

## WORK AND BUSINESS

SZYMON PILCH  
University of Wrocław

### Working Experiences in Agile Software Development: The Case of the Business Processes Outsourcing Industry in Poland

*Abstract:* Lean production is becoming popular in IT-related industries, including the business processes outsourcing (BPO) industry. Managers of companies try to implement lean principles in software development projects and, as a result, Agile Software Development (ASD) is becoming more common in practice. According to ASD authors, this approach aims to increase employee productivity and provide better working conditions. However, little is known about the experience of working in such conditions. This article aims to analyze the experience of working under ASD conditions in the BPO industry in Poland. Based on interviews with employees and trade unionists in the BPO industry and using Grounded Theory Methodology procedures during the data analysis, three categories of work experiences in the BPO industry were reconstructed. The reconstructed categories are: “enthusiasm,” “instrumentalism,” and “disenchantment.” Modes of experience were determined by biographical work experiences, individual resources, and objective context.

*Keywords:* agile software development, lean production, BPO industry, IT professionals, Poland, working experiences

#### Introduction

Lean production (Womack et al. 1990), understood as a specific set of principles and “practices” of manufacturing, is becoming popular in various industries and services (cf. Carter et al. 2013; Ahlstrand, Gautié 2022), despite the criticism that this type of management is connected with a deterioration of working conditions and job quality (Stewart et al. 2016). Lean production is also applied in software development (Poppendieck, Poppendieck 2003; Sauer et al. 2021) and can be seen in emerging management concepts in IT industries. One example is the ASD policy document *Manifesto for Agile Software Development* (Beck et al. 2001), in which both software development theorists and practitioners try to prove that the set of principles contained therein enables the implementation of a “humanized” approach to project management in high-tech industries. Such an attempt also aims to improve working conditions in companies. The implementation and popularization of ASD in IT industries has been achieved by combining the principles of lean production with those of the *Manifesto for Agile Software Development* (ibid.). The juxtaposition of the basic tenets of these two concepts has proven consequential in changing management practices in IT industries on a global scale (Boes, Kämpf 2007: 84; Kämpf 2018). Until the 1990s management practices were still based on what is known as waterfall methodology, which was characterized, among other things, by inflexibility in production procedures.

This article aims to answer the question of how IT professionals experience working in BPO centers in Poland under ASD conditions. I argue that in regard to the implementation of this type of management in the IT sector of a national economy, Poland is a good example for three main reasons.

First, the emergence of business process outsourcing in IT services (Lacity et al. 2009), which is due, among other things, to technological and spatial fixes in the global economy (Silver 2003), has been one of the key elements producing a dependent market economy (DME) (Nölke, Vliegenthart 2009) in Poland. The country's economy resembles an "assembly platform" for semi-standardized services and products, with low spending on R&D compared to neighboring states and the EU. Poland also provides highly qualified and cheap labor.

Second, Poland's economic transformation, including of the IT sector, in the early 1990s was marked by, among other things, the bankruptcy of large state-owned companies and various technological industries, for instance, computer hardware manufacturing. Shortly afterwards, a period of restructuring and privatization began. At that time, the IT sector and the development of high technologies were not recognized as a key state interest. Poland's accession to the EU (in 2004) was followed by a period of greater inflow of FDI and MNCs into the country, and also resulted in an increase in the percentage of employees in the ICT industry in the late 1990s and early 2000s. Since then, the majority of MNC centers with advanced technology have been established in Poland's largest cities, as have some smaller companies (SMEs) with Polish capital (Hardy 2009). The BPO industry in Poland was created from scratch with the help of global capital and a few domestic companies. However, due to the conditions of the IT sector, it is possible to speak of the technological lag of some Polish enterprises on the one hand, and the advancement of MNCs on the other, and thus the Polish BPO industry is labor intensive rather than technology intensive. MNCs hardly provide local partners with state-of-the-art technology and do not create a systemic environment conducive to innovation. Investors also do not invest in the development of R&D centers, as such centers already exist in the countries locating investments in Poland (Jasiecki 2013). The BPO industry appears in Poland's seven largest cities, where 80% of all companies (over 1,800) are located (ABSL 2023: 30). These cities are also Poland's most important academic centers, which supply highly skilled alumni to the labor market each year. In Q1 2023, there were just over 435,000 people working in business service centers (not only IT professionals, but also professionals working in HR, accounting, legal services, etc.).

