

THE WROCLAW UNIVERSITY OF ECONOMICS AND BUSINESS

FACULTY OF BUSINESS AND MANAGEMENT

mgr Nina Orzech

Doctoral supervisor: dr hab. Wojciech Cieśliński

Summary of doctoral dissertation

**Competitiveness of educational services
and a relational capital of vocational
schools**

Wrocław 2020

A challenge for many enterprises is increased competition, dependent on happening processes. Increasing competitiveness, constant pressure of other entities functioning in the same segment, new ways of rivalry, enterprise merging, strategical alliances, inordinately quick technological progress, and other changes of environment require focusing of efforts on targeted reactions to these changes. In a turbulent environment, an enterprise, which wants to succeed, has to know its rival environment and concentrate on developing a bond with different groups of clients. The importance of creating a partnership depends on the specific nature of an organization. Due to the development of technologies and other risk factors, clients' needs grow as well as their tastes, preferences. Because of that their loyalty to the enterprise is diminishing. Nowadays, organizations have problems with creating a bond with a client, because it is harder and much more expensive. Decisions of entities are intended to give a competitive edge against a rival enterprise. The advantages can exist only temporally and requires entities to adjust to the specific conditions of the environment. However, there are conditions of uncertainty on the enterprise market, as well as a market of educational establishments.

In the era of globalization, schools and their surroundings are turbulent, which results in positive and negative effects. In the conditions of demographic decline, strong competition and other competitiveness conditions included in the micro and macro environment, schools not only have to adapt to the changing environment but also face the challenges of the economy and the world. First of all, in order to meet market requirements, an up-to-date assessment of education and its relationship with globalization should be made in the light of economic changes, by showing its strengths and weaknesses, and then presenting the opportunities and threats arising from the environment.

Each educational institution operates in a changing competitive environment. The competitiveness of educational services is a natural element of continuous improvement and stretching of value chains.

Relational capital is a special factor conditioning the competitiveness of educational services. There is a need to analyze the functioning of these relationships in the organizational space of educational units. The analysis of these relationships between schools and their stakeholders is based on a certain degree and assessment of their dependence.

This doctorate focuses on creating research methods in order to develop a method assessing the conditions of the competitiveness of educational services. In particular, the research provides premises for developing a reference model of the competitiveness of educational services based on relational capital. This is possible by diagnosing the relational

capital of vocational schools. The practical goal of the research is to diagnose the competitiveness of educational services of vocational schools in Poland.

The main goal of this dissertation is to develop a reference model of the competitiveness of educational services in the field of vocational schools.

It was hypothetically assumed that the degree and assessment of vocational schools' relationships affects the competitiveness of educational units in the environment.

The main research problem is finding the answer to the question: What is and what determines the competitiveness of educational services?

The complexity of research issues implies the need to identify research hypotheses.

The competitiveness of services at the operational level is:

- a) flexibility, i.e. adjustment to a changing environment,
- b) creating a good school image,
- c) skills of the teaching staff,
- d) qualifications of the teaching staff,
- e) experience of the teaching staff,
- f) school location,
- g) good promotion of the school,
- h) obtaining funds from the EU,
- i) technical and technological potential of the school,
- j) good organization of work,
- k) efficient management,
- l) the school's potential for apprenticeships in enterprises.

The presented doctoral dissertation has repeatedly confirmed the justification of the subject of the thesis at all levels of the dissertation.

The phenomenon of competition is noticeable in business entities, as well as in educational units. In a turbulent environment educational entities that want to succeed must know their competitive environment and focus on building relationships between individuals and their stakeholders by creating organizational networks. The phenomenon that determines the competitiveness of educational services is relational capital, which is why there is a need to analyze the functioning of these relationships in the organizational space. The analysis of these relationships between schools and their stakeholders is based on a certain degree and assessment of their dependence. This is possible through the diagnosis of relational capital of vocational schools in Poland.

