Quality management of higher education: Innovation approach from perspectives of institutionalism. An exploratory literature review

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Abstract: External pressures, like political, economic and technological factors, as well as competition at labour and education markets have challenged higher education institutions to reconsider their organizational structures and internal management approach to provide better quality education, to attract more potential stakeholders, as well as to sustain their positions at local and global markets. The responsiveness of universities to such pressures and uncertainties is diverse. There are dozens of research identifying current best quality management practices. However, this paper makes an emphasis on the analysis of one of the streams of economic science—institutionalism as an innovative approach to effective internal management in HEIs. Institutionalism is a direction in economic thought that places the main emphasis on the analysis of institutions, which is defined as norms, restrictions and principles of behaviour (“rules of the game”) within an organization. In general, institutionalism is so diverse that its study as a whole is almost meaningless because there are different trends in institutionalism itself. Some prefer...
isomorphic elements of new institutionalism, whereas other stress on processes of
differentiation between universities. Nevertheless, despite a growing tendency of an
isomorphic strategy of successful universities and effective organizational strate-
gies, there is a lack of research conducted on the application of elements of
institutionalism in higher education, as a successful approach to effective internal
quality management. The central idea of this paper is to analyze the existing body
of literature related to the application of institutionalism in higher education
through systematic literature review.

Subjects: Business, Management and Accounting; Quality Management; Management
Education; Innovation Management; Organizational Change; Higher Education Management

Keywords: quality management; higher education; institutionalism; institutional theory;
organizational change; literature review

1. Introduction

The issue of quality and quality assurance of higher education has gained so much attention and
interest not only from the business sector but also there is considerable interest to the concept of
quality among academies of HEIs and experts of external bodies as accreditation agencies. The
reason for such interest relates to current globalization and knowledge-based economy, where
quality graduates build the backbone of the nation’s economy and contribute to its development.

The concept of “quality” has changed in the 21st century. According to Rosen (2015), it is not
compliance and focus is on R&D. From perspectives of higher education, it is rather an effort of
organization management to harmonise the whole system in a way, where departments, divisions,
faculties, chairs as well as university and faculty administration, teaching staff strive for achieve-
ment of organizational missions and goals in the context of quality assurance of education in
harmonized, relaxed working environment. Some scholars state that the research activity of
teaching staff is a significant trigger of change (Fullan) to rationalize directions and performance
of the learning process. In the same manner, academic freedom for HEIs is crucial to provide
academic excellence. Most authors argue that “quality” is customer’s satisfaction, meeting their
expectations (Athiyaman, 1997), which in its turn guide an organization to improvements. In the
context of higher education, quality is student and employers’ satisfaction with the quality of
educational services.

The reason for our interest in learning institutionalism in higher education stems from ideas of
new institutionalists emerged in the late 90s of the XX century. New kind of institutionalism “neo-
institutionalism” considers an individual as the basis of economic development, in the same
manner, the aim of the economic system as in-depth development of man. Representatives of
neo-institutionalism, in contrast to the old institutionalism (who mainly studied the role of collec-
tive institutions—trade unions, corporations, the state), study, first, the activities and behaviour of
the individual. An individual is defined not only as a part of the productive forces (this aspect and
activity are reflected by the person-worker) but also the subject of economic, first of all, production
relations (relations of economic property).

In this regard, currently, due to globalization and advanced hi-tech industry and unstable labour
market, the main product of higher education institutions is a competitive graduate population
(Heinz-Dieter & Powell, 2018).

In the context of research on how higher education institutions react to internal and external
changing trends and policies, how they position themselves on unstable domestic and global
markets, as well as how potential stakeholders (students, employers) are attracted, it is of utmost
importance to focus on institutional theory.
According to institutionalists, higher education institutions have played a crucial role in building the backbone of society, economy, government and science (Heinz-Dieter Meyer and Powell, 2018).

There is limited availability of research literature on the application of institutionalism in higher education to effective internal quality management. Literature in management states that quality improvements is provided when the relationship between managers and employees (in our case, university administrators and potential stakeholders as well as faculty staff) is based on trust and confidence, where everyone feels their contribution to the whole decision-making process, where leaders generate an environment in which group members are engaged in achieving organization’s mission and objectives. Hamrol defined the level of success in quality management mainly relies on individuals and type of management, which compromises 50% (Hamrol, 2005). Understanding the compliance of individuals’ work with organization’s objectives, provision of comfortable and motivating working environment, acting like a coach, advisor, consultant, not a rule or dictator as well as cooperation with organization members for quality improvement and inspiration of trust among individuals, finally, quality performance, quality-oriented leadership all encompass crucial features of leadership for quality management (Hasham, 2018).

Continuous improvement of quality in higher education depends on an approach of management in constructing the content of educational programmes, in making favourable working conditions for faculty, as well as in building a mutual and effective bridge between university administration and faculty members.

