

# Chapter 9

## From Coopetition by Cooperation to Consolidation. Contemporary Challenges of University Mergers and Acquisitions



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**Abstract** Consolidations, acquisitions, and mergers of entities are very widespread managerial practices in the business sectors. They usually lead to increased efficiency and competitiveness of business entities, although they may also be aimed at limiting competitiveness through monopolization or oligopolisation. In the case of higher education institutions, mergers in most countries take place on the basis of an autonomous decision of the merger partners, often with the involvement of central and local authorities, employees of the universities themselves and other stakeholders. Universities are also subject to consolidation processes, both in the private and public sectors—in recent decades the number of mergers between universities around the world has increased significantly. The aim of the article is to identify the processes of coopetition, cooperation, and consolidation of universities in Poland. The article focuses on the complexity of mergers and acquisitions in the higher education sector. The research methodology is based on qualitative research—a comparative analysis of a case study of universities.

**Keywords** University management · Mergers and acquisitions · Consolidation · Coopetition · Cooperation

### 9.1 Introduction

So far, there is no extensive base theory in the merger and acquisition processes in the university sector, the existing ones are based on broad literature on the subject of mergers and acquisitions in organizations [1–12].

The progressing consolidation of the university sector in the world is associated with a profound transformation of the universities themselves and their relationship with the environment. The formula of the entrepreneurial university is more and

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more clearly beginning to supplant the traditional university based on the Humboldtian model. This means focusing on commercialization of research results, competition, and at the same time intensive cooperation between universities and the socio-economic environment. A manifestation of the creation of extensive cooperation networks can be the progressive internationalization and even globalization of the activities of universities that compete for students and researchers around the world, also through the development of international cooperation. The development of international rankings and global indexes allowing for the measurement and comparison of scientific achievements (e.g., Web of Science, Scopus, Google Scholar, Hirsch index, etc.) is the illustration and catalyst for globalization processes among universities. There has also been far-reaching commercialization of education, closely related to the empowerment and commodification of higher education. The consequence is a departure from the model of education of intellectuals, oriented towards common goods and universal ideals, to educating specialists who obtain “competence packages”, constituting intellectual capital in the labor market [13].

Relations between organizations on the market are complex, although it seems that they can be classified on the basis of the competition and cooperation criterion [14]. It would be possible to create a continuum—from competition, through cooperation and cooperation to integration. Competitive, inter-organizational relations would be dominated by competition, with a generally limited sphere of shared interest awareness and limited communication between competitors [15]. Cooperation would be a breakthrough as strategic aspects of cooperation appear alongside the area of competition between organizations [16].

The aim of the article is to identify the processes of cooperation, cooperation, and consolidation of universities. The article focuses on the complexity of mergers and acquisitions in the higher education sector. The research methodology is based on qualitative research—a comparative analysis of a case study of universities.

## 9.2 Literature Review

Divisions of consolidation processes are adopted according to various criteria, including the strategy and goals of the merger, the structure of the target organization, the organizational culture after the merger, changes in the ownership and founding structures and others. The basic forms of the organizations’ merging processes are:

- concentration of activities,
- integration of activities,
- coordination of the organizations’ activities [17].

The most common division is due to the consolidation strategy: horizontal and vertical mergers. Horizontal mergers occur when merging business entities produce similar products in the same sector. The motives of organizations merging horizontally are often: willingness to reduce costs, increase efficiency, economies of scale and increase economic security. The effects of this type of mergers are increased

concentration, market share and increased market power of the company. Among horizontal mergers, there are mergers expanding the market and mergers that expand the offer. In higher education consolidations, we usually deal with horizontal mergers, because the entities that undergo the process are most often universities.