Studies have shown that comparing the flexibility of the ratio of the number of students to one teacher in vocational schools in the Kłodzko Valley is at a flexible or highly flexible level, and shows minimal flexibility in the rest of Poland. On the other hand, the flexibility of the relation of the number of teachers to one field of education in vocational schools indicates a severe degree in the Kłodzko Valley and in the rest of Poland - a minimal degree.

The measurement of the relational capital of vocational schools and stakeholders showed that a significant number of voluntary relationships is at a good level. The number of obligatory relationships is at a very good or good level. On the other hand, the number of school relations with the Teacher Training Center and the Ministry of National Education is at the second level, i.e. satisfactory. The most puzzling is the issue of WSO, where the number of relationships is at the first level, i.e. insufficient. Here, one may say that teachers deal with the promotion and image of the school first, seconded by further training and teaching.

Schools' voluntary relations with stakeholders in terms of quality are particularly placed at level four. It can be seen that the number of relationships is good and the quality of these relationships is very good. This indicates that schools care about their image in the environment. A notable exception are schools' and enterprises' relations, as the number of these relations is at the fourth level, which is rated very well, but the quality of these relations dropped to the second level, i.e. two levels below, which was awarded only a satisfactory grade. It can be stated that although schools often try to maintain relationships with enterprises, these relations in terms of quality are insufficient. The overall value of the school's relationship with obligatory and voluntary stakeholders is at levels three and four, which can be assessed as very good and good. It can be said that current schools are assessed from the point of view of the attractiveness of relational resources.

Based on the research on competitiveness circumstances, the conditions of the success of vocational schools are school promotion and technical and technological potential. Next, an important condition is creating a good school image, obtaining EU funds, and a flexible adaptation to the environment. Currently, an interesting phenomenon was detected through the research that the skills, qualifications, and experience of the teaching staff as well as good organization and efficient management are not important conditions of the success of a vocational school.

The competitiveness of vocational schools in the aspect of relationships develops a causative potential for a network organization. Network relations are based on creating

flexibility, using information technology, ensuring the security and recognition of schools in its real and virtual space, as well as in media.

The school's competitiveness criteria related to the elements of circular competitiveness form a reference model for the competitiveness of educational services in the area of vocational schools. Based on the analysis of the developed model, it can be concluded that the competitiveness of educational services is the creation, maintenance and improvement of the school's relational capital, creating the school's development potential, in particular in the field of:

- broadly understood media - the recognition of the school in the media,
- the level of use of information technology,
- the level of flexibility of the school, and
- the level of security.

A surprising phenomenon detected in the course of research is the fact that school decision-makers have a negative attitude to research in the form of surveys. Surveys were sent to 240 randomly selected vocational schools in Poland. 15 technical secondary schools were selected from each province. Only 35 questionnaires were received, which is 14.58% of the collective. In four voivodships, no vocational school took part in the survey, these are Mazowieckie, Śląskie, Opolskie, and Lubuskie.

Vocational education in Germany has a more extensive form than in Poland. The dual teaching system contributes to the greater potential of vocational schools. On the other hand, vocational education in the United States is postponed to the end of general education.

To achieve the goal of the dissertation, the scope and conditions of the competitiveness of educational services have been determined. The first part of the chapter defined the competitiveness of educational services as a new orientation in management that appears at all levels of education. Competitiveness as an object of research in the sciences is a challenge for the researcher because the concept itself has many different definitions depending on the literature on the subject. An additional difficulty associated with a broad approach to competitiveness is the fact that there are different interpretations of this definition. Here you can include concepts such as a competitive game, competition, fight, market game, action process, elimination, challenge. The phenomenon of competition is noticeable both in business entities and in educational units. For public organizations, such as schools, competitive behaviour on the market is a new orientation in management. Vocational education began to take shape in the 17th century, but it took the right shape in the 19th century. Considering the current vocational education, it should be treated as multi-

vocational, characterized by a variety of fields of education. We also distinguish types of schools with similar education profiles. These are economics, tourist, and mechanical schools, which constitute a smaller number on the domestic market. The competitiveness of a vocational school on the education market concerns educational offers, skills of professional qualifications, and is related to the level of employment of graduates in the labour market. Competition is a phenomenon that characterizes relationships between entities.