Evaluation of only students’ satisfaction in defining the quality of education is not enough. Further deep studies to determine other factors affecting the improvement of quality are vital. In this regard, an assessment of university quality management requires further deep actions to successfully provide quality education. Effective management is a guarantee of quality education, thus effective management requires innovation and innovative approaches to successfully handle the issue of quality education. In this regard, the application of elements of institutional theory as a prerequisite to innovation management of quality education is vital.

2. Literature review
Theory of institutionalism has been developed in three phases: the first old institutionalism dates to the end of the 1940 s and the beginning of 1950 s, the second stage (1960s and 1970s) focused mainly on mechanisms of shaping the structure of organizations. Some studies suggested that once an organization reached its legitimacy and outlined its distinctive isomorphic feature, the organization kept its blooming and growing (DiMaggio et al., 1991). New institutionalism is defined as “rules of the game” in society or, “man-made” restrictive frameworks that organize relationships between people, as well as a system of measures ensuring their enforcement. They create the structure of the motivations of human interaction, reduce uncertainty, organize everyday life.

The interest in learning institutional approach in the field of higher education has emerged from the shift of universities orientation to the market-oriented regime. New wave popularity of institutional theory comes to the end of the 1980s and 1990s when higher education institutions have become more autonomous, not connected to the government. Introduction of new reforms and adaption of business-like management approaches in higher education undoubtedly have brought major challenges for HEIs in terms of quality management. According to De Boer and Goedegebuure (1995) and Clark (1998) (in Santiago & Carvalho, 2008) principles of New Public Management is strengthening institutional autonomy of universities through decentralization of decision-making processes, however, the introduction of elements of private sector management somehow has affected the traditional pattern of the current management.

In the past, only lecturers used to be responsible for the quality of education as their personal obligation (M.Seyfried, M.Ansmann, P.Pohlenz, 2019), but now the quality is on the agenda of other external parties like governmental bodies, HEIs and business sector. Quality has become a crucial
issue of institutional quality management as a part of organization responsibility. Stensaker (2008) and Birnbbaum (2000) referred to the rising discussion of “quality management” as “trend” and “management fad” of current days. Undoubtedly, today HEIs exercise institutional pressure on providing quality services and on preserving competitiveness at the national and international markets. In this respect, in the global literature, scholars discuss the issue of “quality management” from perspectives of institutional theory, and mainly emphasize the concept of “institutional isomorphism” developed by DiMaggio and Powell (1983). Indeed, the study of elements of institutionalism can help to determine organizational structures of universities and their response to the external environment. Since HEIs resemble each other in terms of organizational structure, the study of quality management in higher education from perspectives of institutionalism is vital.

In addition, in the light of rapid development of technologies, new forms of communication via digital technologies between students and instructors, new types of learning like massive open online courses (MOOCs) or e-learning, the rise of academic mobility of students, staff, international mutual cooperation, partnerships have triggered universities to reshape their policies and management strategies as well as to apply organizational change and institutionalism.

The growing importance of higher education institutions in shaping the backbone of society, policy, economy and culture, has led to a tremendous expansion of higher education and science globally. Following, Schofer and Meyer (2005) pointed out that the expansion of universities worldwide demonstrates a large amount of isomorphism. Scholars assume that in case of mimetic isomorphism simply coping the best practices of outside field without considering the internal peculiarities of the organization can lead to some implementation challenges, which leads in its turn to less effective quality management.

However, by the rise of a new trend, global governance, like standards of the Bologna process have emerged to fulfil the gaps left by the weakened role of national governments. Besides, national bodies and policymakers attempt to set their missions, strategies via isomorphism. Many universities have recognized the necessity of organizational change and new institutional forms in compliance with technological changes and growing instability at labour markets in the context of skills requirements. In this regard, it is worth to note the significance of innovation management to quality assurance of education.

Classic scholars Meyer and Rowan claimed that if quality management is introduced because of external pressures and requirements, like governmental regulations, the outcome will be no efficient and there will be nothing to do with internal organizational changes. According to them, values, behaviour and structure of higher education institutions are shaped by an external environment. Thus, institutionalism can be a useful tool for policymakers and quality managers to determine appropriate organizational structures and their response to the external environment. Since HEIs resemble each other in terms of organizational structure, the study of institutional isomorphism is crucial. DiMaggio and Powel (1983) developed three types of isomorphism to figure out the main differences of organizations based on institutional pressures: coercive, mimetic and normative isomorphism. According to Greenwood et al. (2011) institutional theory encompasses behaviour of individual and collective actors within an organization, where individuals’ behaviour depends on institutions and the impact of their actions on organizational change.

Overall, the reason for our theoretical study of institutional processes in quality management is to develop a kind of literature guideline to make HEIs understand the significance of institutionalism, isomorphism and organizational changes for effective quality management which will have a positive impact on organizational change and performance improvement.

