

Tomasz Kijek, Katarzyna Budzyńska

# **The Impact of Workforce Skills on the Choice of Location of Enterprises from the Business Process Outsourcing/ Shared Service Center Sector**

**Wpływ umiejętności pracowników na decyzję lokalizacji przedsiębiorstw z sektora zewnętrznej obsługi biznesu / centrum usług wspólnych**

## **Introduction**

Recently, there has been an increase in the use of new enterprise development strategies, such as outsourcing or offshoring. Enterprises frequently outsource a wide range of tasks outside their home country. This is influenced by, among other things, reduction of trade and investment barriers, as well as technological progress – and thus easier globalization of services. Particular attention should be paid to changes that have occurred in the information flow and communication. This allowed enterprises to freely separate production and business processes for the whole world while limiting the cost of transmission of services. Companies can take advantage of differences in production costs without losing the benefits of specialization (Sethupathy, 2013). In addition to technological progress, demographic changes are also affecting the emergence of new business management strategies.

By using outsourcing or offshoring, enterprises minimize costs and achieve other benefits from the separation of auxiliary activities and the implementation of such tasks in their foreign branches. They can also outsource them to another company that will do it more effectively. Therefore, it is important to make the right decision regarding the adopted management strategy. No less important is finding the right location that meets the assumptions set in advance. The subject of location decisions was very often raised by researchers, especially in international economics (Antràs & Helpman, 2004). They believe that the most frequently outsourced tasks are: production and IT, and services related to accounting, customer service, HR or R&D have been increasingly outsourced recently.

This article deals with the subject of interrelations between offshoring, location decisions and the supply of soft and hard skills on the labour market. The aim of the article was to determine which workforce skills and to what extent influence the choice of the location of the enterprise. The theoretical part of the paper presents the issues of offshoring and location factors, with particular emphasis on human capital. In order to verify the research hypothesis that soft skills have a greater impact on the choice of location by offshoring companies than hard skills, empirical research was carried out. The data source used in the analysis included the results of surveys in which 59 enterprises from the Business Process Outsourcing (BPO)/Shared Services Center (SSC) sector with foreign capital in their share capital participated. It should be noted that there is a cognitive gap in determining the role of human capital, including soft and hard skills, as a location factor. Previous studies on the location determinants of enterprises in the BPO/SSC sector focused on classic location factors such as: labour costs, transport or some aspects of human capital in general.

## 1. Literature Review

### 1.1. Offshoring: the concept and typology

Outsourcing and offshoring strategy is one of the most widespread development strategies among Western companies, and it consists, among other things, on the location of enterprises in other countries. It allows economic entities to maintain and strengthen their competitive advantage. In the literature on the subject one can find the division of outsourcing presented in Figure 1.

Figure 1. Division of outsourcing by location of services



Source: Kajzinger, 2015.

Nowadays, managers have to decide whether the tasks are to be carried out in the parent enterprise or transferred abroad. An enterprise that does not outsource tasks (domestic supply) usually engages in standard vertical integration. On the other hand, assigning tasks abroad to your branch involves participation in foreign direct investment and internal trade. This is called international insourcing. Enterprises may outsource their tasks to their home country or abroad. The outsourcing of auxiliary tasks to an external service provider in your home country is called domestic outsourcing. However, when commissioning the implementation of such activities outside the home country to another enterprise, it is called international outsourcing (Antràs & Helpman, 2004). International insourcing and international outsourcing are also called offshoring or offshore outsourcing. In addition, a recent phenomenon has appeared in recent years called nearshoring, which includes location distance.

Offshoring involves looking for new markets, resources or opportunities to expand or gain a competitive advantage. Increasingly, companies, in addition to looking for new locations in order to save, are looking for new resources, talents and technologies. The decision to use offshoring in an enterprise is influenced by both external and internal factors. Such factors include, among other things, the desire to increase efficiency or the lack of human capital in the current location or the desire to use global talent. Therefore, managers must make fully rational and comprehensive decisions by thoroughly analysing the benefits and risks, as well as the associated costs.

## 1.2. Human capital and location decisions in offshoring

In the economic theory, the concept and the measurement of human capital was most often formulated and developed based on the labour market models in which the wage competition mechanism determined the adjustment of demand and supply. The basic differences in understanding economic aspects of man in economic thought concerned the subject and object of analysis. According to the views of Smith, Say and List, human capital is identified with skills, knowledge, health and acquired human abilities (Smith, 1998; Say, 1826; as cited in Hollander, 2017; Roussakis, 1968; as cited in Khaykin et al., 2020). In turn, according to Petty, Walras, Marschall and von Thunen human being is a form of capital the value of which can be estimated (Petty, 1690; Marschall, 1930; as cited in Czajkowski, 2012; Thunen, 1875; Walras, 1954; as cited in Kiker, 1996). Despite the common agreement of classical and neoclassical economists as to the need for investment in human capital, the foundations of modern theory

of human capital were formulated in the 1960s by Schultz (1961) and Becker (2002). According to Schultz (1961), human capital consists of knowledge, skills and competences innate or acquired by employees working in the organization.

Becker (2002) included an additional dimension in this theory in terms of individual health. By this concept he understood the health and well-being of people (Becker, 2002). Other authors attempting to define human capital were Bontis, Dragonetti, Jacobsen and Roos (1999). They define human capital as

the human factor in the organization, the combined intelligence, skills and expertise that gives the organization its distinctive character. The human elements of the organization are those that are capable of learning, changing, innovating and providing the creative thrust which, if properly motivated, can ensure the long-term survival of the organization (Bontis et al., 1999; as cited in Armstrong, 2006).

