital development plans have been developed and implemented at the strategic level and operationalized in the form of: quality systems, procedures, operational plans and schedules (Hoyle, 2012). Many researchers emphasize that professionalization is a process that takes into account not only organizational systems and resources, but also complex interactions with the dynamic environment of the subject (Dekker et. al., 2015; Hall & Nordqvist, 2008) and depends on institutional maturity of the environment (Kostiukevych et al., 2020) and its state regulation (Gavurova et al., 2019).

Professionalization of university management is taking place in many countries and is part of the transformation of the higher education sector. The manifestations of the professionalization of university management in the USA, Great Britain, in many EU countries and in other parts of the world are: the development of the concept of managing public and private universities as well as strengthening and improving managerial professions in the higher education sector (Andronicenau, 2019a; Androniceanu, 2019b). The concepts of new public management disseminated management methods adopted from business in the public sector, including education (Boitier & Rivière, 2016). The concept of new public management aims to indicate good practices in the field of university management (Boitier & Rivière, 2013). It should be noted, however, that to some extent it is in conflict with the logic of traditional, academic thinking (Powell & Colyvas, 2008). Non-public universities, to a large extent, model their activities on the business sectors, the best example of which in recent decades may be the expansion of private, profit-oriented universities. Modifications that have taken place in the management of universities can be found in the administrative structures of universities, legal regulations for the functioning of universities, university missions and strategies, and university values, viewed through the prism of changing the ‘academic ethos’. It should be noted that these transformations deeply interfere with the current view on the management of universities and their autonomy (Androniceanu at al., 2020). Changes in the area of university management are a derivative of the transformations that have taken place in the university environment, in particular in a society in which there have been changes in the hierarchy of values and norms, standards, customs and broadly understood life priorities.

Professionalization of management of public universities follows the stakeholder model, while non-public universities operate more often under the shareholder model, which should, however, take into account the non-commercial nature of the research and teaching mission. The literature on the subject indicates the need to perceive the professionalization of university management as a kind of dialogue and compromise between the stakeholders (Dubar et al., 2011). S. Collini notices that the professionalization of universities creates an opportunity for them to open themselves to society in order to meet its needs (Collini, 2012; Barnett, 1994).

The change brought about by the professionalization of university management was reflected in new practices regarding various professional groups
functioning in universities: scientists, educators or university administration. Traditional administration is developing thanks to professional groups of academic managers, including, for example: chancellors, presidents, rectors, provosts, registrars, chief information officers, chairmen and members of board of trustees.

The gradual increase in the professionalization of management, noticeable in the Polish higher education sector (Koźmiński, 2019), is due to several factors, including: increased reporting requirements, development of university accountability methods, differentiation of universities, increasing competition and strengthening internationalization.

2. Universities as organizational systems

Universities, understood as organizational systems, consist of subsystems integrating: strategies, structures and organizational cultures, and are based on the resources of knowledge, capital and people. Over the last two decades, the growing role of strategic management can be noticed, which more and more often uses integrated controlling systems, allowing for the analysis of research, teaching and implementation activities as well as for comparisons within the organization and between universities (Sułkowski & Górniak, 2019). Strategic choices concern the areas of: research and teaching activities, education, finance, and marketing.

According to Hladchenko, strategic actions should be aimed at professionalization of management processes. The pressure on the professionalization of the university's activities is also evidenced by the fact that the management and administration of universities are increasingly using new tools of controlling, process and project management, which serve the decision-making process (Hladchenko, 2015). However, the results of many studies show that the awareness of the importance and knowledge of the concepts and methods of strategic management in the Polish higher education sector are quite limited (Popławski et. al., 2016).