Thus, understanding elements of institutionalism and isomorphism as well will direct HEIs to operate effectively and professionally. Several theoretical and research frameworks lend themselves
to analyzing the impact of institutional theory on organizations’ performance and competitiveness. However, little is known about the application of institutional theory in the field of higher education institutions. Already available research on institutional issues for studying the nature of universities is based on concepts of new institutionalism dated in the 1970s and 1980s. Taking into account the significant importance of studying institutional theory in higher education in quality assurance of education, a number of research works have been dedicated to exploring the full potential of institutionalism in tertiary education. One of them is an analysis proposed by Cai et al. (2015) about the application of organizational (sociological) institutionalism in higher education. The authors attempted to fill the gap about insufficient studies of institutionalism in higher education, by providing a review of more than 90 articles specific to higher education policy and management.

A review presented by Cai et al. (2015) outlined the first application of institutional theory in higher education dated to 1990. Overall, the research covered the period between 1990 and 2014 and demonstrated the significant rise of the stable study of institutional theory in tertiary education. In the same way, the current review paper made an attempt to review global literature through encompassing all areas of study dedicated to higher education between 2015 and 2019.

3. Research approach and methodology
The research paper collected materials dated between 2015 and 2019 since systematic literature analysis for the period between 1994 and 2014 is already available. The data comes from Web of Science Core Collection database. The reason for investigating our research question in Web of Science Core collection is it is the most respective database in the world, which provides scientific sources and research materials in all disciplines of science, integrated through citation. There is an editorial committee responsible for the selection of the best research works to ensure high-quality scientific information. Web of Science core collection is a global network of the best research, which encompasses all fields of science between nations, languages, terminology and period. The leadership position of core collection is its index citation, popular among 7000 subscribing institutions of the world, with 1 billion searchable citations in more than 250 disciplines. The first publication reported in the database comes from 1900. Collection of the best content materials, which meet all criteria of core collection demonstrate the originality of our research results. There are more than 127 000 journals, 70 000 books and 12 000 conference papers, reported in the database periodically monitored for quality. Thus, the results of our research are valuable.

The study paper searched all published articles using the following keywords: organizational change, institutional theory, institutionalism, isomorphism, institutionalization, and institutional logics (Cai et al., 2015). However, we did not narrow the scope of journals. We systematized our found results in the following way: one for defining main issues discussed by authors; and the second for outlining how often topics if institutionalism is cited in an academic world.

4. Research findings and discussion
Quality management is the effective management of all processes within an organization, prevention of problems rather than failure detection. An innovative approach to quality management plays an increasingly crucial role in running a sustainably quality performance, that is committed to the expectations and needs of potential stakeholders. University administration and faculty staff should feel pressures of productivity challenges, organizational changes and quality compliance in accordance quality standards.

As far as quality management is concerned, the paper attempts to study the application of new approaches towards effective management of quality in higher education from perspectives of institutional theory. In this point, major key concepts of the business sector in effective quality management have been paraphrased in the context of higher education. Please refer to Figure 1 (developed by Author based on Murad & Rajesh, 2010).
To eliminate the presented gap in the relationship between university management and faculty, there is a need for the application of elements of institutional theory to make an effective organizational change in quality management of higher education. As already been mentioned, we can bring an organizational change, if we eliminate the gap between Administration and Faculty staff. The capacity of an organization and readiness to changes in the external environment directly related to the organizations’ management system.

While the search for publications within set keywords, the paper followed definite stages of analysis to make a qualitative overview of literature research in institutionalism. Firstly, the paper made a general overview of the number of publications provided for the period between 2015 and 2018 (Figure 2). For the effective study, the search has been narrowed to the field of higher education in the business and economics categories. Besides, for our research on discussed issues and applied practices presented in documents, we selected publications in “English” and “Russian” languages. The second stage of our research provides systematized collected materials by main discussed issues of analyzed articles, as well as data regarding objects of discussion (Appendix A). In the third part of our systematic research, the paper highlights the number of publications related to higher education and the number of citations per each keyword. We concentrated our attention on papers published in categories of “Management”, “Education Educational Research”, “Business Finance”, “Business”, “Economics”. In the final analysis, the scientific significance of the paper is demonstrated by provided data regarding times of citation, titles of journals and their impact factors, which in its turn will serve as guidelines for young researchers to learn about issues of institutional theory in higher education.

Figure 2 presents the number of publications from 2015 to 2018 related to the application of institutional theory in higher education as an approach to effective management. Data provided for the period between 1990 and 2014 illustrate a moderate rise in the number of institutional theory publications in higher education (Cai, Yuzhuo, Johannes Mehari, 2015). However, a slight decline in publications is also reported. Nearly half of the documents have been published in 2017.
The second figure illustrates a moderate rise of publications in “organizational change” in “Management” field in 2016, which constitutes nearly a fifth of the total.

Kezar (2001) argues that HEIs are exposed to changes and are the most vulnerable types of institutions to the external environment, therefore, it is important to understand why these changes occur, what changes and what circumstances of the change. The importance of applying an evolutionary model of change is it encompasses external factors, takes into account the slow speed of the change and structural-process feature of change, finally, counts the connection of change with resources and strategic features. Authors debate the vulnerable position of liberal education in today’s 21st century, where huge demand is mainly for professional education programmes. Nevertheless, authors advocate that without liberal art programmes, with single technical education it is impossible to build in students' high spirit and mind for lifelong learning and to prepare future educated citizens and managers. Morphew (Morphew, 2009) highlighted that a key strong point of US education system is institutional diversity, which meets demands of the diverse student population and maintains its position in a turbulent and unpredictable environment. In their work, Baker and et al., applied an evolutionary model of change, identifying key answers to questions “why” change occurs, “what” change and “how” change happens. When answering the questions:

Within “why” change occurs: an assessment between external factors and the organization itself is crucial to understand.