Vertical mergers occur when organizations dealing with various phases of production or distribution of the same product are integrated. The motive for merging companies in vertical mergers is often to strive to increase control over the component stages of their operations. Vertical mergers take the form of a bottom-up vertical merger and top-down vertical merger, depending on whether the entity merges with its supplier or its recipient. In the education sector, vertical mergers occur when the university is merged with a different type of entity, e.g., a research institute, a post-secondary school or a hospital [18].

Piotr Szczepankowski, apart from horizontal and vertical mergers, distinguishes conglomerate, product and geographic (market) mergers. Forms and types of acquisitions can be threefold. One-by-one merger occurs when organizations that are close in size and structure absorb each other. One-at-a-time merger is a situation when organizations combine in the face of threats coming from the environment or when a larger enterprise takes over smaller ones. Lastly, many-at-once merger is a merger in which several organizations of diverse character are merging with another organization or seeking to purchase it in order to support their activity in the industry.

The form of the merger is influenced by the organization's goal and the manner of making the acquisition. We can talk about close cooperation, additive and complementary mergers. Close cooperation occurs when the partners of the merger use shared resources and devices, but each of them produces its own products. In the case of additive mergers, resources of the same type are used, and joint products are also created and sold. Finally, complementary mergers occur when common and jointly manufactured products are sold, based on resources that operate on the top-up basis [17].

In the case of organizations that cooperate with each other economically, e.g., are clients or suppliers, cooperation is natural and develops as a part of the unforced relationship. It is different in the case of relations between competitors in the sector or substitute sectors where competition is the primary form of relationship. Cooperation in such relations is often developed through contacts in industry organizations, employers, and business associations in which contacts are intensified and awareness of common interests and values increases. In the case of the university sector, cooperation is the most often developed relationship between universities operating in a similar market [19]. The dominant logic of cooperation is the strategic cooperation between organizations, which enables the implementation of significant, long-term joint projects, taking the form of, for example, consortia, strategic alliances, and joint ventures. Integration is a move towards merging the organizations that will allow participants of the process to benefit. Integration is in many cases the effect of tightening cooperation ties and many years of experience in the implementation of joint projects (Table 9.1).

It is worth noting that the proposed continuum, although it has a wide range, does not exhaust the entire complexity of inter-organizational relations. For example,

**Table 9.1** Types of relationships between organizations

| Relationship type criterion            | Competition  | Coopetition   | Cooperation  | Integration  |
|--|--|---|--|--|
| The dominant logic of the relationship | Competition, competition driving the development of market organization  | Competition in certain aspects, cooperation in others | Cooperation and cooperation in strategic aspects of the activity   | Merging organizations that bring benefits                      |
| Common interests and values            | Usually limited awareness of common interests and values   | Increased awareness of common interests and values    | High awareness of common interests and values  | High awareness of common interests and values                  |
| Cooperation strategies                 | Marginal, competition dominates  | Strategic elements of cooperation                     | Cooperation is a key component of the strategy   | Consolidation and integration strategies                       |
| Inter-organizational communication     | Limited, often stereotypical perception of a competitor  | Developing, expanding communication channel and range | Developed, associated with the coordination of joint ventures  | Developed, fixed, formalized and informal                      |
| Types of connections                   | Benchmarking, imitation, learning from a competitor  | Cooperation in selected shared areas                  | Implementation of joint strategic projects   | Purchase of shares, exchange of shares, structural connections |
| Forms of interdependence               | Competition similar to the perfect model, oligopolistic, duopolistic, similar to monopoly, intense and extensive competition | Associations, sector unions, employers' organizations | Strategic alliance<br>Joint venture<br>Cartel<br>Consortium<br>Economic union<br>Associations<br>Industry associations | Consolidations, mergers, and acquisitions                      |
| Examples of structures and markets     | Competitors in the sector  | Cooperators in the cluster, competitors in the sector | Cooperators in the cluster, competitors in the sector  | Cooperators in the cluster, competitors in the sector          |

Source Author's own study

acquisition processes that are hostile or top-down may not match the proposed scheme because they integrate the organization without the awareness of a community of interests and values, and communication openness.