Baugier and Vuillod believe that strategic management should strive for the proper planning and implementation of decisions regarding the allocation of organizational resources aimed at: (1) achieving the entity's strategic goals, (2) implementing the strategic plan, and (3) increasing the degree of adaptation of the entity's activities to the environmental conditions (Baugier & Vuillod, 1993; Penc-Pietrzak, 2003), support of the equality of rights to be represented in university top-management (Sułkowski et al., 2019). According to Mokhuba and Govender, management of universities, in particular public universities, should contribute to the achievement of the adopted goals, which are specified by the type of organization and key stakeholders (Mokhuba & Govender, 2016). In the case of non-public entities, the setting of strategic goals is mostly determined by the founding structure, while in the case of public universities - university managers, representatives of staff and students associated in collective bodies, together with political decision-makers (Sułkowski, 2017). When analyzing the autonomy of
universities, it should be emphasized that independence in the decision-making process largely depends on the type of university, statute and power structure.

Competitive advantage (distinguishing competence) is the definition of the area in which the organization is particularly strong and which distinguishes it from other active entities. It is also a unique composition of organizational resources and competences, strengthening the competitive position in relation to other organizations in the sector. Strategic planning should be based on using the competitive advantage of a given entity (Baker, 1995). The levels of the strategy created in the organization define its scope. The organizational strategy addresses the university as a whole, while functional strategies address different aspects of its activities. Therefore, they may relate to the following functions: financial, HR, marketing and others. In the university, an additional important role is played by complementary strategies and policies: science, education and implementation.

Looking at the speed and quality of changes in the method of strategic management of universities, it can be noticed that the university management process has developed and is developing in close connection with business practice. The university education quality is one of the core results of effective strategic management which becomes an important direction of appropriate investigations (Çera et al., 2018).

The organizational culture plays an important role in the university management process. When attempting to analyze the literature on the subject, it can be stated that the academic culture was not the subject of scientific reflection during the heyday of the Humboldt-type university. The research on organizational culture was initiated with the increasing profound change in the models of traditional universities. One axis of this change, and at the same time a manifestation of the university's professionalization process, is the evolution from a culture based on trust to a culture based on verification, audit and control (Sułkowski, 2016; Dzimińska et al., 2018). Research in the literature on the subject indicates that the new public management trend, which was based on the assumptions of (Sułkowski, 2016):

- embedding competitive mechanisms into the educational system and the activities of universities,
- economization of the activities of the higher education sector, which means the constant pursuit of savings at universities and causes a systematic reduction in the share of public finances in the activities of public universities,
- privatization of a part of higher education by: creating the possibility of opening non-public higher education institutions, as well as outsourcing some services in public universities, transforming university management systems: from a traditional academic collegial and administrative system into a management and corporate management system, modeled on business solutions,
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- implementation of the accounting and accountability system, which will allow to control the university management processes (financial, education quality assurance),
- changing the orientation in education from academic to vocational, thanks to the adaptation of programs to the needs of the labor market (Singh, 2001).

Professionalization of university management, and the related transformation of the academic culture into the culture of control, results in a departure from trust in the employee in favor of mechanisms of motivation and control. The aim of such approach is to contribute to increasing the effectiveness of the new university management system, but at the same time it leads to the loss of a specific academic ethos based on self-control.

During the process of professionalization of university management, there are many problems related to the formalization and bureaucratization of activities that are creative and very difficult to standardize. A formalized approach to teaching and research will be opposed by part of the scientific community. A kind of tension arose between the autonomy of the academic community and the assumptions of the idea of a culture of control. It should be noted that there are more problems in the process of changes and efforts to professionalize university management. This may result primarily from the differentiation of the idea of trust cultures, which is based on the authority of professors, while the culture of control makes managers and centrally created regulations a source of authority.

3. University missions

Over the last decades the missions of universities differ depending on the type of organization. These changes are shaped by, or influenced by, the choice of various hybrid university concepts stretched between the Humboldt and entrepreneurial university. University missions have different priorities and operate on several levels. The canon is considered to be the implementation of three missions by universities: scientific, educational and cooperation with the environment (the so-called ‘third mission’). The differentiation of the university's mission and goals also depends on the type of university: public or private. Public universities focus their activities primarily on the implementation of non-commercial areas of activity. Non-public, profit-oriented universities pursue commercial goals.