However, Dess and Picken (1999) believe that human capital is made up of employees' abilities, skills and experience. Components of human capital are important for a particular task. It is also possible to increase these resources through individual learning (Dess & Picken, 1999; as cited in Stiles & Kulvisaechna, 2003). Thomas, Smith and Diez (2013) have a similar approach to the definition of human capital as Bontis et al. (1999). According to them, human capital is the efficiency and potential of people in the organization. The potential of employees to develop skills and competences in the long term is treated as human potential (Thomas et al., 2013).

The changes taking place in the modern economy, especially regarding the transition from a goods-based economy to a services-based economy, contribute to a decrease in the importance of hard skills and an increase in the importance of soft skills (Becker, 2002; Heckman & Rubinstein, 2001; Streeck, 2011; Armstrong, 2006; Kuruvilla & Ranganathan, 2010).

Organisation for Economic Co-operation and Development (OECD) defines skills as: "Skills is used to designate an ability to perform complex motor and/or cognitive acts with ease, precision, and adaptability to changing conditions, while the term competence designates a complex action system encompassing cognitive skills, attitudes and other noncognitive components" (OECD, 2002, p. 3). Becker divides skills into general and specific skills, while Acemoglu and Pischke (1999) believe that many of these skills are industry-specific. That is why Estevez-Abe et al. (2001), based on Becker's theory, distinguished general, industry and specific skills. In contrast, Heckman and Rubinstein (2001) believe that in the literature on

the subject, attention is paid to cognitive skills, and less importance is attached to noncognitive skills.

Streeck in his work (2011) showed the perception and division of skills depending on the approach to labour economics (Anglo-American or German). He presented the history related to the definition of skills and its division into hard (academic skills) and soft (nonacademic skills) and their different meanings depending on the approach to the labour economics. It also describes the perception of these skills by entrepreneurs in various economic systems and countries (Streeck, 2011).

According to Nealy (2005), soft skills are becoming increasingly important. They improve work efficiency, which is why entrepreneurs emphasize the development of soft skills (Nealy, 2005). Technical skills are often developed in the education process and included in educational programs. However, according to Wellington (2005), there is a need to show students the importance of soft skills and the possibilities of using them before they start choosing the right business path. Technical (hard) skills are very important, but they are not enough to keep an employee in the company. This is particularly noticeable in enterprises competing with other companies for market position as well as reorganizing (Robles, 2012).

Soft skills include interpersonal, communication and social skills. In the subject literature one can also find other names for noncognitive skills – they are called emotional or nonacademic skills. These skills can specify competencies or attitudes and personal characteristics. It is more and more often said that soft skills allow for effective cooperation with others as well as achieving high results and pursuing set goals. That is why enterprises are increasingly looking for candidates with soft skills on the labour market. In recent years, many studies have been conducted analysing the importance of hard and soft skills in the labour market (Becker, 2002; Heckman & Rubinstein, 2001; Streeck, 2011; Armstrong, 2006; Kuruvilla & Ranganathan, 2010). These studies show that soft skills, which also affect higher earnings, are becoming increasingly important (Wilterdink, 2018).

Noncognitive skills include behaviour, thinking, attitude, social skills and learning (CIPD, 2017). Technical skills (otherwise known as practical skills) include what an employee can do. Very often they are identified with experience or abilities gained from the implementation of a task (Butkiewicz-Schodowska, 2015).

Hard skills do not change depending on the circumstances or the company the person is in. However, with soft skills they should be adapted to the company's culture. In the case of soft skills, there is no universal method to learn

them. These are the individual character traits of a given candidate, difficult to obtain and improve, but they should be supplemented with hard skills (*Hard Skills*, n.d.). Many studies show that soft skills contribute to the long-term success of enterprises. Therefore, these skills are increasingly being taken into account (Robles, 2012).

Enterprises choosing the location for their branch make a strategic decision that allows them to improve their competitive position, efficiency or effectiveness. However, the wrong choice of location carries a risk. For example, it may turn out that transport costs are higher than assumed. There is a risk of losing qualified workforce or the possibility of excessive administrative procedures in a given location. Therefore, before making a site selection, a thorough comparative analysis of selected locations should be made. Each of the locations considered has its pros and cons, and by analysing the strengths and weaknesses of each location, you can choose the one that limits the risk (Vestring et al., 2005). When choosing a location, various location factors are taken into account. The costs and access to resources, including qualified workforce, are some of the analysed factors. Enterprises give off a wide range of tasks outside their home country.

Managers deciding on the specific location of their tasks should assess the investment attractiveness of various geographical locations. That is why it is so important to determine what influences the investment attractiveness and location of branches in a given place. According to Jensen and Pedersen (2010), the most important factors attracting foreign investors are labour costs, resource availability, cultural similarity or the business environment and local networks. They also point out that various location factors affect the transfer of tasks depending on how the nature of the business matches the benefits of the location. Examples include Asian or Central and Eastern European countries, where cheap and yet highly qualified workforce is available.