Third, cultural changes in the sphere of the meaning of work after the collapse of socialism and the country's entry on the path of systemic and economic transformation (Zagórski 1994) should be mentioned, as such meanings often seem, for Poles, not to be simply dividable into materialistic and post-materialistic categories but often to coexist and/or contradict each other (Sawicka, Karlińska 2021). Moreover, organizational culture in Poland (Hofstede et al. 2010), especially in the SME sector (Czarzasty 2014), is characterized by the cultivation of tradition and material values, strong hierarchization in enterprises, respect for authority, centralization of power, and individualism as well as autocracy in the decision-making process. It is collective in relation to attachment to family and community, and paternalistic in social relations at the workplace. It is masculine and

characterized by a high level of uncertainty avoidance, a formalization of procedures, and a preference for clarity of rules.

The work experiences of IT professionals are considered here in connection with how, on the one hand, biographical experiences (Schütze 2016) affect instrumental and autotelic attitudes toward work (Goldthorpe et al. 1968), and on the other, in connection with professional identities. Following Miller (who refers to Bokszański), I define the latter concept as “a set of an individual’s self-concepts, or his or her way of conceiving of oneself, including ideas, judgements and beliefs (Bokszański 1986: 109; 1989: 12–13, 68–69), formed through participation in various processes related to work in its broadest sense and with the participation of many people who modify it and significantly influence its final shape” (Miller 2010: 49). On such premises, the formation of professional identity is considered in the article as a social process.

Professional identity is complimented with Durand’s (2019) proposed concept of identity in the workplace. Categories of identity in the workplace may change over time. Three types of “identity” can be mentioned: contentment, reluctance, and abandonment (ibid.: 91–98). The characteristics of the former are based on the claim that employees share the values of the company in which they work. It is not an identity specific to a particular industry or economic sector. It is, however, based on the resources that the workers can use to achieve particularistic goals or gain positions. The second type is characterized by alienation from the job, which is associated with a sense of resignation resulting from the tension between the desire for autonomy in the workplace and the reality of being forced to accept rules and regulations. The third type is characterized by an inability to gather the individual or collective resources necessary to achieve certain preconceived goals. This type of identity tends to emerge at later career stages (ibid.: 91–98).

In the article, the concept of capital is also used in the text alternatively with the concept of resources,<sup>1</sup> which are defined as Bourdieu proposed (1986): in particular, the concept of social capital, that is, the configuration of resources in the form of networks of acquaintances and contacts; cultural capital, in the form of accumulated knowledge and expertise in the IT field; and economic capital, understood as material resources. Bourdieu’s notion of capital is used narrowly to help to conceptualize, understand, and interpret the findings. Capital is considered in this article as a sensitizing concept (Blumer 1954). It is therefore a concept “which gives the user a general sense of reference and guidance approaching empirical instances (...) sensitizing concepts merely suggest directions along which to look” (ibid.: 7).

In the first part of this article, I analyze transfers in the organizational models of production, from manufacturing to services, and the relationship between the principles of lean production and ASD. I consider the specificities of the IT industry, define ASD, and show both successful and unsuccessful examples of the transfer of these organizational models. Furthermore, I look at the implementation of ASD and its impact on change in working conditions and work experiences. Next, I present the methodological aspect of my research, before moving on to describe the typology of work-experience categories in

---

<sup>1</sup> Resources are “potentially advantageous properties of social agents’ positioning in social structures and capital, i.e., properties that are actively used by individuals involved in relations with other social agents” (Mrozowicki 2011: 77).

BPO in Poland, based on an analysis of qualitative interviews with employees and trade unionists in the Polish BPO industry. The results suggest that in addition to the objective context related to management modes and the degree of technological development of the companies, the individual resources of the narrators and their biographical experiences also play a role in their work experiences. The article ends with a discussion and conclusions.

### **From Lean Production to Agile Software Development and Scrum Methodology—a Discussion of the Transfer of Organizational Models in Certain Sectors of the Economy**

More specifically, in regard to the transfer of organizational models between sectors of the economy, that is, from industry to services, the lean production role in services should be emphasized. Lean production originates from the production system introduced in Toyota factories in Japan in the 1950s (Womack et al. 1990). The principles of lean software development—and ASD in particular—resemble those of lean production (Womack et al. 1990; Conboy 2009). Proponents of lean production claim that if properly implemented in an organization, this type of management “can change the world” (Womack et al. 1990: 7–8). The implication is that it is much more democratic, egalitarian, and inclusive than the hierarchical and formalized earlier modes of management. It allows people to work “smarter”, reduces employee stress levels and work intensity, and increases the scope for autonomy at work (Womack et al. 1990). Researchers engaged in critical labor studies (Stewart et al. 2019) argue that the proponents of lean production’s hypothesize that the method will only improve working conditions, increase autonomy, and empower workers if it is implemented exactly as intended. This is itself an ideological premise. Thus, the problem is lean production understood as a theoretical concept and its “wrong” implementation of a set of practices. Stewart and colleagues (2016: 149) note that lean management in practice means that “social control and subordination [of workers] are axiomatic to it.” Additionally, the implementation of lean production in companies is limited by external and national regulation, which “are accompanied by closer regulation of workers’ activities in work by means of myriad forms of monitoring and surveillance” (Stewart et al. 2019: 27). Research conducted in various industries has confirmed the negative impact of lean management on work experiences and job quality (cf. Carter et al. 2013; Ahlstrand, Gautié 2022). As has been mentioned above, lean production also functions in the software development services known as ASD (Conboy 2009).

