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New ideas and solutions or just rediscovering old truths? Management role in modern world

Nowe pomysły i rozwiązania czy po prostu odkrywanie na nowo starych prawd? Rola zarządzania we współczesnym świecie

ABSTRACT

Management is a multidisciplinary science, because it uses the best principles from other disciplines to create a solid theory and be consistent with current business reality. The process of adapting to new (business and natural) environmental conditions opens the door to new ideas and viewpoints that enrich, and in some cases replace, previous administrative guidelines and managerial implications. The aim of this paper is to present and discuss the major ideas used both in theory and practice to explain phenomena of modern business world. The major finding of this paper is that, these theories were true long ago, but they do not represent the ideal continuity of teaching new management, and they need to be adapted to the new paradigmatic reality. These are also aspects that contribute to the apotheosis of knowledge and finally the formulation and generation of new realities. In this sense, we can consider the new manager to be a knowledge activator. Today, management is based on conceptual foundations that require knowledge in new fundamental areas, efficiency, decentralization and even a proecological approach. Then, new requirements, people's leadership and quality of life are part of a new role in the 21st century, which management has to fulfill. Without the knowledge gained in the history of managing organizations, society would suffer what it has already overcome in the past.

Keywords: theories, management, organization, schools, teaching, learning.

STRESZCZENIE

Zarządzanie jest dyscypliną multidyscyplinarną, ponieważ wykorzystuje najlepsze zasady z innych dziedzin, aby zbudować solidną teorię, która będzie spójna z rzeczywistością. Proces dostosowywania się do nowych warunków środowiskowych otwiera drzwi dla nowych pomysłów i punktów widzenia, które wzbogacają, a w niektórych wypadkach zastępują wcześniejsze wytyczne menedżerskie i teorie zarządzania. Celem artykułu jest prezentacja i dyskusja głównych idei wykorzystanych zarówno w teorii jak i w praktyce zarządzania, by wyjaśnić zjawiska współczesnego świata biznesu. Teorie te były prawdziwe dawno temu, ale nie reprezentują idealnej ciągłości nauczania nowego zarządzania, w którym musi się ono (zarządzanie) dostosować do nowej rzeczywistości paradygmatycznej, czyli aspektów, które przyczyniają się do apoteozy wiedzy i formułowania oraz generowania nowych rzeczywistości. W tym sensie możemy uznać, że nowy menedżer jest aktywatorem wiedzy. Dziś administracja opiera się na fundamentach koncepcyjnych, które wymagają wiedzy w nowych podstawowych obszarach, wydajności, decentralizacji. Potrzeba nowych modeli, przywództwa ludzi. Nowe wymagania, menedżer biznesu, administracja i jakość życia są częścią nowej roli w XXI wieku. Bez wiedzy zdobytej w historii zarządzania organizacjami społeczeństwo ucierpiałoby na tym, co udało im się pokonać w przeszłości.

Słowa kluczowe: teorie, zarządzanie, organizacja, szkolnictwo, nauczanie, uczenie się.

INTRODUCTION

Theories of the past, their refinement or obsolescence, help to understand the business environment of the 21st century (Sulich & Zema, 2017a). This business environment is complex and multidimensional sphere, where interdisciplinary approach can be applied to bridge theory and practice (Sulich & Zema, 2017b).

Management theories arose from the specific conditions that surround an organization at a given time; and given that these conditions are constantly changing, it is expected that theories will evolve to respond to the new needs of the management environment. Sometimes this business environment is more related to the natural environment problems, and through this dimension affect the sector or organizations and create new management paradigms (Kamińska, Parkitna, Rutkowska, Górski, & Wilimowska, 2019). Based on such changes innovations and social changes are introduced in organizations (Kamińska & Rutkowska, 2019).

Management is also an eclectic discipline, that is, it takes the best of the principles from other areas to form a solid theory that is consistent with current reality (Thier, Tyli, & Żmija, 2020). The process of adaptation to new environmental conditions opens the door to new ideas and points of view, which enrich, and in some cases replace, the previous business management and administrative guidelines.

1. CLASSIC THEORIES OF ADMINISTRATION

The old realities differ from those of today, however, an understanding of history allows us to build better theories and concepts that align with current demands, basing the construction of new ideas on those which were considered in the past, their repercussions and conclusions (Drucker, 2017).

Beginning with the industrial revolution, the need arose to develop theories, principles, and models that would facilitate the understanding of reality and that would allow changes and improvements to be introduced with the least degree of uncertainty in the results.