Internationalization of the enterprise overcomes the limitation in access to resources regardless of its size. It reduces the additional costs associated with expansion of the business. By transferring some functions abroad, the company gains the opportunity to appear on the international market and present its products. Costs are the most important factors influencing location selection (Stringfellow et al., 2008), but research is increasingly paying attention to the growing importance of human and technological resources availability (Lewin & Peeters, 2006; Luzzini & Ronchi, 2010; Jensen & Pedersen, 2010).

Many authors believe that not only the quantity but also the quality of available human resources and the ability to use their talents are important (Doh, 2005; Roza et al., 2011; Bunyaratavej et al., 2008). Increasingly, during the recruitment

process, candidates are also assessed for their soft skills, such as communication, teamwork, leadership, problem solving and self-organization (Deming, 2015). Digital skills (hard, technical) – computer or software usage – are also very important skills (OECD, 2016).

Graf and Mudambi (2005) included human capital in their location decision model for offshoring services. Many authors believed that other factors influence decisions when transferring services than in the case of transfer of production. With services, knowledge and information flow are more important than physical capital. Services can be more easily transferred than production, if we compare one with the other, and the main factor differentiating locations is the skills of employees (Graf & Mudambi, 2005; Bouquet et al., 2004).

Bouquet and others (2004) believe that many services that are labour intensive or based on human capital depend on skills, education or specialized knowledge. Enterprises can reduce the risk by raising employee qualifications. The above authors also showed in their study that human capital varies depending on the place, and this affects the choice of the right strategy for entering a new market and the distribution of jobseekers in other countries (migrant workers) (Bouquet et al., 2004).

According to Musteen and Ahsan (2013), intellectual capital, consisting of human, organizational and social capital, was the driving force behind offshoring for young companies. The use of this capital also translates into the development of innovation in these companies (Musteen & Ahsan, 2013). Also, Contractor (2008) in his article drew attention to the importance of human capital and its impact on the export of goods and services.

Based on the literature review, it can be seen that the selection of locations made by offshoring companies is influenced by a number of factors in the destination country and the specifics of the company's operations. Due to the nature of operations of enterprises from the BPO/SSC sector, human capital is an important factor determining location. Given the division of human skills into soft skill and hard skills, the following research hypothesis was formulated: "Soft skills have a greater impact on the location decisions of companies from the Business Process Outsourcing and Shared Service Centre sector than hard skills."

## 2. Methodology

The survey covered economic entities meeting the following criteria: 1) it had to be located in Poland; 2) it had at least 50% share of foreign capital in its share

capital; 3) it operated in the BPO/SSC sector. The study adopted a broad definition of the industry, including the activities of shared service centers (SSCs), enterprises providing business process outsourcing and offshoring services (BPO), IT outsourcing/offshoring (ITO) and research and development centers (R&D). Additionally, a survey aiming at foreign investors whose centers operate in Poland was conducted.

The collection of empirical data was based on an extensive study developed in accordance with research stages model. It assumes four stages of research: 1) defining the research problem; 2) formulation of the problem; 3) problem analysis; 4) preparation and carrying out of research (Skarbek, 2013). An important stage of this research was directing an online survey to the management of service centers located in Poland. Quantitative research was carried out in 2016–2017 among the selected target group, which consisted of companies having their service centers in Poland and being foreign investors. Information about enterprises operating in this sector was taken from industry reports and from EMIS Intelligence. In total, 461 enterprises with their service centers in Poland that were foreign investors were identified.

The research instrument was a questionnaire containing questions regarding, among others: location factors, cooperation between other enterprises from the same sector with local government units and scientific and research units. The questionnaire was answered by the highest-level management staff due to their knowledge of location factors affecting the location of the branch. Selected companies were invited to participate in the research electronically and through the company's account on social media profiles.

One of the questionnaire questions concerned the assessment of the skills of university graduates working in a given location. It was decided that soft skills include: the ability to work with clients – AWC, the ability to organize work well – AOW, the ability to solve problems – ASP, the ability to think analytically – ATA, and the ability to work in a group – AWG. Hard skills included: level of foreign languages – FL, professional qualifications – PQ, and basic software usage – BSU. Respondents assessed whether the skills of potential employees meet their requirements on a scale of 1 to 5, where: 1 meant – definitely not, 3 – neutral, 5 – definitely yes. In the next question, the respondents were asked to specify on a scale from 1 to 10 (where: 1 is the lowest rating, 10 – the highest rating) to what extent they would recommend the city in which the branch of the company is located as a good place to do business for other offshoring companies.

In order to determine the impact of employees' skills on the offshoring company's location decisions, a research procedure was used which included the following stages:



1. Reducing the number of variables characterizing employees' soft and hard skills by applying the principal component analysis.
2. Using the linear regression model to determine the impact of new variables describing employee skills on the tendency of offshoring companies to recommend a given city to other offshoring companies looking for a new location.

The principal component analysis used in the first stage of the research process involves the transformation of primary variables into new mutually orthogonal variables, the so-called principal components (Gatnar & Walesiak, 2004). In the matrix notation, the principal component analysis takes the form of a system of equations:

$$Z^T = BS^T$$

$$S = B^T Z$$

where:

Z – matrix of standardized primary variables,

B – matrix of coefficients of principal components,

S – matrix of principal components,

T – transposition sign.