Merging organizations is often preceded by the development of various forms of cooperation that can lead to integration. Such developmental form of transition from cooperation to integration allows testing various forms of cooperation, potential synergy, and economies of scale. In the case of universities, this is a tendency to create a network of scientific and didactic cooperation, taking on very diverse forms. Presenting these forms of cooperation as a string, at the end of which there is full integration of the organizations, the following models of university cooperation can be identified: informal cooperation, affiliation, consortium, common unit, federal structure, unitary structure.

While analyzing the relations between universities, it should be noted that quite rarely we deal only with competitive relationships even between entities in the same, higher education sector. It results from the essence of scientific ventures and education, which—according to the description of Robert Merton’s CUDOS ethos—are community-based, require cooperation between the research community and effective communication [20]. Therefore, the mission of the university is obviously based on cooperation, and not only competition between the sector entities and the environment. It seems then that although competition for rare effects and resources, such as prestige, scientific results, outstanding students and researchers, plays an important role in the activities of universities, the different forms of cooperation have the key meaning. G. Harman and K. Harman proposed diversification of models of university cooperation according to the integration criterion. The cooperation includes informal cooperation and affiliation, which are often forms of bottom-up cooperation in the field of scientific activity between researchers. Informal cooperation in the case of universities means the implementation of research or teaching projects with the participation of employees of both units, without signing contracts. It is also mutual support of universities in scientific improvement, education, and realization of implementations by universities or other entities surrounding universities. Affiliation belongs to the forms of cooperation when relatively stable cooperation between collective entities is established. Cooperation includes the implementation of selected objectives, with the simultaneous independence and organizational and program independence of entities in achieving the remaining objectives [21]. It is good practice to stimulate and develop such cooperation without creating organizational and legal barriers to the implementation of cooperation between researchers from various scientific centers. Cooperation with a higher degree of integration, which requires decisions at managerial level, is the coordination of activities in the form of a consortium or joint entity. Formation of formalized networks in the form of consortia is an example of coordinated and formalized cooperation that enables implementation of joint strategic projects. The next step towards integration is the creation of a common unit, for example, technology centers, design units, incubators, spin-offs, split-offs, and split-ups (Table 9.2).

Most researchers propose a clear distinction between cooperation and connection. Cooperation between business entities may cover various forms of alliances and joint

**Table 9.2** University cooperation models

| University cooperation models according to the integration criterion |             |            |              |                        |                   |
|--|-------------|------------|--------------|------------------------|-------------------|
| Informal cooperation   | Affiliation | Consortium | Joint entity | Federational structure | Unitary structure |
| Cooperation coordination merger                                      |             |            |              |                        |                   |

Source [21]

**Table 9.3** Connections between organizations

| Types of connections  |                                |  |
|-----------------------|--------------------------------|--|
| Cooperation           | Connection                     |  |
|                       | Acquisition (takeover)         | Merger                                     |
| Strategic alliance    | Share takeover                 | Merger by absorption                       |
| Joint venture         | Property takeover              | Merger by creating a new organization      |
| Cartel                | Other—contractual—arrangements | Merger as a result of individual contracts |
| Consortium            |                                |  |
| Economic union        |                                |  |
| Employer associations |                                |  |

Source [13]

ventures of two or more entities, such as strategic alliances, joint ventures, cartels, consortia, economic unions, and others. Connections can be divided into acquisitions and mergers. Acquisitions will include share takeovers, property takeovers and other contractual arrangements. In terms of mergers, there will be merger by absorption, merger by creating a new organization and merger as a result of individual contracts (listed in Table 9.3).

Cooperation and consolidation of enterprises can be embedded in the axis of coordination, i.e., coordination of organizational activities. Coordination is based on the fact that organizations make joint economic and market decisions so that their impact on the environment is greater. Coordination is related to similar problems as the merger and concerns financial, technical, strategic and organizational issues.