Professionalization of university management is assumed to control the way of implementing the mission chosen by the university. The changes introduced in the field of higher education forced the formal division of the academic staff into three groups: (i) research, (ii) research and teaching and (iii) teaching staff. New trends in university management have also introduced systems and mechanisms according to which individual groups of university employees are assessed, as well as incentive measures and controlling tools, both in the area of university finances,
research and didactics. Currently, research and teaching and research workers are increasingly subject to pressure to create scientific achievements, which are parameterized and serve as the basis for extending employment, promotion and granting awards. The introduced education quality assurance systems require a formal evaluation of the university's teaching and administrative staff, which is regularly assessed both by superiors and students. Assessment results become data used to make tactical and sometimes strategic decisions. They are the material for improving the processes taking place at the university. As the research conducted by M. Kwiek and D. Antonowicz shows, the direction of the cultural transformation taking place today is defined, and Polish universities, compared to universities in the world, are at different stages of the change (Antonowicz & Kwiek, 2015; Kwiek, 2015).

Changes taking place in the Polish higher education system, positive changes in enrollment rates and an increase in the number of students force university managers to seek new forms of cooperation in order to enrich both their education offer and improve the quality of education. Over the last few years, universities have strengthened the area of cooperation with the social and economic environment. This cooperation is usually based on mutual benefit. On the one hand, universities make their educational programs more practical, enhance the value of the diploma and adjust the profiles of their graduates to the requirements of the labor market. For entrepreneurs, an important aspect of such cooperation becomes a graduate who has the knowledge, skills and competences sought by employers that allow him to take up a job. The very process of building a university's relationship with the social and economic environment is more and more often permanently inscribed in the university's strategy. Professionalization of university management also implies greater participation of external stakeholders in the decision-making process. An important element that affects the quality of the relationships being built is mutual understanding of the needs and the benefits of long-term cooperation.

4. Functional areas

Human capital management in universities is characterized by certain characteristic features that distinguish it from managing people in enterprises. First of all, the goals of business organizations and universities are different, at least with regard to public and private, not-for-profit universities. Enterprises operate in the economic logic of profit, market share and competition, which translates into treating employees as an entity producing economic goods. Universities dominated by the mission of producing social good, i.e. science and education, operate by balancing the logic of higher values with economic thinking.

The concept of talent management is an important tool for the professionalization of university management in the area of human resource management. It is referred to in the literature on the subject as ‘integrated talent management’ and to be effective, the organization should manage the talent in the
right way: by identifying, enhancing and increasing the performance of a talented and competent employee (Lockwood, 2005), including development of internal knowledge management systems (Mishchuk et al., 2016).

Talent management is also present at universities. In the literature on the subject, there is a strong need to strengthen the talent management process in higher education. The reasons for the growing importance of the concept of talent management in universities include:

- increased competition in the sector - development of public and private universities;
- internationalization of research;
- talent searches to improve the quality of education;
- demographic changes affecting recruitment processes;
- changing trends in the labor market;
- incomplete use of the knowledge of current employees.

Hewitt identifies three major trends in paradigm shift in talent management strategies to build a sustainable competitive advantage (Hewitt, 2012). According to him, paradoxically, programs for rewarding and studying employee performance in higher education do not directly affect the effectiveness of activities related to talent management processes in universities. The second trend is the lack of focus on the development of leadership and planning of staff changes in universities so as to educate the staff who will be ready to fill university managerial positions at an interval. The last, third trend is related to the negligible process of monitoring the development and involvement of talent in universities.

When reviewing the literature on the subject, three main trends in competition for talent in universities can be identified:

1. competition for scientists (researchers) who will strengthen the research and development programs of universities;
2. competition for academic staff - attracting the best academic teachers by universities in order to increase the quality of education and make the offer of study programs more attractive;
3. competition for talented students - recruiting from the group of students people with the highest talents; creating for them academic development paths, and later professional promotions at universities.

An important functional area of the university is the area of finance. Professionalization of university management in this area should lead to the most effective use of university resources; more and more often it manifests itself in the introduction of new IT solutions and financial programs strengthening the controlling process at universities.