1.1. FORERUNNERS OF SCIENTIFIC MANAGEMENT THEORY

The first of them was Robert Owen (England, 19th century), who contemplated the role of administrators as reformers, focused on improving the working conditions of workers, which would bring improvements in production and profit levels (Hartz, 2018).

On the other hand, Charles Babbage, in addition to sharing many of Owen's ideas (Lewis, 2007), was one of the first to propose the division of labor, based on an operational analysis that emphasized training and whose objective was to increase capacity and efficiency.

1.2. THE THEORY OF SCIENTIFIC ADMINISTRATION

This theory emerged in the early 20th century largely out of the need to increase productivity, caused by labor shortages (Evans & Lindsay, 2008).

Its maximum expositor was Frederick Winslow Taylor (1856–1915). Main works: *Shop Management* and *The Principles of Scientific Management*.

His observations came from studies of time and movement in assembly lines, which allowed him to divide each operation into its parts, and then design and implement more efficient methods to execute each activity. He proposed better pay to the most productive workers, according to a system called by him "differential rates", which was "scientifically correct".

Contributions: Among the inheritances of this theory, we have faster assembly lines; application of its efficiency principles to other non-industrial organizations; emphasis on job design as well as scientific selection and development of workers. From the Scientific Administration the professionalization of this discipline begins.

Limitations: Its main deficiency lies in the perception of the human being as a "rational" entity whose primary motivation was focused on satisfying their physical and economic needs, leaving aside both the desire to achieve satisfaction at work and in their social environment as part of a group, such as the frustrations and tensions caused by not obtaining favorable results in these areas. On the other hand, by highlighting productivity and profitability, it resulted in abuse of workers and customers.

1.3. CLASSICAL ORGANIZATION THEORY

Its ideas addressed the management of complex organizations (Kamińska et al., 2019). Henri Fayol (1814–1925). Considered the founder of this school. He was the forerunner in the systematization of administrative behavior. He stated that there are a series of common aspects in any successful administration that are capable of identification and analysis in order to have reliable forecasts and administrative methods that ensure favorable results.

Fayol's administrative division (Evans & Lindsay, 2008) has largely remained to our day. It consists of 6 interrelated functions: 1) product technique, production and manufacturing; 2) commercial, purchase of raw materials and sale of products; 3) financial, acquisition and use of capital; 4) safety, protection of employees and property; 5) accounting; and 6) administration.

1.4. TRANSITION THEORIES

These appear thanks to the classical school but with a greater focus on human relations and organizational structure.

Mary Parker Follet (1868–1933). Her primary conviction was the need for the group for the individual to manifest as an integral being (Evans & Lindsay, 2008). In it there was a common purpose that everyone sought to satisfy, the hierarchical differences being only "artificial distinctions". She called her model "holistic" as a reflection of that search for the all-inclusive.

This idea and the vision of the organization as “the co-operative company between individuals who work together as groups”, together with the perception of the worker as a fundamental strategic factor of the company, were her greatest contributions.

2. SCHOOL OF HUMAN RELATIONS

Following the verification that the proposals of the classical theory did not lead to total productive efficiency, nor did they generate the desired harmony at work, this school emerged as an attempt to improve the conditions of the worker as a human being.

2.1. THE MOVEMENT OF HUMAN RELATIONS

The term human relations is frequently used to show the interaction between managers and subordinates. This movement is presented as a systematic way of knowing the social and psychological factors that produce successful human relationships.

Contributions: It promoted genuine interest in the workers, which would produce profits. The importance of administrative style was emphasized, which brought about a revolution in administrator training, focusing more on administrative skills than on technical skills. Interest in group dynamics was renewed.

Limitations: The Hawthorne experiments, the benchmark of this school, had many flaws in their design, so their results generate controversy. The conception of the “social man” advanced with respect to that of the “economic-rational man”, but it was not enough to describe the person in the workplace.

2.2. THE SCIENTIFIC APPROACH TO BEHAVIOR

The scientific method was incorporated into the study of the work environment by Mayo. Their concept of “social man” was taken further by Maslow and McGregor, who specialized in the study of behavior, and proposed the concept of “self-realizing man” (McGregor, 1960).

Contributions. The wealth of knowledge regarding individual motivation, group behavior, interpersonal relationships at work, etc. was enriched. As a result, managers improved the quality of treatment towards their subordinates.

Limitations. The full potential of this school has not been developed. One obstacle you continually face is managers’ resistance to accepting that they can be helped in dealing with other people. In addition both the terminology and the complication of these theories result in them being of little practical utility.