The determined values on the principal components formed the basis for estimating the parameters of the linear regression model, where the dependent variable was the tendency of offshoring companies to recommend a given city to other offshoring companies looking for a new location – PP, while independent variables describe soft skills – SS and hard skills – HS. The model takes the following form:

$$PP_i = \alpha_0 + \alpha_1 SS_i + \alpha_2 HS_i + \gamma X_i + \varepsilon_i$$

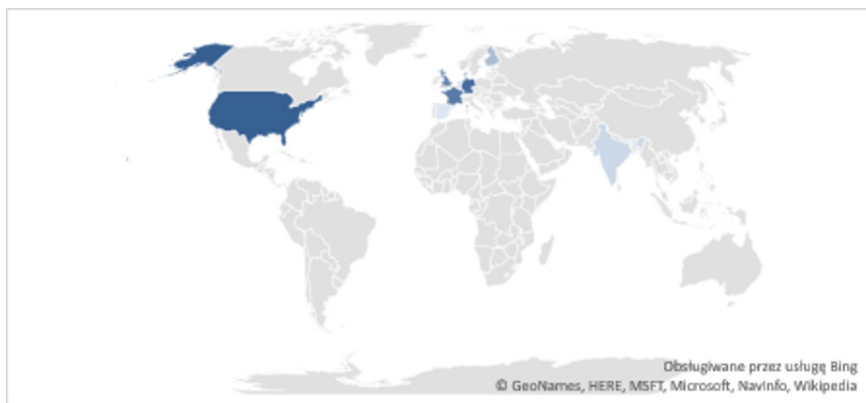
where:

X – vector of control variables.

### 3. Empirical results and discussion

The questionnaire was completed by 58 respondents representing investors from 13 countries. Enterprises whose parent units are located in the USA or Germany constituted the largest share (Figure 2).

Figure 2. Location of respondents parent unit



Source: Authors' results.

Among the surveyed enterprises, the majority (47%) were large enterprises employing over 250 employees. The next group was medium-sized enterprises that employ from 50 to 249 employees constituting 41% of the surveyed companies. Five and seven percent were respectively micro and small enterprises. In the group of enterprises surveyed, the dominant part (almost 34%) were enterprises operating for 3 to 5 years. A similar group in terms of numbers were enterprises operating for 6 to 10 years (32%). On the other hand, enterprises operating for over 10 years accounted for around 24%. The least numerous group were enterprises operating in a given location for up to 2 years.

The sample surveyed was definitely dominated by enterprises with the type of activity of an external customer service center (BPO) – about 41% of responses. Also a large group of enterprises represented the type of IT outsourcing (ITO) – around 39%, and the response of the shared services center (SSC) – around 32%. R&D centers were represented among the surveyed enterprises slightly less – nearly 9%, while the remaining answers accounted for around 27%.

The surveyed group of enterprises in 58% provided commercial services, i.e., for external business entities. Enterprises implementing processes for their parent unit or its branches constituted about 19% of the surveyed enterprises. The other centers (around 24%) carried out their processes in a hybrid system, i.e., for the parent unit and its branches and commercially. In terms of services provided, IT services predominate in the centers surveyed (about 66%). Other responses indicated were finance and accounting (around 44%) as well as customer service (around 24%) and human resource management (around 20%). Research and development services as well as marketing were also represented

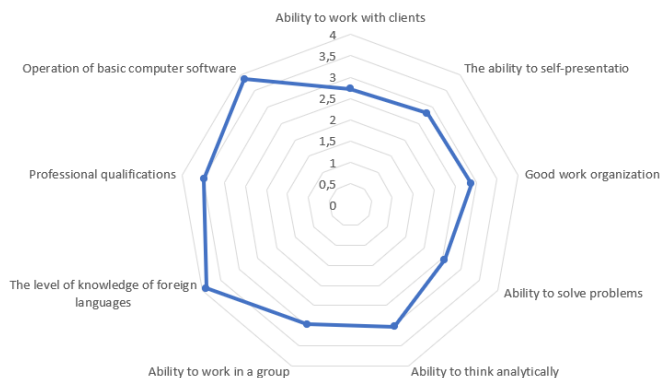
by the surveyed enterprises – about 10%. The least numerous group in the survey were enterprises providing other services, below 10%.

In the study, hard skills such as knowledge of foreign languages, professional qualifications and the ability to use basic software were included in the skills that can be acquired. On the other hand, the remaining skills were classified as soft skills, which are personal attributes of an individual and distinguish them from other people.

The calculated arithmetic averages of indications for individual variables show that the level of hard skills possessed by university graduates corresponds to the highest degree with the expectations of offshoring companies. On the other hand, one can observe a gap between the expectations of offshoring companies regarding the soft skills of employees and their actual level held by university graduates. This situation may indicate a low level of soft skills training by universities in their educational programs. In such a situation, universities should change the way of both teaching and learning, especially when it comes to such abilities as communication, teamwork, analytical thinking, professional and ethical approach to work. These skills would increase the competitiveness of graduates on the labour market.

Based on the carried-out survey, it can be seen that entrepreneurs rated hard skills well. Hard skills are acquired and are necessary for the implementation of services (Figure 3). In contrast, soft skills were rated at an average of less than 3. This indicates low skills among employees. Increasingly, however, soft skills affect location selection. If a given graduate has the ability to learn, then the hard skills that he acquired at school or university lose their importance. That is why it is imperative for the universities to teach the students not only specific information but also how to learn new things.

Figure 3. Average assessment of skills achieved by graduates



Source: Authors' results.