Another functional area which for a long time did not play a significant role in the management process in higher education is the area of broadly understood university marketing. Professionalization of management in this area should focus on developing studies and placement offers appropriate for the labor market, as well as building the image and reputation of the university. Universities
are increasingly professionalizing their marketing departments, strengthening their position in the organizational structure. In the area of marketing, universities more and more often use the tools of the relationship marketing concept. There is a noticeable effort to build a network of mutual connections between the university and its stakeholders. Building positive ties with its students and graduates plays a special role in this process. For these activities, social media is used, which has become one of the pillars of marketing communication.

5. Research results

The assessment of activities in the field of professionalization of university management is represented by the results of research carried out in 2018 and 2019 as part of the project: ‘Dialog’ – project ‘Organizational improvement of universities of the future UNIFUT.PL’ (Decision No. 0146/DLG/2017/10) covering the area of Poland.

The exploratory basis for the actual research was the material obtained from secondary sources, such as: compact publications, articles, legal regulations, conference materials and content taken from the Internet pages. An immanent source component was also the knowledge acquired by the authors of the article as a result of many years of experience in working in institutions and organizations dealing with science and didactics – also in the area of administrative sciences. The collected material was subjected to a qualitative analysis using the desk research method. The obtained results became the basis for confronting the theoretical assumptions with the actual approach to the phenomena concerning the indication of the current state of evaluation of the process of professionalization of university management and the necessity to analyze the management approach characteristic of enterprises in terms of university management. This initial source analysis was both an impulse and a basis for conducting research on empirical material represented by primary sources in the form of people employed and directly or indirectly involved in the implementation of Law 2.0 and the entrepreneurial approach at universities in Poland.

The proper descriptive and monothematic explanatory study was carried out at the turn of 2018 and 2019. Its purpose was to collect information about the readiness of the university’s employees to implement the concept of professionalization of management at universities including but not limited to representatives of administrative sciences. The defined research goal was translated into a research problem with the following content: defining and assessing the current favorable circumstances and adversities in the implementation and application of solutions in the field of professionalization of management in the university structures. Due to the type of information received, the research was of quantitative and qualitative nature. The identification of factors and their analysis allowed for the creation of a statistical picture of the University employees’ readiness to implement the concept of professionalization of management at universities including administrative sciences. Taking into account the focus on
recognizing opinions and attitudes, as well as the scope of perceiving and interpreting the legitimacy of reorganization in terms of the approach to university management, they can be described as qualitative research. Due to the scope of the measurement, the study was fragmentary (only a group of representatives of a part of the University were examined using sampling), deterministically characteristic for the studied group. The selection for the sample was carried out in two stages. First of all, out of 392 universities operating in Poland in 2018/2019, constituting the finite studied population of artificial units, the method of stratified selection with optimal allocation (public / non-public, number of employees) was selected with an assumed random error of 3% and a confidence level of 0.97 a sample of 39 universities. Consequently, for the selected artificial units, the study in the second step covered natural units using the method of selecting typical units (1), directing the research in each of the selected universities to people participating in the university management process with a minimum number of questionnaires to be completed at the university - 30 people.

\[ N_{min} = \frac{NP(\alpha^2 f(1-f))}{NP \cdot e^2 + \alpha^2 f(1-f)} \]  

(1)

The study was conducted on the basis of the direct questionnaire technique with the use of a measurement tool in the form of a standardized questionnaire, which was filled in by the participants of the study, i.e. persons holding managerial and administrative functions in various positions at universities (rectors, vice-rectors, heads of scientific units, heads of administrative units). The survey was conducted on a sample of 551 people, of which 66% were men and 34% women. The overwhelming group of respondents are people aged between 30 and 60. Most of the respondents had a master's degree or a doctoral degree. Among the respondents, the dominant (39%) work experience at the university ranges from 11 to 20 years. 55% of the respondents were employees of non-public universities. The results presented below constitute only a selected fragment of the research carried out as part of the project and correspond to the nature of the issues discussed in the presented publication.