3. THE QUANTITATIVE SCHOOL

This school has had an important influence on the function of planning and control, product development, production scheduling, etc. (Sołoducho-Pelc & Sulich, 2020). Its limitations are the perception of administrators of this discipli-

ne, which is considered complicated and of a mathematical nature, incapable of integrating the psychological and behavioral factors present in the work (Song & Xie, 2019; Sulich & Rutkowska-Podołowska, 2017).

4. TEACHING AND LEARNING OF ORGANIZATIONAL MANAGEMENT

Organizations do not work automatically; they need people to provide for their leadership. Management is the key element in organizational performance and survival (Dean & Sharfman, 1996; Skivington, 1990). Daft (2008) stated: “Much of management’s job is the fight to make organizations function effectively. The work of society is done through organizations, and the management function is to make these organizations do their work”.

Managers, like organizations, have been influenced by values stemming from prevailing ideologies in society. Two of these contemporary ideologies based on the theories of McGregor (1960): Theories “X” and “Y”, have been described by Peters and Waterman (1982), as follows:

McGregor (1960) catalogued Theory X as “the presumption of mediocrity of the masses.” Its premises are: “(1) that the average man has an inherent aversion to work and will try to avoid it if he can; (2) that people, therefore, need to be forced, controlled, directed, and threatened with punishment so that they can put an adequate effort towards the ends of the organization; and (3) that the typical human being prefers to be directed, likes to avoid responsibility, has relatively little ambition and wants security above all else.” McGregor (1960) argues that theory X is not a straw man, “but a theory that materially influences the management strategy of a broad sector of American industry” (J. E. Kendall & K. E. Kendall, 1993).

Theory Y, in contrast, assumes: (1) that the use of physical and mental effort at work is as natural as playing or resting. The typical human being does not inherently dislike work; (2) that external control and the threat of punishment are not the only mechanisms to promote efforts towards the ends of the organization; (3) that the commitment to the fulfilment of objectives is a function of the rewards associated with the environment, of which the most important is the satisfaction of the ego, which can be the direct product of the effort directed towards the purposes of the organization; (4) that the average human being learns, under correct conditions, not only to accept responsibility but to seek it; and (5) that the capacity to exercise a relatively high degree of imagination, ingenuity, and creativity in solving organizational problems is broad, and not scarcely distributed among the population (McGregor, 1960, p. 95).

X and Y theories represent two opposite conceptions about the nature of work and of the human being. These ideologies coexist today and promote different behaviors among people at managerial levels.

These theories were true long ago, but they do not represent an ideal continuity for the teaching of the new management, where it must adjust to the new paradigmatic reality; that is, the aspects that contribute to the autopoiesis of knowledge and formulation and generation of new realities. In this sense, we could consider that the new manager is an activator of knowledge, facilitating to approximate a decision making of greater interpretive scope (Sołoducho-Pelc, 2017).

New management models and technologies have framed several innovative proposals and ideas that help a wide variety of managerial decision-making. Modern managers are exposed to competitiveness and many pressures regarding the speed of the movement and variation of the modern managerial world.

The management framework has changed: therefore, the management of the 21st century requires a profile of managing administrator- advanced, innovative, the new manager must take the lead and the administration as his main work tool, things are managed, the staff. It is led, for this reason the manager of the 21st century must be trained and educated in those competencies that the business management environment requires and requires him to have extraordinary skills, that is, out of the ordinary, because we are in an environment where change is a constant and we need to assume a new managerial reality day by day according to changes and modern ideas (Sołoducho-Pelc, 2014a).

Today administration is based on conceptual foundations, in need of knowledge in new basic areas, productivity, decentralization. There is a need for new models concerning leadership of people (Sołoducho-Pelc, 2015). There are new demands on the business manager. Administration and quality of life are part of the new role in the 21st century (Drucker, 2012).

In this century there is a reality that cannot be hidden. Leaders are needed to direct their own lives, and that of the companies they run; in a different way. The different research by authors worldwide presents an approach to characteristics, types and styles of leadership. Very few focus on form, on developing the skills necessary to move from being just the boss.

That is, that person can exercise leadership differently from the traditional type, manages to become a leader who really empowers his followers in order to do things through the tools that are provided through training; and, makes your staff motivated to want to do things (Castillo, 2016).