Within “what” change: according to Kezar minor improvements and evolutionary change in nature are defined.

Within “how” change: understanding of “responsiveness” to change, that is the organization’s reaction to changes.

As a result, new organizational structures, processes, missions, values and cultural changes will take place in an organization. However, despite the advantage of an evolutionary model as dependent on external factors, it does not examine the internal factors of an organization. Thus, to some extent, a need for an institutional change of HEIs management stems from external forces like economy, technology, governmental regulations and reforms, demands of stakeholders and sponsors. Since HEIs seem to be too vulnerable to external factors, an approach to institutional change should be carefully examined.

Arif Seema made a systematic analysis of universities based on Beer’s Viable System Model (Beer, 1983, 1984, 1989, 2004; Rios, 2010), which states the existence of only five subdivisions to effectively manage an organization. The first comprises of management and operational units. In the case of HEIs faculties as a body to provide the goods and services to potential customers, and the administrative offices provide support in carrying out all activities. To put it differently, teachers and learners are the main actors and faculties and departments are the operational units. Next important factor is the coordination of the whole system. It defines the current and future position or state of the organization. It consists of coordinators, head of departments, and all those who are engaged in the improvement of the organization performance: teaching and learning. As well as a body responsible for quality improvement and the Human resource department is crucial. Equally important integration of all units plays a significant role in preserving university management effective. It comprises of an office, which works in close connection with deans, directors and registrar to collect information for critical use and exchange critical information with the head office and external authorities to regulate the system. Additionally, the existence of the body responsible for collecting all critical information for policymaking and coordination all functions of the system to set the current and future strategy of required measures and to ensure sustainability in future. Finally, the division responsible for normative decisions, and for setting the ethos, the vision and the identity of the organization brings effective management.
However, there is a little room for possible threats. Allocation of resources could be a tool of power control for senior management, as well as the inappropriate application of knowledge by local management can stimulate manipulation of senior management to make uncertain decisions. The reason is not intentional actions, rather than poor interpersonal interactions. In addition, some middle management actors in the search for compliance with the leader’s needs, the security of their position and promotion underestimate the mission, needs and goals of an organization. With the same manner, the fulfilment of some gaps in terms of development and performance of an organization, the atmosphere becomes not relaxed and flexible, rather than bureaucracy takes place.

Higher education alike modern business organizations pursue quality service assurance and adoption of organizational changes. As far as the relationship between management and faculty is concerned, traditionally, faculty considers itself as a source/community of knowledge, whereas management understands itself as a decision-making body, which sees faculty as knowledge labour and demands obedience and compliance with needs. Lack of understanding between these actors, each communicate separately without interaction.

Alford and Friedland (1985) introduced the term institutional logics. They described various practices and beliefs within an institution to form how individuals engage contradictory fights. They defined three different practices of institutional order: capitalism, state bureaucracy, and political democracy. However, later in 1991, they defined “institutional logics” from perspectives of studying interrelationships between individuals, organizations and society (Alford & Friedland, 1985). According to them, institutional order owns its main logic, which directs its organizing principles and rules. The concept of institutional logics focuses on the relationship between organisational design and underlying beliefs and values.

The research on institutional logics in the field of higher education institutions belongs to Gumport, 2000. Slaughter and Rhoades (2004) conclude that: “Rather than simply seeking to maximize external revenue generation, academic capitalism could seek to enhance the social benefits of intellectual property and educational services”.

All things considered, the implication of hybrid logic (a combination of market/industry behaviour with social institutional logic) can ease management of tensions in university missions (Upton, Stevie & Jarrett, 2017). The research-based on key issues covered by papers reveals the frequent discussion of institutional change and diversity. The concept of organizational change and institutional quality culture as an innovative approach for effective management acquires attention, as well as the issue of institutional logics and isomorphism, touches the main key points of discussion.

To start with organizational change in higher education, 26 results were found. When we narrowed our search to categories of “Business”, “Management”, “Economics”, “Business Finance” and “Education Educational Research”, we had 10 publications in total. As for the concept of “institutional theory”, only 4 documents have been written in the field of education. As for “institutional change”, there are more than 300 publications in all research fields, 15 of which relate to topics of higher education and only 9 documents have recorded in the categories of “Management” and “Education Educational Research”. Out of 440 publications in all research fields, only 4 documents discuss the concept of “isomorphism” in higher education.

“Institutional logics” in the field of higher education has been studied in 10 publications (out of 176). We found 9 documents in English and 1 written in the Turkish language. We concentrated our focus on English-written documents.