**Table 1. Question 1. Universities should implement similar missions**

|                | Frequency | Percentage | Percentage of valid | Cumulative percentage |
|----------------|-----------|------------|---------------------|------------------------|
| Very large     | 173       | 31.4       | 31.4                | 31.4                   |
| Quite large    | 221       | 40.1       | 40.1                | 71.5                   |
| Rather small   | 128       | 23.2       | 23.2                | 94.7                   |
| Very small     | 27        | 4.9        | 4.9                 | 99.6                   |
| Don’t have an opinion | 2    | 0.4        | 0.4                 | 100.0                 |
| **Total**      | **551**   | **100.0**  | **100.0**           | **100.0**              |

(Source: own study based on research under the project: ‘Dialog’ - project ‘Organizational improvement of universities of the future UNIFUT.PL’ (Decision No. 0146/DLG/2017/10))
The results of the study show that the respondents to a very large extent (31.4%) and quite large extent (40.1%) believe that universities should carry out similar missions. This means that the understanding of the diversification of the strategy and mission of universities in Poland among managers and administrative staff is weak. The vast majority of respondents perceive university missions as similar.

Figure 1. Universities should implement similar missions

(Source: own study based on research under the project: ‘Dialog’ - project ‘Organizational improvement of universities of the future UNIFUT.PL’ (Decision No. 0146/DLG/2017/10))

The analysis of the answers to the above question shows a certain differentiation of the approach between employees of public and private universities on the changes introduced by the Law 2.0 and their impact on the effectiveness of university management. 48.7% of respondents from private universities and 57.6% of respondents from public universities believe that the changes introduced by the Law 2.0 are conducive to more effective management of universities.

Table 2. Question 2. The changes introduced by the Law 2.0 are conducive to more effective management of universities in Poland

| Public universities | Frequency | Percentage | Percentage of valid | Cumulative percentage |
|---------------------|-----------|------------|---------------------|-----------------------|
| Very large          | 47        | 19.3       | 19.3                | 19.3                  |
| Quite large         | 93        | 38.3       | 38.3                | 57.6                  |
| Rather small        | 89        | 36.6       | 36.6                | 94.2                  |
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### Private universities

| Frequency | Percentage | Percentage of valid | Cumulative percentage |
|-----------|------------|---------------------|-----------------------|
| Very large | 45 | 14.6 | 14.6 | 14.6 |
| Quite large | 105 | 34.1 | 34.1 | 48.7 |
| Rather small | 136 | 44.2 | 44.2 | 92.9 |
| Very small | 11 | 3.6 | 3.6 | 96.4 |
| Don’t have an opinion | 11 | 3.5 | 3.5 | 100.0 |
| **Total** | **308** | **100.0** | **100.0** |}

(Source: own study based on research under the project: ‘Dialog’ - project ‘Organizational improvement of universities of the future UNIFUT.PL’ (Decision No. 0146/DLG/2017/10))

47.8% of respondents from private universities and 40.2% of respondents from public universities believe that the changes introduced by Law 2.0 do not favor more effective management of universities.

**Figure 2. The changes introduced by the Law 2.0 are conducive to more effective management of universities in Poland**

(Source: own study based on research under the project: ‘Dialog’ - project ‘Organizational improvement of universities of the future UNIFUT.PL’ (Decision No. 0146/DLG/2017/10))
Table 3. Question 3. The Rector plays a leadership role at the university

|         | Frequency | Percentage | Percentage of valid | Cumulative percentage |
|---------|-----------|------------|---------------------|-----------------------|
| Very large | 194      | 35.2       | 35.2                | 35.2                  |
| Quite large | 229     | 41.6       | 41.6                | 76.8                  |
| Rather small | 96      | 17.4       | 17.4                | 94.2                  |
| Very small | 32       | 5.8        | 5.8                 | 100.0                 |
| Total    | 551      | 100.0      | 100.0               |                       |

(Source: own study based on research under the project: ‘Dialog’ - project ‘Organizational improvement of universities of the future UNIFUT.PL’ (Decision No. 0146/DLG/2017/10))

Figure 3. The Rector plays a leadership role at the university

The survey shows that 76.8% of respondents believe that the Rector should play a leadership role in the university, while 23.2% of respondents have the opposite opinion. It is commonly understood that the Rector's role is of a leadership nature, which is in line with the direction of changes in the academic order introduced by Law 2.0.