Coordination tasks include setting goals for implementation, standardizing actions and correcting the actions of the other party. There may be interdependencies adding up—in the case of organizations independent of each other, whose maintenance depends on the actions taken by each of them. Branches can remain independent, but their activities are always coordinated within the whole organization. Sequential interdependence means that one organization has the task to take action before the other can take part in the venture. The third type of interdependence is reciprocal interdependence—here the cooperation of companies has a very wide scope.

The typology of interdependence of goals may be a useful cognitive model, allowing for a description of the increase in the degree of coordination of cooperating universities (or other organizations). The growth of cooperation is usually followed by the development of its complexity. For example, universities, starting from the formalized cooperation to joint scientific and didactic projects, creating consortia and

joint entities, start to operate in a multifaceted manner, which requires the development of forms of coordination. Cooperation begins with the standardization of goals that are aggregated and implemented together. Gradually, as the advancement of cooperation increases, joint planning and coordination appear in the form of sequential implementation of partners' tasks. The third stage of interdependence is mutual coordination and corrections, which take the form of feedback. Such a fairly universal model of interdependence can describe both cooperation, coordination, and integration from the concepts of Harman and Harman [21].

### 9.3 Materials and Methods

The methodology of research is qualitative. The unstructured nature of the problem needs a deeper analysis, possibly with qualitative methodology. The method of the research is qualitative case study comparative analysis based on data from interviews, observations and documentation analysis. The sample is non-random and heterogenic to find commonalities between very differentiated cases of mergers of HEI's. There are 3 cases of mergers of universities (two Polish cases and one French):

#### 1. Merger of Cracow Medical University with the Jagiellonian University.

The case of a conservative merger indicating that the organizational identity is slowly changing. The values, culture, and identity are a huge intellectual and emotional capital that can be launched in the consolidation process of the universities.

#### 2. Merger of the Medical Academy in Łódź with the Military Medical Academy

The merger, thanks to which the two academies became a university. There were, however, numerous barriers—of financial, organizational, cultural and social nature.

#### 3. Merger of Université Joseph Fourier with Université Pierre Mendès France and Université Stendhal

Federal merger with a higher degree of integration of individuals than in the case of consolidation of the Jagiellonian University. In this case, all support structures have been designed and implemented by the universities and integrated entities.

### 9.4 Results and Discussion

The comparative analysis leads to several conclusions from which good practices can be derived (Table 9.4). At the planning stage, the most important good practices related to the effectiveness of the analysis of the effects of the merger, due diligence and planning a strategy for conducting the merger. At the implementation stage, communication and flexibility are of key importance allowing to make adjustments.

**Table 9.4** Comparative analysis of university mergers

| Merger areas           | Indicators             | Jagiellonian University  | Medical University  | University Grenoble Alpes  |
|------------------------|------------------------|--|---|--|
| Consolidation strategy | Decision of the merger | Rectors and senates of both universities, without the participation of the authorities<br>“ <i>the decision was made by the rectors—Koj and Szczeklik</i> ” (K1) | Rectors and Senates of the universities, at the initiative of Military Medical Academy, under the influence of changes in the regulations of central financing from the Ministry of National Defense<br>“ <i>the decision was made at the top, as in a military school, at the order [...] politicians stated that they would not finance the training of military doctors</i> ” (L3) | Rectors, senates, with the active participation of local authorities and representatives of the Ministry<br>“ <i>the decision was political, the rectors negotiated, in agreement with the regional authorities and the participation of the ministry</i> ” (G1) |
|                        | Goals of the merger    | 1. Reunification of the Jagiellonian University<br>2. Increase in the scientific position<br>“ <i>reunification of the Jagiellonian University</i> ” (K1)        | 1. Maintaining the educational achievements of military doctors<br>2. Strengthening the scientific potential of the Medical University<br>“ <i>absorption of Military Medical Academy by Medical University [...] “supposed” reduction of education costs</i> ” (L3)  | 1. “Critical mass” in the area of science<br>2. Position in international rankings<br>3. Rationalization of education networks<br>“ <i>Shanghai shock, but also the feeling that fragmentation is irrational</i> ” (G1)  |