While the search for materials in “institutionalization”, firstly we had 637 publications related to “all categories of the web of science”. After narrowing to higher education topic, we found 26
documents, out of which only 12 articles were published under the categories of “Education Educational Research”, “Business”, “Economics”, and “Management”. Below the deep detailed analysis of these acquired publications is presented. (Please see Table 1).

The study paper eliminated from our research proceedings papers and mostly concentrated on published articles since data about journals and frequency of citations a well as impact factor of journals have been collected to demonstrate the qualitative value of studied materials.

All collected materials have been coded in a way to systematize them by types of categories, journals and times cited. To illustrate, “2015. Hoover”—first digits stand for the year of publication, the second symbol is for the name of the author. Please refer to Appendix B.

The information presented in Figure 3 shows the number of total publications systematized by types of categories provided in the Web of Science database within initially set keywords, as well as information about citations. From the graph, it is clear that publications in “institutionalization” have the highest citation of over 30 times, while research in “institutional theory” has the lowest. However, one common point in the application of the former concepts in higher education is that both of them relate to “EER” category. Most significantly, citation data for materials in “isomorphism”, “institutional change” and “institutional logics” remained constant and a majority of them has been published in categories of “Management” and “EER”. Furthermore, times cited “organizational change” have been reported more than one fifth in the “Management” category.

This figure shows that issues of institutionalism in higher education are mostly related to “Management” and “Education Educational Research”, which in its turn demonstrates a little number of papers published in this topic.

The information presented in Figure 4 shows the frequency of cited materials in the web of science database from 2015 to 2019, in a selection of keywords of institutionalism applied in

| Table 1. Segmentation of collected materials by number and times of citations |
|-----------------------------|-----------------------------|---------------------------------|-----------------------------|
| Keyword                     | Total publications out of “other fields” | Web of Science categories | Sum of times cited |
| Organizational change in higher education | 10 publications/459 | Management—4, Education Educational Research—2, Business Finance—1, Business—1, Economics—2 | 24 |
| Institutional theory        | 4 publications/210          | Education Educational Research—6 | 1 |
| Institutionalization        | 8/637                      | Education Educational Research—6 (excluding 2 in Portuguese, 2 in Spanish), Business, Management, Economics—2 | 32 |
| Isomorphism                 | 4/440                      | Education Educational Research—3, Public Administration—1 | 11 |
| Institutional change        | 9/373                      | Education Educational Research—7, Management—2 | 21 |
| Institutional logics        | 8/179                      | Education Educational Research—5, Management—2, Interdisciplinary—1 | 11 |
higher education. Between 2015 and 2019, nearly more than 10 times the concept of “institutionalization” has been cited; this was the highest citation of all other keywords, applied in the research. There was an inverse correlation between citation data for the term “institutionalization” from 2016 to 2017 compared to the information given for 2018 and 2019.

In 2017, the trend for “institutionalization” reached its peak and remained constant until 2018. As for publications in “institutional change” and “institutional logics”, there were fluctuations in the citation. The figure illustrates a dramatic rise in the citation for articles written in “isomorphism” in 2018.

The most significant decrease in the citation table was for “institutional theory”, which demonstrates once the more outmost significance of this research for scholars. In 2018, “organizational change” had the highest citation, while at the same time there was the lowest reference to it in 2017. As can be seen from the table, there was a slight increase in the number of citation until 2018, except for “institutional logics” which had an unstable reference data.
Overall, according to the average annual growth rate, there is a tendency of interest rise in studying elements of “institutional theory” in higher education, as an innovative approach to quality management of education. However, no citation is reported for application of “institutional theory” in higher education during the studied period, except for 2019. Since the research has been carried in the middle of 2019, we were not able to evaluate and analyze data for 2019.

To sum up the discussion section, the increasing demand for quality education, the growing accountability of HEIs to the society and the decreasing government funding have lead HEIs to reconsider their policy and to implement effective quality management procedures. The decrease of the state interference and bureaucratic procedures, an increase of university autonomy have led university management to be more accountable for the quality and for the intra-university decision-making processes. In the course of new trends and challenges in a competitive environment, different types of organizations have emerged. There is a growing awareness among university administration and quality managers on the importance of reconsidering the existing organizational structure to be accountable for the quality and to preserve competition potential. In this regard, the current review paper can add the theoretical value to the existing global and regional literature about the importance of studying elements of institutional theory in shaping the organizational structure of universities and surviving in a competitive market-oriented environment. Since HEIs resemble each other in terms of organizational structure, the study of institutional theory is crucial. As well as, since the present review has not been only limited to a particular number of journals in higher education, a broad picture of increasing interest in institutional theory can be obtained. Following, the acquired data on citation report can also provide deep theoretical insight into the value and significance of research studies for academics and practitioners. It is worth to note, that the current paper is the first and most important attempt of studying institutional theory in higher education at the regional level. In the light of new public reforms being implemented in Kazakhstani higher education system, undoubtedly, universities in Kazakhstan are facing institutional pressure in pursuit to quality educational services and to competitiveness at the national and international markets. In this respect, providing a wide range of global, respectful and quality studies on the issue of quality management of higher education from perspectives of institutional theory, can assist Kazakhstani university administrators and managers to analyze and to determine effective organizational structures to be responsive to the external competitive environment.