The second part of the chapter presents and defines factors affecting competitiveness, and defines their role in the vocational school. Each educational institution operates in a changing competitive environment. Along with the emergence of the demographic decline in secondary schools, there were symptoms of competition between schools for each student. Some institutions that could not adapt to the new rules of the game on the education services market were sentenced to "bankruptcy". Another important element of the educational market mechanisms is the quality of education, which means for the school that it can maintain a constant number of customers. Turbulent fields of education of schools should have an impact on the degree of employment of graduates in the learned profession.

Competition in the context of fields of education causes the stratification of candidates for several schools, where the quality of teaching plays a dominant role. The situation of duplication of education in many schools contributes to saturating the labour market in a short time by specialists in a given field, which in turn causes a deficit in other professions. Such stratification is detrimental to these schools. The speed of introducing innovations and pedagogical experiments translates into the recruitment of the largest or planned number of students, ensuring survival, releasing graduates who find employment as well as taking the "clients" away from the competition, and thus forcing it to a gradual elimination. Non-school competition concerns continuing and practical education institutions, continuing education and training centers, as well as entities from outside the education system conducting educational and training activities as well as legal and natural persons conducting educational activities.

The rest of the chapter presents the determinants of the competitiveness of modern organizations. Contemporary organizations should demonstrate knowledge of the positive and negative conditions of competitiveness to gain a market advantage. In this case, an analysis of all the company's resources and skills is needed. Competition should be considered only in the context of its conditions and characteristics, therefore one can only speak about the degree, scope, or area of competition in a given situation or economy. In strategic management, competitiveness is a basic category, which is why management schools characterizing

organizational strategies aimed at achieving competitive advantage have been presented. Competitive behaviours on the market include activities in the course of making strategic decisions that relate to: the right place, a specific moment, selected customers, specific goods and services.

The "right place" as a factor of competition in decisions is influenced by location, transport, technical and social infrastructure. The task of the enterprise to provide goods and services in the right place is always by definition bound by the principle "where the product is closest to the customer". "A specific moment" as another competitive factor in making strategic decisions is difficult to define. The company must come out with its product offer to the customer when he needs it most. This is related to the technological regime, the aging of the product or service, the culture, history, and brand of the organization. Strategic decisions are aimed at building the company's competitive advantage. However, the advantage always exists temporarily and requires adjusting organizational solutions to specific environmental conditions. However, there are conditions of uncertainty of competitive behaviour on the market. This is related to the choice of strategy: cooperation, competition, confrontation, or avoiding competition.

When making decisions during choosing clients, it is important to meet the tastes, preferences, and needs of the market. No enterprise is able to meet the needs of all customers, which is why the organization must direct its decisions to choose the right group. The selected market segment must be sufficiently large for the company to stay on the market.

The choice of "specific goods and services" is associated with widespread acceptance and must necessarily be of interest to the potential buyer. The company must accurately recognize the needs of customers to provide them with the right goods and services.

To achieve the next goal, factors structuring relational capital in the context of the environment's competitiveness were characterized. The impact of these factors on the organization was determined. The source of building competitive advantage of modern vocational schools is their broadly understood relationship with the environment. The configuration of these relationships gives you opportunities to do better in the market. Elements of competitiveness in the relations of vocational school with voluntary and obligatory stakeholders, which result from legal acts, have been demonstrated.

School management requires effective and efficient management of stakeholder relations. By implementing principles of the strategy, the educational unit can expand its value through established relationships with stakeholders. School relationship management should take place according to the following phases:

1. Identification of voluntary and obligatory stakeholders of a vocational school.
2. Analysis of the number of vocational school relations.
3. Analysis of the quality of vocational school relations.
4. Analysis of the value of vocational school relations.
5. Measurement of the relational capital of a vocational school.
6. Relational capital assessment of a vocational school.