Interpersonal skills, especially those related to communicating in a group or talking to clients, are becoming increasingly important. This affects the relationships in the group, which in turn influences teamwork. Technological development affects the computerization of most of the work, which also increases the importance of soft skills.

Other important elements are problem solving and analytical thinking. Increasingly, scientists point out that people with underdeveloped soft skills can learn them. A very important element affecting the development of soft skills are odd jobs/internships/apprenticeships, where a student must learn to cope in the work environment. Students taking up full-time studies also learn to manage their time and effectively combine their professional and school duties.

In accordance with the adopted research procedure, in the first step the number of input variables describing the skill level of university graduates was reduced to two variables/components representing soft skills and hard skills. These two components had eigenvalues higher than 1 and they met the eigenvalue one criterion of component selection. In our analysis, the first two components explained 76% of the total variance. Due to low values of loadings (below 0.40) we decided to remove the AWC and PQ variables from the analyses. Consequently, for all other variables loadings ranged from 0.47 to 0.87. The first component had positive loadings on the AOW, ASP, ATA, AWG variables. As such, it represented soft skills. The second component, representing hard skills, had positive loadings on the FL and BSU variables.

The results of the linear regression estimation showing the relationship between the level of soft skills and hard skills of employees and the tendency to recommend a given location by offshoring companies is presented in Table 1. The control variables in our model included the firm's size and the firm's age. We used dummy variables for small – S, medium-sized – MS and large – L firms respectively. These dummies allowed us to directly compare small, medium-sized and large firms relative to micro – M firms. In the case of the firm's age we also employed dummies for infant – I (operating below 2 years), young – Y (operating between 3 and 5 years) and mid age – MA (operating between 6 and 10 years) firms respectively. The reference group included older – O (operating above 10 years) firms.

Table 1. Estimation of model parameters

| Variable | Coefficient | Standard deviation | t     | P> t |
|----------|-------------|--------------------|-------|------|
| SS       | 0.20        | 0.10               | 2.04  | 0.05 |
| HS       | 0.12        | 0.17               | -0.71 | 0.48 |
| S        | 0.14        | 0.81               | 0.17  | 0.86 |
| MS       | 0.36        | 0.61               | 0.59  | 0.56 |
| L        | 1.64        | 0.63               | 2.59  | 0.01 |

|                                                |       |      |       |      |
|------------------------------------------------|-------|------|-------|------|
| I                                              | 0.74  | 0.69 | 1.07  | 0.29 |
| Y                                              | 0.56  | 0.46 | 1.23  | 0.22 |
| MA                                             | -1.01 | 0.47 | -2.15 | 0.04 |
| Constant                                       | 6.93  | 0.61 | 11.43 | 0.00 |
| F(8.49) = 2.46 (p<0.05); R <sup>2</sup> = 0.29 |       |      |       |      |

Source: Authors' results.

In accordance with the obtained results, soft skills have a positive and significant ( $p<0.05$ ) impact on the tendency of offshoring companies to recommend a given location as a place of business to other offshoring companies. In the case of hard skills, this impact turned out to be insignificant. This may be related to the high assessment of hard skills by the surveyed enterprises and treating possession of these skills as a necessary condition, but not sufficient to recommend a given location to offshoring companies. It is worth noting that soft skills are the individual characteristics of each employee. They can influence the strengthening of mutual interaction of individuals and their work (Hendarmanto & Tjakraatmadja, 2012). Soft skills are subjective and depend on people. They are difficult to estimate because they relate to interaction with other people. Examples of soft skills include communication skills, motivation, problem solving skills, teamwork and time management skills. Increasingly, employers are looking for candidates with both hard and soft skills. Team communication skills are particularly important when implementing team projects (*Hard Skills vs. Soft Skills: What's the Difference?*, n.d.). As regards the control variables, it appeared that the large firms were more willing to recommend a given location than the micro firms. On the other hand, the older firms were more likely to recommend a given location than the mid age firms.

## Conclusions

As part of offshoring, various functions are performed. Therefore, employers are looking for a workforce with different skills. An example is the Call Center, in which very diverse functions are implemented, involving low-skilled workers. In the implementation of basic customer service, where there is direct contact with customers, knowledge of a foreign language and communication skills are required. Another example is the implementation of simple accounting services, in which basic forms are processed (e.g., in insurance and taxes). Candidates are not required to know English or have higher education. New services are emerging,

in which the workforce performs various functions. Therefore, the requirements for the skills of the candidate depend on the nature of the services provided.

The situation is different when the company provides services that require high qualifications. An example of this is financial data analysis, where specialized financial/accounting knowledge is required. In the case of outsourcing of knowledge processes (conducting training or specialized courses), specialist skills are required, e.g., language experts or IT graduates. In the implementation of highly complex processes, most employees have post-graduate and/or higher education (Kuruvilla & Ranganathan, 2010).

The success of a company is based on the human capital. In the current economic situation there is very high competition between companies, including in the field of access to knowledge (qualified employees) (Araújo & Pestana, 2017). When choosing the right employees, managers should be guided by their use of the right skills and not focus on short-term savings (Kurdia et al., 2011). In enterprises, you can meet human capital management as well as its competences. McClelland (1973) believes that the job candidate should be assessed in terms of his competence and skills, and not on the basis of psychometric tests (assessment of the candidate's knowledge).