(continued)



Table 9.4 (continued)

| Merger areas                        | Indicators                   | Jagiellonian University  | Medical University   | University Grenoble Alpes   |
|-------------------------------------|------------------------------|--|--|---|
| Stakeholders' opinion of the merger | Strategic analysis           | None<br>"there were no analyses, the reunification was treated as quite obvious, there was only a sharp negotiation process" (K1)              | None<br>"nobody analyzed anything, just a political decision" (L3)   | Strategic analysis and due diligence<br>"strategic analyses were still conducted at the stage of alliance and establishing a university connection, then it was also taken into account in the negotiation process" (G2)  |
|                                     | Strategic management process | None<br>"there were no formal strategies, after the negotiations legal documents and a new structure were prepared, which evolved anyway" (K1) | None<br>"there was no effective strategic management, the decision to absorb, and to try to get along" (L3)  | 1. Formal merger strategy<br>2. Strategic plan<br>3. Strategic controlling<br>"extensive strategic analysis process, which consisted in estimating the value of the merger, due diligence and maximizing potential benefits ... obviously after the negotiation process" (G1) |
|                                     | Before the merger            | Positive on both sides<br>"positive opinions prevailed in general, the more so that the soft option of the merger has effected" (K1)           | Many critical voices, merger treated as "forced"<br>"rather negative, in particular from Military Medical Academy employees, but opponents of the merger were also among MU professors" (L3) | 1. Staff: ambivalent opinions<br>2. Administration: concern<br>3. Students: weak participation<br>"mostly, cautious but positive opinions, students did not have a special opinion" (G1)  |
|                                     | During the merger            | Positive on both sides   | Many critical voices, merger treated as "forced"   | 1. Training programs<br>2. Satisfaction improvement   |

(continued)

Table 9.4 (continued)

| Merger areas    | Indicators          | Jagiellonian University  | Medical University   | University Grenoble Alpes  |
|-----------------|---------------------|--|--|--|
|                 | After the merger    | Positive on both sides   | Many critical voices, merger treated as “forced”   | 1. Generally positive opinions of the faculty, students and administration.  |
| Merger barriers | Merger barriers     | Loss of former Military Medical Academy positions<br>“the key obstacle was the threat of losing jobs at Military Medical Academy” (K1)   | The fear of losing jobs, fear of conflicts and chaos<br>“above all, animosities, loss of positions by people, struggles for locations, clinics and money” (L3)   | 1. Human fears, inertia of structures<br>2. Political negotiations<br>3. Decision-makers’ ambitions<br>“politics, they had to settle down in terms of position, ... this is one of the reasons why the Polytechnic has left the merger” (G1)                                   |
|                 | Overcoming barriers | Creation of Collegium Medicum and ensuring its autonomy, management positions in the Jagiellonian University<br>“maintaining the autonomy of Collegium Medicum as former Cracow Medical Academy, with new positions: Vice-Chancellor, Chancellor, Rector’s Plenipotentiaries” (K1) | Simultaneous top-down by the rectors<br>Attempts at central conflict resolution. Establishment of separate military medical department<br>“the first commissioner, rector, and the next one did not touch on internal tensions outside [...] in the middle it boiled, hence these structures of departments [...] the military-medical one” (L3) | 1. A lot of meetings, discussions and trainings<br>2. Leadership, indicating the sense of change<br>“as in France, the process of reaching out with the participation of the Ministry and provincial authorities, discussions, negotiations, until compromises were made” (G1) |

(continued)