The progressing autonomy of schools results in increased cooperation with the local community, institutions, and enterprises. In the era of constant legal changes, growing democratic and political awareness, the cooperation of schools with their stakeholders is growing. Schools enter into numerous cooperation networks, where, on the one hand, they carry out educational, caring, upbringing, and cultural and educational activities for the benefit of the local community, and on the other hand, schools are the main source of support for suppliers of material and financial resources.

In the cognitive aspect, talking about space is both a dynamic approach describing the relationship processes generated by relationship subjects and their stakeholders, while the environment is a static approach that does not allow to explicitly examine these relationships. Space does not have to affect the organization and is not limited in any way. The environment has an impact on the organization and depending on the environment, this is the reaction. The conditions of the educational unit in three states of the stable, predictable and unpredictable, turbulent environment in the context of real, virtual and media space have been indicated.

The school environment is a set of all factors that affect its development potential and allow it to retain and attract customers, i.e. students. The factors related to the school's permanent environment are mostly location, knowledge, school's history, as well as its structure and organizational culture. The predictable variable school environment will relate to emerging innovations in science and technology, technology development, and competition intensity. Legal changes as a predictable variable environment concern, among others, elimination of lower-level schools, elimination and creation of new professions, extending the duration of education in a vocational school, etc. The current demographic decline and graduates are also factors of a variable but predictable environment. The factors of the school's turbulent environment include globalization, i.e. family migrations (departures of high school graduates, arrivals of foreigners who do not speak the language), as well as the labour market, media, radio, and press. The creation of a new workplace in the environment may affect school turbulence. Then the school must flexibly adapt and create a new field of education in the form of an umbrella class. The variable and unpredictable environment at

school are psychopathic acts in the form of terrorism, bomb and criminal alarms, and forgery of school documents. It is difficult to predict natural disasters in the form of fire or floods. Current schools take care of safety, but they are exposed to drugs, violence, student fights, or corruption. The school's image is negatively affected by slander or falsification of data.

The reaction of a vocational school depends on the condition of its surroundings. The permanent environment is related to the image of the school. An image is a picture of a school, related to its location, tradition, history, and other factors surrounding a stable school environment. School reputation is a school's long-term resource. This valuable resource is a response to the changing and predictable school environment. An example here may be the achievements of graduates who are connected with their school and influence its shape. The school's innovation in science or technology influences its prestige. In intense competition, the school's reputation has a large impact on the choice of school, which in turn alleviates the effects of the demographic decline. Organizational routines are the answer to the turbulent school environment.

The second chapter discusses the school's resources in real, virtual, and media space. The first part of the chapter focuses on the evolutionary aspects of competition between vocational schools. Ways to adapt schools to the environment were discussed and traditional schools have been distinguished. Traditional schools, which stick to old rules and directions, often use their monopoly in the area. If they are not threatened by competition, they create unnecessary specialists. Graduates of such schools must retrain to get a job. The time available for a graduate of such school to take up work increases significantly. Lack of competition reduces the level of education, which prevents further improvement of qualifications at universities. This has a negative impact on the migration of highly educated people - a student from a small town can return as a university graduate, often with an equally educated spouse. The high qualifications of the inhabitants of a given region have a positive impact on its development. Schools with traditional faculties in a region with the greater competition are on a slippery slope, due to the decreasing number of students (this is not about demographic but about the proportionality of admitted students).

Flexible schools are looking for opportunities by adapting to the needs of the environment. Often, if necessary, they introduce one or two years of a given specialty. Sometimes such activities are caused by umbrella agreements with given companies or institutions. We can compare it to company classes and schools from the period of the centrally planned economy. Some of these students find employment in enterprises or patronage institutions. Apprenticeships in these facilities help in student recruitment.

Employers get to know and at the same time influence the knowledge and skills of future employees by adapting them to their needs.

Schools with high educational results play a very important role in their region because they generate the highest number of future students from their area. This results in an influx of knowledge into the region. The number of admissions to such a school is usually constant. There is always a demand for highly qualified people in the labour market.