6. Conclusions

To sum up, in an attempt to summarize the issues of professionalization of university management in Poland, it can be stated that it is a multi-threaded and complex process that requires, above all, time and changes in the perception of the academic ethos. A common area, both for universities and enterprises, can be the...
area of innovation. It is in this area that we should look for opportunities for the development of Polish universities. Strategies of research-oriented universities should shape a pro-innovative organizational framework (Rytmeister, 2009). The contemporary missions of universities are formed primarily in two dimensions: traditional and contemporary. Traditionally, the mission is shaped by values taken from the roots of the culture-forming role of universities. The contemporary dimension is primarily the relationship of the university with the socio-economic and political environment. The effect of the changes in the academic order in Poland will be the growing diversification and strategic polarization of universities. Diversification will involve the differentiation of the strategies and missions of various Polish universities (Górnia, 2017). The priority will be the development of world-class science and innovation in as many scientific disciplines as possible. Public policies within the science system in Poland are a significant area of professionalization of university management. It is important that public policies are consistently aimed at rewarding scientific and research achievements so that the best Polish universities are able to compete for talents and manage to attract the most talented scientists. The strategy of research and teaching universities will be to search for a balance between these two aspects of activity. Technical universities can also move towards the development of innovation, applications and applied sciences, and economic universities can move towards relationships with business and practical education. An important element in the professionalization of university management is the activity of universities, consisting in the implementation of innovative solutions in various areas of operation, e.g. scientific, didactic, administrative or management. These activities must contribute to the improvement of the quality of education, scientific activity or administrative management of the university. Attracting talents and creating the most modern IT infrastructure, which has an obvious positive impact on e-learning development due to increase of effectiveness of communications (Bilan et al., 2019), should be a strategic investment in the science and higher education system. Employing and retaining talented research workers is possible not only by creating conditions for research and development for them, but also by ensuring competitive remuneration and appropriate motivation.

Authors Contributions

The authors listed have made a substantial, direct and intellectual contribution to the work, as can be seen. They read and agreed it for publication. Conceptualization, Ł.S., R.S., P.B. and K.K.-M.; methodology, Ł.S., R.S., P.B. and K.K.-M.; software, Ł.S., R.S., P.B. and K.K.-M.; validation, Ł.S., R.S., P.B. and K.K.-M.; formal analysis, Ł.S., R.S., P.B. and K.K.-M.; investigation, Ł.S., R.S., P.B. and K.K.-M.; resources, Ł.S., R.S., P.B. and K.K.-M.; data curation, Ł.S., R.S., P.B. and K.K.-M.; writing-original draft preparation, Ł.S., R.S., P.B. and K.K.-M.; writing-review and editing, Ł.S., R.S., P.B. and K.K.-M.; visualization, Ł.S., R.S., P.B. and K.K.-M.; supervision, Ł.S., R.S., P.B. and K.K.-M.; project...
administration, Ł.S., R.S., P.B. and K.K.-M.; funding acquisition, Ł.S., R.S., P.B. and K.K.-M.

**Conflict of Interest Statement**

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

**References**

Androniceanu, A., Kinnunen, J., Georgescu, I., & Androniceanu, A-M. (2020). Multidimensional analysis of consumer behaviour on the European digital market. In: Sroka, W. (ed.)*Perspectives on Consumer Behaviour: Theoretical Aspects and Practical Applications*, pp. 75-95, Springer. Doi: https://doi.org/10.1007/978-3-030-47380-8

Androniceanu, A. (2019a). The social sustainability of smart cities: urban technological innovation, big data management, and the cognitive internet of things. *Geopolitics, History, and International Relations* 11(1), 110–115. Doi:10.22381/GHIR11120197

Androniceanu A. (2019b). Using automated digital systems to thoroughly regulate social governance: monitoring and behavior modification through data-driven algorithmic decision-making. *Contemporary Readings in Law and Social Justice*, 11(1), 63-68

Antonowicz, D., Kwiek, M. (2015). The Changing Paths in Academic Careers in European Universities: Minor Steps and Major Milestones. In: T. Fumasoli, G. Goastellec, B.M. Kehm (eds.), *Academic Work and Careers in Europe: Trends, Challenges, Perspectives* (pp. 41-68). Cham: Springer International Publishing. Doi:10.1007/978-3-319-10720-2_3

Baker, M.J. (ed.). (1995). *Marketing. Theory and Practice*. London: Macmillan Business. Doi:10.1007/978-1-349-24260-3

Barnett, R. (1994). *Limits of competence: Knowledge, higher education and society*. Buckingham: SRHE and Open University Press.