5. Conclusion

To summarize, the results of the research paper provides valuable information about available literature analysis for academics, scholars, as well as for candidates of a PhD degree programme as guidelines to study the concept of institutionalism in higher education. Today, HEIs are facing economic, political and social challenges of globalization in positioning itself at the labour and education arena. The university administration has realized greater importance of effective quality management to ensure quality education and competitive graduates to potential stakeholders. Since the product of higher education is the backbone of the whole country and society, the need for an innovative approach to reconsider current existing quality management system has emerged.

Research on the history of institutionalism reveals an assumption, that being as a part of society and governmental structure, HEIs as an institute is responsible for quality assurance of educational services acquired by members of society as well as for meeting expectations and need of society individuals.

Systematic literature review reveals that this approach from perspectives of institutionalism is a new and innovative approach to quality management of education. Application of elements of the new approach in quality management will bring to light both academics and managing bodies of HEIs in ensuring quality education. Further research analyzing the practical implication of institutionalism in HEIs as a management approach is also necessary to concretely investigate empirical findings where managers of HEIs successfully apply the studied managerial approach.
As a result of literature research, we have witnessed a shortage of studies in institutionalism in the field of higher education, however, according to results of citation report, there is a growing interest to studies in this particular topic.

The academic value of this paper is that it has provided a greater understanding of the concept “institutionalism”, “institutional theory” and other its components. Our research opens new research questions in terms of theoretical and empirical studies, since findings of the paper demonstrated a considerable number of publications available in all categories of the web of science database, whereas only less than one-twentieth of total studies in institutionalism encompass issues of higher education.

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### Appendix A. Table 2: Issues of analysis in the collected articles published between 2015 and 2019

| Author | Central issues | Objects |
|--------|----------------|---------|
| **2015** | | |
| Hoover E., Harder M. K. | Organizational change, meta-ethnography | Synthesis of peer-reviewed papers in organizational change and sustainability |
| Baker, Vicki L.; Baldwin, Roger G. | Organizational change and evolution, institutional diversity | US Liberal arts colleges (Albion College, Allegheny College, Kenyon College) |
| Lockett, A., Wright, M., Wild, A | Institutionalization of a new organizational practice | UK higher education |
| Slater, R., Pearson, V., Warren, J. | Institutional change to curriculum design, production teams | The Open University |
| Ward, Hsuying C., Lu, Ming-Tsan P., O'Connor, Brendan H. | Bottom-up change and faculty collaboration as a prerequisite to institutional change | University faculty learning community |
| Xie, L. L., Huang, C., Wei, Y. G. | An ideal model of modern higher education, political empowerments, economic drivers, institutional policy | China's high education modernization |
| **2016** | | |
| Arif, Seema | Quality improvement tool, organizational development, process management via creative innovation | Private universities in Pakistan operated as business bodies and owners. |
| Haque, M., TitiAmayah, A., Liu, L. | Organizational growth, vision, organizational readiness for change | HEI in Southern California |
| Huang, Rui-Ting | Resistance to change in mobile and organizational learning | Employees with mobile English learning experience |
| Levin, John S., Aliyeva, A., Laurencia, W. | Institutional instability and identity change, new government policies institutional norms | HEIs formerly community colleges in the provinces of British Columbia and Alberta |
| Kohoutek, Jan | Institutional quality cultures, managerial style—regenerative culture, academic style—reproductive culture, internal institutional configuration | Universities in the Czech Republic |
| Aslan, Imran; Gunes, Pinar | Institutionalization, quality of education | Bingol University in the east of Turkey. |
| Fay, Daniel L.; Zavattaro, Staci M. | Organizational actors, organizational branding and marketing policies, publicness, university performance | HEIs in the United States from 2006 to 2013 |
| Croucher, Gwilym; Woelert, Peter | Institutional isomorphism, Vertical and horizontal differentiation, isomorphic change | Australian public universities |
| Storey, Valerie A.; Richard, Brendan | Institutional change, development of a collaborative environment, Organizational change/support, External institutional support | HEIs involved in the Carnegie Project |