The next part of the chapter deals with the subject of innovation in education. Directors of educational institutions in relation to the environment should be guided by flexibility and innovation. The environment directly or indirectly affects school management. School principals must adapt their management policy to the changing environment. They should not only base their decisions on current reality but also think in perspective. The way to manage your school efficiently is to get to know your close and distant surroundings thoroughly. Any turbulence causes a reaction in the school environment. Only efficient, flexible, and immediate decisions destroy negative effects and create a good image of the school. The consequence of all turbulent environments are different and new methods of managing educational institutions. Principals who want to meet market challenges must learn about, identify, and then adapt management policies to their school environment.

Mediality is the recognition of the school in the media. The media play a central role in perceiving, communicating, creating, and learning about the world. Because of mediatization, the phenomena that happened in a distant place are transmitted to the local community. Currently, each organization has its own independent marketing policy, which aims to create a positive image in the eyes of society. Not all things depend on the institution because the organization can be represented by the environment. School-dependent marketing is targeted activities carried out by an organization, aimed at collecting a large number of customers through selected information distribution channels. Independent marketing is a published indicator of exam results in local magazines, which has a significant impact on the competitiveness of the organization. Anti-marketing is conducted by market competition, which uses the weaknesses of the organization and publicizes them.

Communication in the conditions of globalization and technological progress is developing very dynamically from the point of view of the method of information transfer. Communication is the process of transmitting information at a specific place and time. The subject of communication can be a person or organization, and the object – information. The message, i.e. the dissemination of information through mass media, is media communication, and impersonal communication carried out remotely using ICT tools is virtual

communication. Modern schools should follow innovative communication methods and adapt educational programs and methods to new market requirements. The new approach to the school is the comprehensive use of digital means in school work.

Digitization is the competitive potential of an organization. The strategy of using IT resources creates the digital potential of the organization and allows it to gain a competitive advantage. The digitization of the school is primarily associated with technological equipment, equipped workshops, and the informational and technological development of each teacher. The globalization and computerization process taking place in the modern world causes challenges and changes that educational markets are facing. The purpose of digitization in the education market is to implement information and communication technologies in education.

A safe school is perceived positively in society, and this consequently affects its choice by students and, above all, their parents. A legal, technological, and organizational system is being created to ensure safety in educational establishments. As a consequence, principals should strive to ensure school safety. Management through security is a whole series of procedures, behaviours, and tasks that the school must face. The decisions that arise when managing a school are not always predictable. Sometimes it is not easy to guess what the consequences will be when it comes to making decisions at a fast and stressful moment. It is difficult to require a reasonable choice when the situation concerns emergency states, which in turn can even result in the lives of those under their care. Even a professional in such emergency situations can make risky decisions that are highly likely to make a mistake. The rarity of choices made in such extreme moments multiplies the possibility of making a mistake with tragic consequences. In a turbulent environment, it is difficult to predict threats that may occur suddenly and unexpectedly. It is important to manage a security system in which people and systems complement each other. This gives the image of a safe school that will be perceived positively in society.

The third chapter focuses on the methodology, analysis, and design of the competitiveness of educational services. To obtain reliable knowledge, it was necessary to notice key solutions using appropriate research tools. First, materials for verifying hypotheses and scientific questions were collected. They were primary and secondary materials. Primary materials are statistical data, i.e. demographic data, the number of employees, and other documents of selected vocational schools. Secondary materials are processed primary data that appear in the form of tables, drawings, charts.

The next stage was the identification of schools in the Kłodzko Valley. Various research methods have been selected, i.e. an approach geared towards exploring the interior and the outside, as well as historical research. In the study of educational units in a variable organizational space, all three approaches had significant importance for the research methodology. By studying the "interior of the school" you can learn about mechanisms, decision-making processes, the state of school resources, competences, structures, and organizational culture. "From the outside" was the identification of the school and how to respond to changes in the environment, identification in the environment. The historical study of the school concerned a long time horizon that analyses and tracks the changes in the environment, the school's response to a change in its environment.