Baugier, J., Vuillod, S. (1993). *Strategie zmian w przedsiębiorstwie*. Warszawa: Poltext.

Bilan, Y., Mishchuk, H., Samoliuk, N., & Grishnova, O. (2019). ICT and Economic Growth: Links and Possibilities of Engaging. *Intellectual Economics*, 13(1). Doi:10.13165/IE-19-13-1-07

Boitier, M., Rivièere, A. (2013). Freedom and responsibility for French universities: From global steering to local management. *Accounting, Auditing and Accountability Journal*, 26(4), 616-649.

Boitier, M., Rivièere, A. (2016). Changing Professions? The Professionalization of Management in Universities. In: J. Frost, F. Hattke, M. Reihlen (eds) *Multi-Level Governance in Universities. Higher Education Dynamics*, vol 47 (pp. 95-113). Cham: Springer. Doi:10.1007/978-3-319-32678-8_5

Çera, G., Cepel, M., Zakutna, S., & Rosza, Z. (2018). Gender differences in perception of the university education quality as applied to entrepreneurial intention. *Journal of International Studies*, 11(3), 147-160. Doi:10.14254/2071-8330.2018/11-3/13

Collini, S. (2012). *What are universities for?*. London: Penguin Books.
Dekker, J., Lybaert, N., Steijvers, T. & Depaire, B. (2015). The effect of family business professionalization as a multidimensional construct on firm performance. *Journal of Small Business Management*, 53(2), pp. 516-538. DOI:10.1111/jsbm.12082

Dubar, C., Tripièr, P. & Boussard, V. (2011). *Sociologie des professions*. Paris: Armand Colin.

Dzimińska, M., Fijałkowska, J., & Sułkowski, Ł. (2018). Trust-based quality culture conceptual model for higher education institutions. *Sustainability*, 10(8), 244-257. DOI:10.14254/2071-8330.2019/12-4/16

Górniak, J. (2017). Ustawa 2.0: partycyjny model istotnej zmiany regulacyjnej. *Nauka i Szkolnictwo Wyższe*, 2(50).

Hall, A., Nordqvist, M. (2008). Professional management in family businesses: Toward an extended understanding. *Family Business Review*, 21(1), 51-69. DOI:10.1111/j.1741-6248.2007.00109.x

Hewitt, A. (2012). 2012 Higher Education Survey: The State of Human Resources Effectiveness. Available online: https://thinkmissionexcellence.maine.edu (accessed on 26 September 2019).

Hladchenko, M. (2015). Balanced Scorecard – a Strategic Management System of the Higher Education Institution. *International Journal of Educational Management*, 29(2), 167-176.

Hoyle, E. (2012). Professionalization and deprofessionalization in education. In: E. Hoyle, J. Megarry, *World Yearbook of Education 1980: The Professional Development of Teachers* (Chapter 24). London: Routledge.

Howorth, C., Wright, M., Westhead, P., Alcock, D., (2016). Company metamorphosis: professionalization waves, family firms and management buyouts. *Small Business Economics*, 47(3), 803-817.

Kafel, T. (2013). Wymiary profesjonalizacji podmiotów ekonomii społecznej. *Białytn Ekonomii Społecznej*, 2. Available online: http://fundacja.egap.pl/mowes/wp-content/uploads/2013/02/BES-nr2_Artykul-3.pdf (accessed on 5 November 2019).