Table 9.4 (continued)

| Merger areas  | Indicators            | Jagiellonian University   | Medical University   | University Grenoble Alpes  |
|---------------|-----------------------|---|--|--|
| Restructuring | Restructuring methods | <p>Change of structure by joining Collegium Medicum, headed by the new Vice-Rector, lack of deeper restructuring</p> <p><i>“the restructuring consisted in the incorporation of the entire structure of Cracow Medical Academy, as a largely autonomous structure” (K1)</i></p> | <p>Rector’s decisions, regulations limiting the budgets of individual units. Laying off excess teaching and administrative staff. Balancing the university budget</p> <p><i>“changes in the structure took place, but in fact it was quite superficial, the division remained [...] it is difficult to talk about methods, it was simply the rector’s orders” (L3)</i></p> | <p>1. Reorganization of the central structure</p> <p>2. Introduction of integrated university units</p> <p>3. Implementation of new IT systems</p> <p><i>“departments remained unchanged, but supporting units changed significantly”, “new funding, a lot of grants ... and hard science gained, social sciences lost” (G1)</i></p> |
|               | Restructuring results | <p>Expanding the structure with Collegium Medicum</p> <p><i>“limited, because the goal was to unite, not far-reaching changes in management” (K1)</i></p>   | <p>Reduced operating costs</p> <p>Increased scientific efficiency (parameterization 2013)</p> <p><i>“at least the university was patched and did not fall apart” (L3)</i></p>  | <p>1. Effective implementation of new IT systems</p> <p>2. Faster and more effective financial, documentation and personnel processes</p> <p><i>“significant change, it is much more efficient even in terms of IT system and financial settlements” (G1)</i></p>  |

(continued)

**Table 9.4** (continued)

| Merger areas        | Indicators          | Jagiellonian University   | Medical University  | University Grenoble Alpes   |
|---------------------|---------------------|---|---|---|
| Integration process | Integration team    | Rectors and vice rectors<br><i>“the integration team consists actually the former authorities of both universities.” (K1)</i>   | Authorities of both universities, not a specialized team<br><i>“there was no such thing, the authorities were just negotiating” (L3)</i>  | 1. Integration team<br>2. Participation of stakeholders<br>3. Integration plan<br><i>“it took a long time, many years, first a consortium and cooperation, then an agreement, information about the merger and many years of cooperation in teams at various levels” (G1)</i> |
|                     | Integration effects | Relative separation of Collegium Medicum and Jagiellonian University<br><i>“rather positive, although after almost 25 years the degree of integration could be bigger” (K1)</i><br><i>“A makeshift that lasts until today” (K2)</i> | Relative separation of old Military Medical Academy<br><i>“rather unstable unity [...] the division remained ... certainly an important thing that we have become a university, although we could be one without them ... maybe a year or two later” (L3)</i> | 1. Gradual integration is progressing<br>2. Rather positive effects<br><i>“we gained a new identification ... a bit based on contradictions, we improved in the rankings and organizationally ... and teams and students from abroad” (G1)</i>                                |

Source Author's own study (the respondents' markers are in the brackets)

Assessment of consolidation effects is possible after some time and depends on the assumed merger goals.

Entities joining the merger should have a real will to merge, a perspective of shared values and interests. The strongest integrating mechanisms are organizational culture and identity. The case of the conservative merger of the Jagiellonian University and the Cracow Medical Academy indicates that the organizational identity is changing slowly. The strong ethos and organizational culture of the Jagiellonian University and many centuries of medical science history at the Department of Medicine in Cracow constituted a strong organizational identity. The creation of the Collegium Medicum of the Jagiellonian University was a kind of “return to the matrix”, which strengthened the ethos, academic and organizational identity of the Jagiellonian University scientific staff, those of Collegium Medicum in particular. On the other hand, however, a certain minimum of changes in the formula of federal merger allowed Collegium Medicum to remain separate, retain a significant part of autonomy and important prerogatives of the authorities. As a consequence, the organizational system has not changed radically, neither in strategic, structural nor cultural aspects.