As Steven Covey puts it, things are managed, and people are led (Covey, 1991). This is the modern approach to management. Clearly differentiate between resource management and people management. The manager must be able to understand as a first step the playing field where the leading role is being played. For this it is important to analyze and know how managers have been trained and where we are go-

ing, in the future, with the particularities of the modern environment (Ikram, Sroufe, & Zhang, 2020).

Historical trends and the evolution of management itself are then the starting point for understanding the competencies that must be developed for the manager-leader of the 21st century (Ferasso, Wunsch Takahashi, & Prado Gimenez, 2018; Rothe, Rutkowska, & Sulich, 2018).

At this point, we could make a contrast, since at the beginning quality was not something essential in the companies at the time of manufacturing their products, but over time they all realized that every product needs to be of a good quality so that the client finds it attractive.

The existing competition in the market has contributed a lot towards increasing awareness concerning quality in modern businesses. Quality has many definitions and I think it covers different perspectives. For this reason, there is no established definition of quality. Dr. Deming suggests a radical new definition of the role a company plays. Instead of making money, you must stay in business and provide employment through innovation, research, constant improvement, and maintenance (Deming, 2017).

People or managers with habits of effectiveness based on high quality education, are the foundation in forming highly effective organizations. This is the reason that the development of these habits and academic training constitutes the basis for organizational effectiveness (Sulich, 2016). These capacities, without a doubt, are the necessary attributes for human organizations to be successful in the 21st century (Covey, 1991).

All the above-mentioned leads us to high quality in administration. Globally, high-quality management is a philosophy of progressive improvement, of responses to customer requirements and the expectations of the organization, currently the global implications are so important that in recent years the business world has been connecting environment to different global quality standards (J. E. Kendall & K. E. Kendall, 1993).

Quality management is one of the best tools a manager has. Having a quality management system, it allows the manager to demonstrate his leadership abilities. In addition, it allows you to have a better and closer relationship with your suppliers and customers (Torres, 2007).

Furthermore, we cannot ignore the fact that Social Management constitutes a strategic thought for the construction of alliances, which occur between the different sectors that have been acting in society in different scenarios, one from the other due to their activities (Sulich, 2017). These are contributing elements of information and participating in the different factors in the participatory planning processes to strengthen administrative development (Rutkowska & Pakulska, 2018; Zucatto et al., 2010).

Organizations are no longer the same, they must change, management must also be committed to change, assume and incorporate technology as a process center,

with modern characteristics that favor processes, guarantee quality and productivity (Onete, Chița, Vargas, & Budz, 2020; Tallman, 2008).

5. ROLE OF MANAGEMENT SCHOOLS IN THE NEW CENTURY

The real value of an academic career, which is also the case in management schools, is built on the permanent search for new methods, theories, schemes, procedures and approaches (Zema & Sulich, 2019). In addition, the repercussion of such a search on organizations is considered, given the multiplier effect through the service provided both with teaching and with consulting activities (Drucker, 2017).

Apart from research, which complements teaching by strengthening the teacher's knowledge and nurturing study programs with new knowledge, and implicit in the link of generic value, teaching is a natural activity and fundamental (Sołoducho-Pelc, 2014b). Teaching energizes knowledge by creating momentum that oscillates between positions that describe your entire sphere of influence. For example, from a mere logistics function it serves the purpose of disseminating and imparting knowledge to another person (Whetten & Cameron, 2015). This is of service to delineate the area of effectiveness of those who participate in said process due to the interest shown by generations of students and teachers in specific areas of management (Ryszawska, 2018).

Schools of management, due to their character as formers of national leaderships and shapers of leadership, contrast with other schools that participate in the productive activity of a country (for example, schools of economics, engineering, etc.).

They have the greatest responsibility and a unique opportunity to contribute to a select, first-class education, and just in time to meet the challenges of a world economy that is being changed by the vectors of technology and globalization.

Opportunities and threats influence any rational selection when determining the right balance in an academic career that may be developed in a management school (Sołoducho-Pelc, 2014b).

The arguments in favour of 'publish or perish' are visibly forceful and should not be ignored (De-Carli, Ferasso, Segatto, Andra, & Alves, 2017). Adding teaching to research, however, enhances human capital despite the reservations of those who see the development of an unprofitable cost benefit ratio on some occasions.

6. CONCLUSION

As a conclusion we can say that without the learning that has been built throughout history in the management of organizations, society would suffer what it has overcome in the past.

The construction of a successful management model is based on learning from the mistakes and results of past theories, since the systems are repeating cycles, therefore the

importance of management's ability to apply the continuous improvements of each one of the processes, correcting any process that is not operating according to its effective standards. Synergy makes the result of an organization different for each of its parts.