Kostiukevych, R., Mishchuk, H., Zhidebekkyzy, A., Nakonieczny, J., & Akimov, O. (2020). The impact of European integration processes on the investment potential and institutional maturity of rural communities. *Economics and Sociology*, 13(3), 46-63. DOI:10.14254/2071-789X.2020/13-3/3

Koźmiński, A. K. (2019). Uczelnie chcą kształcić elity. *Rzeczpospolita*. Available online: https://www.rp.pl/Opinie/302289847-Uczelnie-chca---ksztalcic-elite.html (accessed on 5 November 2019).

Kwiek, M. (2015). The unfading power of collegiality? University governance in Poland in a European comparative and quantitative perspective. *International Journal of Educational Development*, 43, 77-89.

Lockwood, N. (2005). *Talent Management Overview*. Available online: http://www.shrm.org/research/briefly_published/Talent%20Management%20Series%20Part%20III,%20Employee%20Engagement.asp#TopOfPage, p. 2 (accessed on 26 September 2019).
Mishchuk, H., Bilan, Y., & Pavlushenko, L. (2016). Knowledge management systems: issues in enterprise human capital management implementation in transition economy. *Polish Journal of Management Studies, 14*(1), 163-173. doi:10.17512/pjms.2016.14.1.15

Mokhube, D.K., Govender, K. (2016). The merger of historically disadvantaged tertiary institutions in South Africa: A case study of the University of Limpopo. *Cogent Business & Management, 3*(1), 125-133.

Penc-Pietrzak, I. (2003). *Analiza strategiczna w zarządzaniu firmą : koncepcja i stosowanie.* Warszawa: C.H. Beck.

Popławski, W., Markowski, M., Forkiewicz, M. (2016). Świadomość strategii i zarządzania w zarządzaniu uczelniami wyższymi na przykładzie szkół wyższych w Polsce. *Zeszyty Naukowe. Organizacja i Zarządzanie: Politechnika Śląska, 93*, 415-450.

Powell, W., Colyvas, J. (2008). Microfoundations of institutional theory. In: R. Greenwood, C. Oliver, K. Sahlin, R. Suddaby (Eds.), *Handbook of organizational institutionalism* (Chapter 11). London: Sage.

Rytmeister, C. (2009). Governing university strategy: Perceptions and practice of governance and management roles. *Tertiary Education and Management, 15*(2), 137-156.

Sikorski, C. (1995). *Profesjonalizm. Filozofia zarządzania nowoczesnym przedsiębiorstwem.* Warszawa: PWN.

Singh, M. (2001). Reinserting the Public Good in Higher Education Transformation. *Kagisano, CHE Higher Education Discussion Series, 1*, November, 8-18.

Sułkowski, Ł. (2013). Kulturowe uwarunkowania zmian organizacyjnych – cztery paradigmy. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu, 277*, pp. 322-330.

Sułkowski, Ł., Bednarek, M., Parkes, A. (2016). *Kulturowa zmienność procesów zarządzania.* Warszawa: Difin.

Sułkowski, Ł. (2016). *Kultura akademicka: koniec utopii?*. Warszawa: Wydawnictwo Naukowe PWN.

Sułkowski, Ł. (2017). *Fuzje uczelni: czy w szaleństwie jest metoda?* Warszawa: Wydawnictwo Naukowe PWN.

Sułkowski, Ł., Górniak, J., (eds.) (2019). Wstęp. In: Ł. Sułkowski, J. Górniak, *Strategie i innowacje organizacyjne polskich uczelni* (pp. 7). Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.

Sułkowski, Ł., Bogacz-Wojtanowska, E., Wrona, S., Jędrzejczyk-Kozioł, A., Góral, E., & Wojdyła, K. (2019). Unsustainable power distribution? Women Leaders in Polish Academia. *Economics and Sociology, 12*(3), 162-180. doi:10.14254/2071-789X.2019/12-3/11

Sułkowski, Ł., Przytula, S., Borg, C., & Kulikowski, K. (2020). Performance Appraisal in Universities – Assessing the Tension in Public Service Motivation (PSM). *Education Sciences, 10*(7), 174.

Wydawnictwo Naukowe PWN. (2019). *Profesjonalizacja.* Available online: https://sjp.pwn.pl/sjp/profesjonalizacja;2508545 (accessed on 5 November 2019).