The obtained results confirmed the research hypothesis and constitute the starting point for formulating recommendations for graduates' competence profile on the labour market. Colleges and universities should reflect on their educational programs and on ways of activating students, e.g., by making them perform various managerial functions. One of the methods that could help improve soft skills could be working on projects, case studies, presentations or other tasks that would allow the development of communication skills, group collaboration or analytical thinking, to name just a few. Participation in apprenticeships or internships allows students to develop communication skills, adapt to changing working environment conditions, solve problems and think analytically. A good solution would be cooperation with interested entrepreneurs in order to adapt educational programs to their requirements. Thanks to such cooperation, the university is able to respond quickly to the needs of the industry and to the requirements of local or global markets.

The present study allows for a better understanding of the relationship between workforce skills and location decisions of companies from the BPO/SSC sector. Going beyond the common approach, we considered two kinds of workforce skills, i.e., soft skills and hard skills, in our analyses. However, the research suffers from some limitations. First of all, we focused solely on the BPO/SSC sectors, excluding other foreign business services sectors. Another limitation

relates to the spatial dimension of the study, since the sample only consists of companies operating in Poland. To overcome these limitations, future studies on determinants of location decisions of foreign business services centres should include entities from other sectors (e.g., R&D centers, KPO centers, HRO centers, LPO centers). Moreover, it would be worth extending the geographical scope of research to other countries from Central and Eastern Europe.

## Bibliography

- Acemoglu, D., & Pischke, J. (1999). The Structure of Wages and Investment in General Training. *Journal of Political Economy*, 107(3), 539–572. doi: 10.1086/250071.
- Antràs P., & Helpman E. (2004). Global Sourcing. *Journal of Political Economy*, 112(3), 552–580. doi: 10.1086/383099.
- Araújo, J., & Pestana, G. (2017). A Framework for Social Well-Being and Skills Management at the Workplace. *International Journal of Information Management*, 37(6), 718–725. doi: 10.1016/j.ijinfomgt.2017.07.009.
- Armstrong, M. (2006). *Strategic Human Resource Management. A Guide to Action* (3<sup>rd</sup> ed.). London and Philadelphia: KOGAN PAGE.
- Becker, G. S. (2002). The Age of Human Capital. In: E. P. Lazear (Ed.), *Education in the Twenty-First Century*. Stanford, Calif.: Hoover Institution Press. Retrieved from [http://media.hoover.org/sites/default/files/documents/0817928928\\_3.pdf](http://media.hoover.org/sites/default/files/documents/0817928928_3.pdf) (20.05.2020).
- Bontis, N., Dragonetti, N. C., Jacobsen, K., & Roos, G. (1999). The Knowledge Toolbox: A Review of the Tools Available to Measure and Manage Intangible Resources. *European Management Journal*, 17(4), 391–402.
- Bouquet, C., Hébert, L., & Delios, A. (2004). Foreign Expansion in Service Industries: Separability and Human Capital Intensity. *Journal of Business Research*, 57(1), 35–46.
- Bunyaratavej, K., Hahn, E. D., & Doh, J. P. (2008). Multinational Investment and Host Country Development: Location Efficiencies for Services Offshoring. *Journal of World Business*, 43(2), 227–242. doi: 10.1016/j.jwb.2007.11.001.
- Butkiewicz-Schodowska, A. (2015). Kapitał ludzki we współczesnym zarządzaniu przedsiębiorstwami. *Zeszyty Naukowe Uniwersytetu Szczecińskiego. Współczesne Problemy Ekonomiczne*, 858(11), 115–123. doi: 10.18276/wpe.2015.11-11.
- CIPD. (May 2017). Human Capital Theory: Assessing the Evidence for the Value and Importance of People to Organisational Success, Technical Report.
- Contractor, F. J. (2008). The Influence of Human Capital Investment on the Exports of Services and Goods: An Analysis of the Top 25 Services Outsourcing Countries. *Management International Review*, 48(4), 433–445. doi: 10.1007/s11575-008-0025-9.

- Czajkowski, Z. (2012). *Kapitał ludzki – pojęcie i miary*. Warszawa: Instytut Gospodarki Światowej.
- Deming, D. J. (2015). The Growing Importance of Social Skills in the Labor Market. *NBER Working Paper Series*, 21473, 1–48.
- Dess, G. D., & Picken, J. C. (1999). *Beyond Productivity: How Leading Companies Achieve Superior Performance by Leveraging Their Human Capital*. New York: American Management Association.
- Doh, J. P. (2005). Offshore Outsourcing: Implications for International Business and Strategic Management Theory and Practice. *Journal of Management Studies*, 42(3), 695–704. doi: 10.1111/j.1467-6486.2005.00515.x.
- Estevez-Abe, M., Iversen, T., Soskice, D. (2001). Social Protection and the Formation of Skills: A Re-Interpretation of the Welfare State. In: P. Hall & D. Soskice (Eds.), *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage* (pp. 145–83). Oxford: Oxford University Press. doi: 10.1093/0199247757.003.0004.
- Gatnar, E., Walesiak, M. (2004). *Metody statystycznej analizy wielowymiarowej w badaniach marketingowych*. Wrocław: Wydawnictwo AE we Wrocławiu.
- Graf, M., & Mudambi, S. M. (2005). The Outsourcing of IT-Enabled Business Processes: A Conceptual Model of the Location Decision. *Journal of International Management*, 11(2), 253–268. doi: 10.1016/j.intman.2005.03.010.
- Hard Skills*. (n.d.). Retrieved May 20, 2019, from Investopedia <https://investopedia.com>.
- Hard Skills vs. Soft Skills: What's the Difference?*. (n.d.). Retrieved from <https://www.thebalancecareers.com> (20.05.2019).
- Heckman, J. J., & Rubinstein, Y. (2001). The Importance of Non-Cognitive Skills: Lessons from the GED Testing Program. *American Economic Review*, 91(2), 145–149. doi: 10.1257/aer.91.2.145.
- Hendarman, A. F., & Tjakraatmadja, J. H. (2012). Relationship among Soft Skills, Hard Skills, and Innovativeness of Knowledge Workers in the Knowledge Economy Era. *Procedia – Social and Behavioral Sciences*, 52, 35–44. doi: 10.1016/j.sbspro.2012.09.439.
- Hollander, S. (2017). *Jean-Baptiste Say and the Classical Canon in Economics. The British Connection in French Classicism*. London and New York: Routledge, Taylor & Francis Group.
- Jensen, P. D. Ø., & Pedersen, T. (2010). The Economic Geography of Offshoring: The Fit Between Activities and Local Context. *Journal of Management Studies*, 48(2), 352–372. doi: 10.1111/j.1467-6486.2010.00967.x.
- Kajzinger, E. (2015). *ICT-Enabled Outsourcing and Offshoring Activities in Hungary*. Retrieved from [www.oecd.org](http://www.oecd.org) (13.05.2019).