(Continued)
## Appendix A. (Continued)

| Author | Central issues | Objects |
|--------|----------------|---------|
| Dee, Jay; Leisyte, Liudvika | Organizational change as a learning process, organizational performance | Academics and managers of the selected university |
| Adserias, Ryan P, Charleston, LaVar J., Jackson, Jerlando F. L. | Organizational diversity, leadership style, institutional diversity | 10 cases of leadership styles |
| Martin-Sardesai, A., Irvine, H., Tooley, S., et al. | Organizational change, performance management, management control systems, rankings, quality | Australian university |
| Volchik, V., Maskaev, A., Savko, P. | Organizational and institutional change, New Public Management approach, Original Institutionalist approach, quasi-market environment | Higher education in Russia |
| Acer, Ebru Karatas; Guclu, Nezahat | Isomorphism, Quality versus the quantity of education, Organizational model developed by Birnbaum (1988) concerning how colleges work, and by Bolman and Deal (2003) on organizational structure. | The policy of public universities, Turkish public universities |
| Paquibut, Rene Ymbong | Institutional quality standards, quality assurance, strategic management, institutional accreditation | Higher education institutions in Oman |
| Striedinger, A | Management; diversity; politics, organizational institutionalism | Austrian universities. |
| Ju, W | New institutionalism, policy orientation of HEIs, the modern university system, higher engineering education, transformation | HEIs in China |
| Reegard, K | The institutionalisation of vocational education and training; service sector, institutional-theoretical framework | Vocational education and training (VET) in the service sector in Norway |
| Lewing, Morgan; Shehane, Melissa | Service-learning institutionalization in higher education, university philosophy and mission | Independent colleges and universities of the Gulf Coast Region of the United State |
| Wadhwani, R. D., Galvez-Behor, G., Mercelis, J. | The driver of institutional change, academic entrepreneurship, the relationship between academia and society, | |
| Armstrong, Mary A.; Javanovic, Jasna | institutional change, Intersectional Facilitators, key institutional characteristics | 18 universities that received large NSF advance Institutional Transformation (IT) grants |
| Kaskie, B., Walker, M., Andersson, M. | Institutional change/programmes designed for ageing employees | 187 colleges and universities across the United State |
| Mas, X, Pastor, L., Merina, M. | Performance learning activity | University of Catalonia |
| Mampaey, Jelle; Huisman, Jeroen | new institutional theory; institutional logics, stakeholder management | European universities |

(Continued)
| Author                        | Central issues                                                                                                                                                                                                 | Objects                                                                 |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| Pruiken, Insa                | the new management model of science as “entrepreneurial university”, mode of negotiation, organizational autonomy, strategic management                                                                            | Karlsruhe Institute of Technology                                      |
| Upton, Stevie; Warshaw, Jarrett B. | Institutional logic, Research, teaching, engagement with external communities (industry, workforce, economy), mixed strategy for cross-case analysis—analysis of university policy and accreditation self-study reports     | public research universities: Stony Brook University, University of California-Berkeley and UIC.                                      |
| Zheng, G., Shen, W., Cai, Y. | multiple logics, state-led model, market orientation, regulated academic autonomy.                                                                                                                           | Chinese doctoral education system                                      |
| Taylor, Alison; Kahike, Renate | community service-learning, hybrid logics                                                                                                                                                                   | Canadian higher education                                               |
| de Castro Casa Nova, S. P., Costa Lourenco, I., Leitao Azevedo, R. F | Impact of institutional change, organizational identity and image, application of institutional theory                                                                                                       | HEI in Europe, faculty perceptions of an organizational image during institutional change |
| Valchik, V.; Savko, P. O., Maskaev, A. I | Institutional change, vertical management structure, academic reorganization, ongoing centralized and bureaucratic approach, institutional reform                                                                   | Russian higher education system, representatives of reorganized universities |
| Turner, Lauren A.; Angulo, A. J | Application of institutional theory to define higher organizational strategies of universities, diversity,                                                                                                     | Education policy in the United States                                  |
| Trechsel, L. J., Zimmermann, A. B., Graf, D. | institutional change; higher education policy, change management, top-down and bottom-up policy, agents of change                                                                                           | higher education institution in Switzerland, the University of Bern       |
| Elken, Mari                  | institutionalization; EU education policy; transnational actors                                                                                                                                              | European Qualifications Framework Advisory Group, EQFAG)              |
| Bischof, Lukas               | Quality assurance, isomorphic influence, the European model                                                                                                                                                 | The higher education system of Kazakhstan, Moldova and Russia           |
| Lee, Ruth Vance; Kelly, Rosemarie | institutional isomorphism and stakeholder salience, institutional influence                                                                                                                                    | Irish HEIs                                                             |
| Liu, Cui; Cai, Yuzhuo        | Triple Helix model loosened control of the central government, balanced interaction of local government, industry, and university, market-oriented economy                                                        | Shenzhen Special Economic Zone                                         |
| Aksom, H.                   | Organizational responses, management, bureaucracy, publishing policy, institutional complexity                                                                                                                   | Ukrainian publishing policy                                             |
Appendix B. Table 3. Segmentation of publications by types of journals, the web of science categories and citation