When referring to management, we must consider it as a process in which each process must be analyzed and studied separately in order to later fit them and adjust them to the needs of the organization.

Learning and teaching the role of management allows a company to achieve adequate coordination between its areas, to make its resources more efficient, to see the organization as a whole in which it is necessary to take care of each of its parts, the staff, the work environment and everything that can have an effect on achieving its goals.

REFERENCES

- Castillo, F. (2016). *Managing information technology*. Springer.
- Covey, S. R. (1991). The 7 habits of highly effective people. *National Medical-legal Journal*, 2(2), 8.
- Daft, R. L. (2008). *Management*. Cengage Learning.
- Dean, J. W. Jr, & Sharfman, M. P. (1996). Does decision process matter? A study of strategic decision-making effectiveness. *Academy of Management Journal*, 39(2), 368-396.
- De-Carli, E., Ferasso, M., Segatto, A., Andra, P., & Alves, F. S. (2017). The dilemma of industry-university cooperation processes within technology transfer offices: Evidence from three Brazilian case studies. In *Proceedings of the 25th Annual International Association for Management of Technology Conference IAMO*, 15-19 May 2016 (pp. 15-19). Retrieved from <https://ssrn.com/abstract=2966561>.
- Deming, D. J. (2017). The growing importance of social skills in the labor market. *Quarterly Journal of Economics*, 132(4), 1593-1640.
- Drucker, P. F. (2012). *Management: Tasks, responsibilities, practices*. Routledge.
- Drucker, P. F. (2017). *The practice of management. Modern economic classics-evaluations through time*. Harper Collins Publishers
- Evans, J. R, & Lindsay, W. M. (2008). *The management and control of quality* (7th ed.). South-Western College Pub.
- Ferasso, M., Wunsch Takahashi, A. R., Prado Gimenez, F. A. (2018). Innovation ecosystems: A meta-synthesis. *International Journal of Innovation Science*, 10(4), 24.
- Hartz, L. (2018). *The necessity of choice: Nineteenth-century political thought*. (3rd ed.) Routledge.
- Ikram, M., Sroufe, R., & Zhang, Q. (2020). Prioritizing and overcoming barriers to integrated management system (IMS) implementation using AHP and G-TOPSIS. *Journal of Cleaner Production*, 254, 120121. Retrieved from <https://linkinghub.elsevier.com/retrieve/pii/S0959652620301682>
- Kamińska, A. M., Parkitna, A., Rutkowska, M., Górski, A., & Wilimowska, Z. (2019). Economic determinants of the effectiveness of Polish enterprises. In Z. Wilimowska, L. Borzemski, & J. Świątek (Eds.), *Information systems architecture and technology: Proceedings of 39th International Conference on Information Systems Architecture and Technology, ISAT 2018*. Pt 3 (pp. 36-48). Springer.
- Kamińska, A. M. & Rutkowska, M. (2019). Model 3E a ekoinnowacje. In Z. Malara & J. Tutaj (Eds.), *Innowacje a dobrostan społeczeństwa, gospodarki i przedsiębiorstw: próba pomiaru* (pp. 209-216). Wrocław: Oficyna Wydawnicza Politechniki Wrocławskiej. Retrieved from <https://www.dbc.wroc.pl/publication/142340>
- Kendall, J. E. & Kendall, K. E. (1993). Metaphors and methodologies: Living beyond the systems machine. *MIS Quarterly*, 17(2), 149-171.