- Khaykin, M. M., Lapinskas, A. A., & Kochergina, O. A. (2020). The Development of the Theory of Human Capital in the Historical Dimension. *Advances in Economics, Business and Management Research*, 139, 505–510. doi: 10.2991/aeb-mr.k.200509.090.
- Kiker, B. P. (1966). The Historical Roots of the Concept of Human Capital. *The Journal of Political Economy*, 74(5), 481–499.
- Kurdia, M. K., Abdul-Tharim, A. H., Jaffar, N., Azli, M. S., Shuib, M. N., & Ab-Wahid, A. M. (2011). Outsourcing in Facilities Management – A Literature Review. *Procedia Engineering*, 20, 445–457. doi: 10.1016/j.proeng.2011.11.187.
- Kuruvilla, S., & Ranganathan, A. (2010). Globalisation and Outsourcing: Confronting New Human Resource Challenges in India's Business Process Outsourcing Industry. *British Journal of Industrial Relations*, 41(2), 136–153. doi: 10.1111/j.1468-2338.2009.00559.x.
- Lewin, A. Y., & Peeters, C. (2006). Offshoring Work: Business Hype or the Onset of Fundamental Transformation?. *Long Range Planning*, 39(3), 221–239. doi: 10.1016/j.lrp.2006.07.009.
- Luzzini, D., & Ronchi, S. (2010). Purchasing Management in the Luxury Industry: Organization and Practices. *Operation Management Research*, 3(2), 7–21. doi: 10.1007/s12063-009-0024-4.
- Marschall, A. (1930). *Principles of Economics* (8<sup>th</sup> ed.). London: Macmillan.
- McClelland, D. (1973). Testing for Competence Rather Than for Intelligence, *American Psychologist*, 28(1), 1–14.
- Musteen, M., & Ahsan, M. (2013). Beyond Cost: The Role of Intellectual Capital in Offshoring and Innovation in Young Firms. *Entrepreneurship Theory and Practices*, 37(2), 421–434. doi: 10.1111/j.1540-6520.2011.00477.x.
- Nealy, Ch. (2005). Integrating Soft Skills Through Active Learning in the Management Classroom. *Journal of College Teaching & Learning*, 2(4), 1–6. doi: 10.19030/tlc.v2i4.1805.
- OECD. (2002). *Organisation for Economic Cooperation and Development, Definition and Selection of Competences (DESECO): Theoretical and Conceptual Foundations. Strategy Paper*. Retrieved from <http://deseco.ch/bfs/deseco/en/index/02.parsys.34116.downloadList.87902> (20.05.2019).
- OECD. (2016). *New Skills for the Digital Economy: Measuring the Demand and Supply of ICT Skills at Work*. Technical Report prepared for 2016 Ministerial Meeting on the Digital Economy, Paris: OECD Publishing.
- Petty, W. (1690). *Political Arithmetik* (Reprint, 1899). London: Printed for R. Clavel.