| Publication | Times cited | Web of Science Category/Research Area | Journal/impact factor | Types of document |
|-------------|-------------|--------------------------------------|-----------------------|-------------------|
| 2016. Arif  | 3           | Management, Business                 | Business process management journal | Article           |
| 2016. Haque | 3           | Management / Business & Economics    | Leadership & organization development journal / 1.7 | Article           |
| 2016. Huang | 3           | Management / Business & Economics    | Journal of organizational change management / 1.573 | Article           |
| 2017. Dee   | 2           | Management / Business & Economics    | Learning organization            | Article           |
| 2018. de Castro Caso Nov | 0     | Management/Business & Economics      | International journal of organizational analysis | Article           |
| 2017. Adserias | 3    | Education Educational Research      | Race ethnicity and education / 1.728 | Article           |
| 2015. Vicky B. | 2    | Education Educational Research      | Innovative higher education      | Article           |
| 2017. Martin-Sardesai | 6   | Business Finance / Business & Economics | British accounting review / 3.885, | Article           |
| 2018. Volchik | 0     | Economics / Business & Economics    | Journal of institutional studies  | Article           |
| 2017. Volchik | 1     | Economics / Business & Economics    | Journal of institutional studies  | Article           |
| 2017. Acer   | 1           | Education & Educational Research    | Educational sciences-theory & practice / 0.782 | Article           |
| 2018. Turner | 0           | Education & Educational Research    | Harvard educational review / 4.151 | Article           |
| 2017. Paquibut | 0    | Education & Educational Research    | Quality assurance in education    | Article           |
| 2017. Striedinger | 1 | Political Science; Women’s Studies | International feminist journal of politics / 1.771 | Article           |
| 2017. Ju     | 0           | Humanities, Multidisciplinary; Social Sciences, Interdisciplinary | Proceedings of 4th international conference on education, language, art and intercultural communication | Proceedings Paper |
| 2015. Lockett | 24        | Business; Management / Business & Economics | British journal of management / 4.619 | Article           |
| 2016. Levin  | 4           | Education & Educational Research    | Canadian journal of higher education | Article           |
| 2018. Trechsel | 1       | Education & Educational Research    | Higher education policy / 1.478   | Article           |

(Continued)
| Publication          | Times cited | Web of Science Category/Research Area | Journal/Impact Factor                                      | Types of Document       |
|---------------------|-------------|--------------------------------------|-----------------------------------------------------------|-------------------------|
| 2018. Elken         | 0           | Education & Educational Research      | European educational research journal                     | Article                 |
| 2017. Reegard       | 1           | Education & Educational Research      | Journal of vocational education and training              | Article                 |
| 2017. Morgan         | 1           | Education & Educational Research      | Christian higher education                               | Article                 |
| Lewing              |             |                                      |                                                           |                         |
| 2016. Kohourek       | 1           | Education & Educational Research      | Higher education quarterly                                | Article                 |
| 2016. Imran A.       | 0           | Business; Economics                   | 3rd International Conference on Business and Economics (BE-ci) | Proceedings Paper       |
|                     |             |                                      |                                                           |                         |
| 2016. Fay Daniel     | 7           | Public Administration                 | Public administration review / 5.765                      | Article                 |
| 2016. Croucher       | 4           | Education & Educational Research      | Higher education / 3.42                                   | Article                 |
| 2018. Bischof        | 0           | Education & Educational Research      | Conference on Future of Higher Education—Bologna Process Researchers Bucharest, Romania Nov 27–29, 2017 | Proceedings Paper       |
| 2018. Lee            | 0           | Education & Educational Research      | 12th International Technology, Education and Development Conference, Valencia, Spain | Proceedings Paper       |
|                     |             |                                      |                                                           |                         |
| 2017. Wadhmani       | 4           | Management & organizational history   | Management                                               | Editorial Material       |
| 2015. Slater         | 4           | Education & Educational Research      | Open learning                                            | Article                 |
| 2017. Armstrong      | 2           | Education & Educational Research      | Journal of diversity in higher education / 1.657         | Article                 |
| 2016. Storey         | 1           | Education & Educational Research      | Journal of applied research in higher education           | Article                 |
| 2015. Ward           | 1           | Education & Educational Research      | Journal of applied research in higher education           | Article                 |
| 2017. Kaskie         | 0           | Education & Educational Research      | Innovative higher education                              | Article                 |
| 2017. Mas            | 0           | Education & Educational Research      | 3rd International Conference on Higher Education Advances, Valencia, Spain | Proceedings Paper       |

(Continued)
| Publication | Times cited | Web of Science Category/Research Area | Journal/impact factor | Types of document |
|-------------|-------------|--------------------------------------|-----------------------|-------------------|
| 2017. Mampaey | 7           | Education & Educational Research      | Studies in higher education / 3.359 | Article           |
| 2017. Pruisken | 3           | Interdisciplinary                     | Historical social research / 0.409 | Article           |
| 2017. Upton   | 1           | Education & Educational Research      | Journal of higher education policy and management / 1.31 | Article           |
| 2017. Zheng   | 0           | Education & Educational Research      | Higher education / 3.42    | Article           |
| 2018. Liu     | 0           | Management                            | Science and public policy / 2.051 | Article           |
| 2018. Aksom   | 0           | Management / Business & Economics    | International journal of educational management | Article           |
| 2017. Taylor  | 0           | Education & Educational Research      | Canadian journal of higher education | Article           |
| 2015. L.L. XIE| 0           | Education & Educational Research; Social Sciences, Interdisciplinary | Proceedings of the 2015 international conference on social science, education management and sports education | Proceedings Paper |