- Lewis, M. A. (2007). Charles Babbage: Reclaiming an operations management pioneer. *Journal of Operations Management*, 25(2), 248–259.
- McGregor, D. (1960). *The human side of enterprise*. New York: Mc Graw Hill.
- Onete, C. B., Chița, S. D., Vargas, V. M., & Budz, S. (2020). Decision-making process regarding the use of mobile phones in Romania taking into consideration sustainability and circular economy. *Information*, 11(10), 473. Retrieved from <https://www.mdpi.com/2078-2489/11/10/473>
- Peters, T. J. & Waterman, R. H. (1982). *In search of excellence: Lessons from America's best-run companies*. New York: Warner Books.
- Rothe, R., Rutkowska, M., & Sulich, A. (2018). Smart cities and challenges for European integration. In *Proceedings of the 4th International Conference on European Integration 2018, ICEI 2018: May 17–18, 2018, Ostrava, Czech Republic. Pt 3* (pp. 1240–1246).
- Rutkowska, M. & Pakulska, J. (2018). The level of eco-innovations in EU member states. In *Proceedings of the 4th International Conference on European Integration 2018, ICEI 2018: May 17–18, 2018, Ostrava, Czech Republic. Pt 3* (pp. 1247–1255).
- Ryszawska, B. (2018). Sustainable finance: Paradigm shift. In A. Bem, K. Daszyńska-Żygadło, T. Hajdikova, & P. Juhasz (Eds.), *Finance and sustainability. Proceedings from the Finance and Sustainability Conference, Wrocław 2017* (pp. 219–231). Springer International Publishing.
- Skivington, J. J. (1990). *Computerizing production management systems. A practical guide for managers*. Chapman & Hall.
- Sołoducho-Pelc, L. (2014a). Koncepcja i wdrażanie strategii w małych, średnich i dużych przedsiębiorstwach. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, 366, 470–484.
- Sołoducho-Pelc, L. (2014b). Competitive advantage: The courage in formulating objectives and expansiveness of a strategy. *Procedia - Social and Behavioral Sciences*, 150, 271–280.
- Sołoducho-Pelc, L. (2015). Searching for opportunities for development and innovations in the strategic management process. *Procedia - Social and Behavioral Sciences*, 210, 77–86.
- Sołoducho-Pelc, L. (2017). The importance of trust within the organisation for the implementation of the strategic management process. *International Journal of Contemporary Management*, 16(4), 237–261.
- Sołoducho-Pelc, L. & Sulich, A. (2020). Between sustainable and temporary competitive advantages in the unstable business environment. *Sustainability*, 12(21). Retrieved from <https://www.mdpi.com/2071-1050/12/21/8832>
- Song, M. & Xie, Q. (2019). How does green talent influence China's economic growth? *International Journal of Manpower*, 41(7), 1119–1134.
- Sulich, A. (2016). Żonglerka jako narzędzie wspomagające pracę w grupie projektowej. In J. Nowakowska-Grunt & I. Miciuła (Eds.), *Wybrane aspekty w zarządzaniu organizacją XXI wieku: innowacje – gospodarka – społeczeństwo* (pp. 215–225). Katowice: Wydawnictwo Naukowe Sophia.
- Sulich, A. (2017). Zielone miejsca pracy – diagnoza sytuacji studentów i absolwentów Politechniki Wrocławskiej. *Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach*, 9(315), 139–149.
- Sulich, A. & Rutkowska-Podołowska, M. (2017). Green jobs and changes in modern economy on the labour market. In R. Borowiecki & J. Kaczmarek (Eds.), *The propensity to changes in the competitive and innovative economic environment: processes – structures – concepts* (pp. 87–94). Kraków.
- Sulich, A. & Zema, T. (2017a). Społeczna odpowiedzialność biznesu a zielone miejsca pracy. *Marketing i Rynek*, 11(24), 579–591.
- Sulich, A. & Zema, T. (2017b). Problem zarządzania ryzykiem we współczesnej filozofii techniki. In M. Olkiewicz, M. Woźniak, M. Drewniak, & J. Chmura (Eds.), *Nauka i biznes – wyzwania XXI wieku. Cz. 2* (pp. 8–21). Waleńców: Wydawnictwo Naukowe Intellect.
- Tallman, S. (2008). Global strategic management. In M. A. Hitt, R. E. Freeman, & J. S. Harrison (Eds.), *The Blackwell handbook of strategic management*. Wiley-Blackwell.
- Thier, A., Tyli, I., & Żmija, K. (2020). Management of water resources and their consumption within the circular economy. In M. Dziura, T. Rojek, & A. Jaki (Eds.), *Restructuring management: Models – Changes – Development* (pp. 203–226). Toruń: Towarzystwo Naukowe Organizacji i Kierownictwa „Dom Organizatora”.
- Torres, C. A. (2007). *Introduction to the administration of organizations*. Mexico: Pearson.
- Whetten, D. A. & Cameron, K. S. (2015). *Developing management skills – Global Edition*. New Jersey: Pearson.
- Zema, T. & Sulich, A. (2019). Relations in the interorganizational networks. *International Journal of Social Sciences & Educational Studies*, 6(1), 111–121.
- Zucatto, L., Ferasso, M., Evangelista, M., (2010). A importância das exportações para o desenvolvimento local da fronteira Noroeste do Rio Grande do Sul e do Extremo-Oeste de Santa Catarina. *Revista Portuguesa e Brasileira de Gestão (Lisboa)*, 9, 97–111.