In the study, it was assumed to reach vocational schools in the Kłodzko county – various management bodies, which showed differences in resources and environment. Surveys addressed to school principals took the form of a relatively extensive research questionnaire, which contained a considerable list of questions and a wide scale of answers. It was a factor hindering the study, but the choice of problems and research questions gave the possibility of deeper inference. Often in surveys, respondents presented reality as they would like it to look, especially when it concerns school heads. Therefore, there were ways to limit manipulation options by introducing control questions or using other research techniques.

The research had a complementary role in the method of testing – statistical and reporting materials, sometimes supported by analyzing the press content and internet information. In the research of educational units and their organizational space, this research method cannot be omitted. Data on schools and their surroundings published on the internet and in magazines were an additional valuable source of information. An additional source of information is GUS statistics.

Case studies particularly focused on analyzing the organizational space of schools, particularly identifying stakeholders and the content of relationships that exist between them and schools. The method of the targeted interview was considered to be the most beneficial and, at the same time, a real way of gathering information for the development of case studies. In the conducted research, a targeted interview with principals was conducted orally at four schools, while the others were supplemented by e-mail. This was done according to a prepared pattern of questions. It allowed us to direct the conversation about similar areas of the school and compare them. For a deeper and more reliable picture, in some cases, the interview with other school employees who hold managerial positions (deputy directors, managers, accountants, administrative secretaries) has been deepened.

A comparative analysis of the source documentation of selected schools in terms of competitiveness conditions was an important research method. The competitiveness of educational services of schools in the Kłodzko Valley was diagnosed and a comparative analysis was carried out with other vocational schools in Poland. A survey was developed to assess the quantity and quality of relationships and the communication channels of these relationships. This tool was targeted at fifteen randomly selected vocational schools in every voivodeship in Poland. The last element of the research was a diagnosis using qualitative methods of educational system solutions, additionally using competitiveness conditions in selected countries. A comparative analysis was carried out with German, American and Polish schools in terms of legal solutions to competitiveness. The developed research procedure was supplemented with results from direct interviews and questionnaires addressed to school heads in Kłodzko Valley. Then, the results were developed, based on electronic surveys addressed to vocational schools in Poland and on vocational education websites in Germany and the United States. Based on the materials from vocational schools in the Kłodzko Valley, case studies of six educational units were created. All the schools described in the case study are secondary schools located in the Kłodzko Valley with the type of technical school. The Kłodzko Valley is characterized by a large number of hotels, spa sanatoriums, leisure and recreation centers, and a large agrotourism center. It is influenced by the tourist attractiveness of the area and the location by important communication routes in the border area. This attracts not only domestic but also foreign tourists. Each of the schools is located in an environment it depends on and must cooperate with it. However, the environment is variable and its turbulence has a direct or indirect impact on these educational establishments. Depending on whether it is a close or distant environment, cooperation and management are changed accordingly. Tradition, and therefore school history, are inseparable. Traditional schools will look for solutions in relation to their history, and innovative schools will flexibly follow their surroundings. There are also adaptive schools that, despite market challenges, can adapt to the environment. The educational institutions described above have common features and differences, are able to cooperate and compete at the same time, but each tries to attract a student by developing their management model. Most of the schools have fields of study flexibly to the tourist environment. Such direction of education is nutrition and household technician, landscape architecture technician. In addition, all schools participate in the project „Modernization of vocational training in Lower Silesia" and „Modernization of vocational training centers in Lower Silesia" (the second project does not involve only Bożków). The

schools have different management bodies (Municipal Office, District Office, and Marshal's Office) and, depending on the specifics of the school, various stakeholders.

Chapter four measures the flexibility of vocational school relationships on the basis of case studies and targeted interviews in the Kłodzko Valley and on the basis of surveys in Poland. The flexibility of the relationships of the surveyed vocational schools as an element of competitive advantage is an effective instrument to compete used by schools, which enables them to possibly achieve a high position in the education market.