- Robles, M. M. (2012). Executive Perceptions of the Top 10 Soft Skills Needed in Today's Workplace. *Business Communication Quarterly*, 75(4), 453–465. doi: 10.1177/1080569912460400.
- Roussakis, E. N. (1968). *Friedrich List, the Zollverein, and the Uniting of Europe*, Bruges: College of Europe.
- Roza, M., Van de Bosch, F. A. J., & Volberda, H. W. (2011). Offshoring Strategy: Motives, Functions, Locations, and Governance Modes of Small, Medium-Sized and Large Firms. *International Business Review*, 20(3), 314–323. doi: 10.1016/j.ibusrev.2011.02.002.
- Say, J. B. (1826). *Traité d'économie politique* (5th ed.). Paris: Rapilly.
- Sethupathy, G. (2013). Offshoring, Wages, and Employment: Theory and Evidence. *European Economic Review*, 62(C), 73–97. doi: 10.1016/j.eurocorev.2013.04.004.
- Schultz, T. W. (1961). Investment in Human Capital. *The American Economic Review*, 51(1), 1–17.
- Skarbek, W. W. (2013). *Wybrane zagadnienia metodologii nauk społecznych*. Piotrków Trybunalski: Naukowe Wydawnictwo Piotrkowskie. Retrieved from <https://depot.ceon.pl/> (9.09.2021).
- Smith, A. (1998). *An Inquiry into the Nature and Causes of the Wealth of Nations*. Oxford: Oxford University Press.
- Stiles, P., & Kulvisaechana, S. (2003). *Human Capital and Performance: A Literature Review*. Cambridge: Judge Institute of Management, University of Cambridge.
- Streeck, W. (2011). Skills and Politics: General and Specific. In: M. R. Busemeyer & Ch. Trampusch (Eds.), *The Political Economy of Collective Skill Formation*. doi: 10.1093/acprof:oso/9780199599431.003.0012.
- Stringfellow, A., Teagarden, M. B., & Winter, N. (2008). Invisible Costs in Offshoring Services Work. *Journal of Operations Management*, 26(2), 164–179. doi: 10.1016/j.jom.2007.02.009.
- Thomas, H., Smith, R. R., & Diez, F. (2013). *Human Capital and Global Business Strategy*. Cambridge, UK: Cambridge University Press.
- Thünen, J. H. von (1875). *Der isolierte Staat. Vol II, Part II* (originally published 1875, translated by B. F. Hoselitz). Chicago: Comparative Education Center, University of Chicago.
- Vestring, T., Rouse, T., & Reinert, U. (2005). Hedge Your Offshoring Bets. *MIT Sloan Management Review*, 46(3). Retrieved from <https://sloanreview.mit.edu/article/hedge-your-offshoring-bets/> (9.05.2019).
- Walras, L. (1954). *Elements of Pure Economics* (translated by W. Jaffé). Homewood, Ill.: Richard D. Irwin, Inc.

Wellington, J. K. (2005). The “Soft Skills” of Success Risk. *Vital Speeches of the Day*, 71(20), 628.

Wilterdink, B. (2018). *Skills for the 21<sup>st</sup> Century – Building Human Capital for Economic Mobility*. Retrieved from <https://hackernoon.com> (10.05.2019).

## Summary

Human capital consists of knowledge, skills, and competences innate or acquired by employees working in the organization. This article deals with the issue of the effect of human capital on the location decisions of enterprises from the BPO/SSC sector. We focused on two main components of human capital, i.e., soft skills and hard skills, which are crucial location factors for the BPO/SSC enterprises. The research instrument was the questionnaire containing questions regarding location factors of enterprises from the BPO/SSC sector. The research sample consisted of 58 enterprises. The principal component analysis and the linear regression were used to conduct analyses. Our findings show that only soft skills have the impact on the choice of location by offshoring companies.

KEYWORDS: human capital, skills, outsourcing, offshoring, location of enterprises, Poland

## Streszczenie

Kapitał ludzki składa się z wiedzy, umiejętności i kompetencji wrodzonych lub nabytych przez pracowników pracujących w organizacjach. W niniejszym artykule poruszono tematykę dotyczącą wpływu kapitału ludzkiego na decyzje lokalizacyjne przedsiębiorstw z sektora BPO/SSC. Autorzy w skupili się na dwóch głównych komponentach kapitału ludzkiego, tj. umiejętnościach miękkich i twardych, które są kluczowymi czynnikami lokalizacyjnymi dla przedsiębiorstw z sektora BPO/SSC. Instrumentem badawczym był kwestionariusz zawierający pytania dotyczące czynników lokalizacyjnych przedsiębiorstw z sektora BPO/SSC. Próba badawcza składała się z 58 przedsiębiorstw. Do przeprowadzenia analiz wykorzystano analizę głównych składników i regresję liniową. Z ustaleń autorów wynika, że tylko umiejętności miękkie mają wpływ na wybór lokalizacji przez firmy offshoringowe.

SŁOWA KLUCZOWE: kapitał ludzki, umiejętności, outsourcing, offshoring, lokalizacja przedsiębiorstwa, Polska

## Noty o autorach

Tomasz Kijek – dr hab., prof. UMCS; Wydział Ekonomiczny, Instytut Ekonomii i Finansów, Uniwersytet Marii Curie-Skłodowskiej w Lublinie; główne dziedziny działalności naukowej: modelowanie procesów produkcji wiedzy, efektów rozprzestrzeniania się wiedzy, wyceny aktywów wiedzy na rynkach kapitałowych, dyfuzji innowacji, roli eko-innowacji w zrównoważonym rozwoju, innowacji i konwergencji technologicznej z uwzględnieniem efektów przestrzennych

oraz pomiaru produktywności i efektywności; e-mail: tomasz.kijek@poczta.umcs.lublin.pl; ORCID: 0000-0002-0134-4943.

Katarzyna Budzyńska – mgr; Wydział Ekonomiczny, Instytut Nauk o Zarządzaniu i Jakości, Uniwersytet Marii Curie-Skłodowskiej w Lublinie; główne dziedziny działalności naukowej: outsourcing, offshoring, logistyka, green logistics transport, analiza finansowa, potencjał i atrakcyjność inwestycyjna regionów, zarządzanie projektami, wykorzystanie różnych technologii i rozwiązań mobilnych; e-mail: k.budzyńska@umcs.pl; ORCID: 0000-0001-5465-5748.