The analysis of this merger case suggests that values, culture, and identity are a huge intellectual and emotional capital that can be launched in the university consolidation processes. The natural mechanism of the territorial, value or historical continuity community is the basis for the permanent consolidation of the university.

The example of consolidation from Grenoble, just like the merger of the Jagiellonian University with the Medical Academy indicates that the return to the identity and heritage of the University of Grenoble from over 40 years was a strong integrator. The UGA merger is federal, although the degree of entity integration is slightly greater than in the case of the consolidation of the Jagiellonian University. In this case, all supporting structures have been designed and implemented as integrated, university-based units. We are also dealing with a greater degree of interaction and cooperation within inter-faculty matrix structures.

Through mergers, universities should also implement restructuring processes which lead to a more effective and more effective realization of the mission. This means a change in the organizational structure that will be associated with the consolidation process and with the optimization of management. It is possible to optimize many areas of management that accompany restructuring. UGA experience shows that consolidation restructuring may include, among others: implementation of process management and new IT systems. Consolidations should also develop effective human capital management. This is about the diversity of career paths, which occurred, for example, in UGA during the consolidation. Some employees specialize primarily in scientific activities and another part in didactic activities. Of course, it does not close the possibility of transfers between these groups and allows to combine these two activities, traditionally forming the core of the academic profession. There is also a third group of employees that is gaining in importance, namely academic managers. A good practice that serves the implementation of strategic goals is also the implementation of incentive systems, including assessment, remuneration, and development of employees, which substantially reward employees' achievements, work, and commitment. This leads to an increase in diversity within the academic

staff, but allows more effective assessment and appreciation of the effects of work. An important and integral part of the human capital management system should also be talent management, which applies to both employees and students and is a condition of belonging to the “world-class of universities”.

The perspectives of research on the consolidation processes of universities are leading towards large comparative international projects. The conclusions from such studies would refer to the higher education sector, but also to the broader processes of combining public organizations in general. Understanding the organizational and managerial conditions of effective mergers and connections between universities would help to improve the existing practice.

## 9.5 Summary

The article presents an introduction to the issue of mergers and acquisitions in the university sector. It is followed by a review of the literature on the subject. The types of relationships between organizations, university cooperation models, connections between organizations, typology of interdependencies and coordination of activities have been characterized. The next part of the article presents the material, methods, results, discussion, and summary.

The merger process of the universities involves managerial implications. The due diligence and strategy are crucial in planning and administration of the merger. In addition, clear mission and strategic goals are necessary. Mergers in the university sector are becoming increasingly important. Due to the strengthening of economies of scale and promotion of universities in rankings, public universities tend to consolidate. However, in the case of private universities, this depends on the competitiveness in the sector, the economic situation and the development strategy. The most important issue seems to be the barriers to consolidation of the university, which largely determine the success of the merger [13].

In the case of universities, the processes that should contribute to the success of the merger are as follows: planning of strategic consolidation and cultural integration of the universities. Good knowledge of the sector and universities are variables that increase the probability of successful mergers. Universities most often merge within one country and with similar entities, usually the ones they cooperate with, which means that the conditions of knowledge of the sector and the merger partner are met.

University mergers have become one of the popular strategies and methods of consolidation and restructuring in the sector of science and higher education.

There are several guidelines that can be used to effectively consolidate universities in the public sector:

1. Effective communication of consolidation values in the organization.
2. Exposing potential benefits to all interest groups.
3. Preparation of the strategy for the change process.
4. Selection and preparation of the integration team and change leaders.

5. Providing internal support for the change and overcoming the resistance of the main stakeholders of the university.
6. Organization of support and commitment of the managerial staff.
7. Securing the key resources for the consolidation process.
8. Institutionalization of change.
9. Flexible, entrepreneurial and coordinated implementation of the merger.

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