The arithmetic average formula was used to measure the flexibility of vocational school relationships to develop the following indicators:

1. The ratio indicator of the number of teachers to one field of education – W_K .
2. The ratio indicator of the number of students to one teacher – W_N .

Based on the analysis, a formula was created for the degree of teacher flexibility relationship with students and the field of education. The degree of flexibility ratio of teaching staff in a vocational school is as follows: one vocational school employs 9 teachers in one field of education and 9 students per teacher. The 9 by 9 formula was created, which illustrates the flexibility of teachers towards students and fields of study. The deviation of the teaching staff in vocational schools was developed on the basis of W_n and W_k indicators using the 9-on-9 formula. The results of the relationship of the flexibility of the teaching staff in vocational schools were compared to the assessment of values and deviations in the following criteria: correct, acceptable (upper, lower), incorrect (upper, lower). Based on the above classification, a map was created for assessing the value and deviations of vocational schools. In addition, a degree of relationship between the organization's flexibility was developed based on two criteria: the flexibility of employing teachers relative to students and the flexibility of employing teachers relative to the field of study. The following degrees of flexibility relationships are distinguished:

- maximally flexible,
- highly flexible,
- elastic,
- slightly flexible,
- inflexible, otherwise called rigid.

For cognitive purposes, a graphical form of the degree of flexibility ratio of the organization was developed, which was based on a range of values and deviations as well as their assessments. Finally, comparative charts were developed for the flexibility of the ratio of the number of students to one teacher and the flexibility of the ratio of the number of teachers

to one direction of education in all the studied vocational schools, and a comparison of the Wn index of vocational schools in the Kłodzko Valley with the same indicator in the rest of Poland was made.

In the last chapter, an assessment of the relational capital of the studied vocational schools was prepared. The first part measures the relational capital of a vocational school on a national scale using weights. Measures for the quantity, quality, and value of school relationships were developed and used. Then, levels of relationship intervals were introduced to evaluate the relationship. Eventually, a map of the relationship between stakeholders and vocational schools was created. Based on such a map, these relationships could be assessed.

The second part of the chapter focuses on the adaptive conditions of vocational schools in the Kłodzko Valley to the dynamics of educational services. On the basis of the case studies of the studied vocational schools in the Kłodzko region, tables were prepared to take into account the results of studies conducted in the field of relations between schools and their stakeholders. A map of networking the organizational space of the surveyed vocational schools with their causal potential and a table showing success factors, i.e. determinants of the competitiveness of vocational schools, and a collective SWOT analysis of the studied educational units were prepared. The conditions of the surveyed schools were determined and verified. Finally, the author has created a reference model of determinants of the competitiveness of educational services in the area of vocational schools.

Relational capital explains to us the competitiveness of educational services by measuring and explaining the variable. The ability to provide competitive services will have an impact on the conditions for competitiveness. Relational capital makes it possible to understand the relationships between competitive conditions and the ability to provide competitive services. The school's competitiveness criteria related to the elements of circular competitiveness form a reference model for the competitiveness of educational services in the area of vocational schools. Educational competitiveness is the school's ability to provide comprehensive media coverage, use technology and flexibility, and maintain school security in its organizational space. Based on the analysis of the developed model, the level of security is the competitive position of vocational schools. Nowadays, maintaining an appropriate safety condition in schools is a prerequisite for the functioning of educational units. Flexibility and innovation affect the competitive advantage of vocational schools in relation to their stakeholders. Digitalization as an intangible resource creates a competitive advantage and affects the competitive potential of an educational unit. Currently, media is a competitive instrument of vocational schools in the education market.

Theoretical considerations, analyzes of empirical research results and conclusions based on them, which are disclosed in the dissertation, bring original and new value to the area of knowledge about the competitiveness of educational services in the context of relational capital of vocational schools. In addition, thanks to the research contained in this dissertation, we receive tools for strategic planning in the field of human resources (teachers), quantitative intangible resources (fields of study) and the admission of students for a given employment of teachers and fields of study.