ASD consists of four fundamental management principles (Beck et al. 2001) for team management and work organization: first, individuals and interactions over processes and tools; second, working software over comprehensive documentation; third, customer collaboration over contract negotiation; finally, responding to change over following a plan. These formulations should, according to the authors of the *Manifesto* (ibid.), be taken as guidelines to be followed by team leaders and workers on a daily basis. It is difficult to consider ASD as a single method of software development production, as it must be taken into account that methodologies such as Scrum, Feature-Driven Development, eXtreme

Programming, and so forth are also classified to some extent as agile methods. As there is not enough space in this article to discuss each of the above-mentioned methodologies in detail, I will discuss the characteristics of Scrum, which, on the one hand, can be considered to be a management methodology embodying ASD, and, on the other hand, has become the most popular methodology in IT services.

Scrum is a “methodology [which] facilitates the coordinated activity of programmers who break their work into small tasks that can be completed within fixed duration cycles or ‘sprints,’ tracking progress and re-planning in regular meetings in order to develop products incrementally” (Hidalgo 2019: 5). The methodology (Highsmith 2009) consists, in practice, of artefacts and ceremonies created to maintain the “philosophy” embodied in ASD, that is, agile management of projects, tasks, and teams. The most common artefacts are product backlog and sprint backlog; the ceremonies are sprint planning, daily stand-up, sprint review, and sprint retrospective. The Scrum team, apart from the software development team, consists of a scrum master and product owner.

A product backlog is a structured list of requirements provided to the team by the customer for a requested product or service. This list is never complete and is constantly growing. A sprint backlog is a list of every item the team commits to deliver in an incremental cycle (known as a sprint, which lasts 2–4 weeks as the team works through the development cycle of a product or service). Sprint planning is a meeting in which a map for the upcoming product increment cycle—a sprint—is conceived. Such a meeting usually lasts up to two hours and should be attended by all members of the team, together with the scrum master and the product owner. During the meeting, what is to be included in the product backlog is discussed, as well as how many tasks in the backlog the team can deliver with the resources available. The daily stand-up is a 15-minute informal meeting at the start of the working day, where a briefing is held on what obstacles have been encountered, what goals have been met, and what tasks are coming up. Sprint review is usually a long meeting (sometimes taking several hours) of the whole team together with managers to present what has been achieved in a cycle (sprint). The team receives feedback from managers and clients, and consequently there may be an update or a change in product requirements. A sprint retrospective is an hour-long meeting of the whole team to discuss successes, challenges, failures, and lessons learned. These meetings also help to improve the process in order to have more effective sprints in the future.

In addition to the team leader and IT professionals, Scrum also includes the roles of product owner and scrum master. The role of the former is to create and manage the product backlog on the basis of the known requirements of the client and the company; additionally, such a person represents the company in regard to the client and informs the members of the team about the important elements to be delivered. The most important role of the scrum master is to set priorities in daily work, as conflicting priorities may lead not only to a loss of efficiency, but also to a loss of trust between managers, the client, and the team. The role of the scrum master can be described as that of the team’s servant (the model of a supportive leader) and a product owner. In practice, such a person binds the whole team together and ensures that the Scrum framework (ceremonies and artefacts) is maintained, and also tries to provide the team with information to help them improve their skills, gain efficiency, and remove the barriers that prevent their further development.

ASD is characterized also by the fact that the team members' process of making production-relevant and strategic decisions is de-hierarchized and decentralized (Highsmith 2009). Greineder and colleagues (2021: 270–271) argue that agile teamwork is characterized by “optimal and effective use of applied work techniques, which influences various factors such as structural characteristics, IT, mindset, work characteristics, organizational context and interaction style, employee empowerment.” Considering the above, work experiences under ASD could be expected to be associated with “ideal” working conditions and the effective and “humanized” management of teams, and thus to contribute to generating large profits for companies. Nevertheless, it is important to juxtapose the above views with the results of empirical research.

Research shows rather nuanced and ambivalent results. This type of management has some advantages, such as, for instance, a reduction in work exhaustion and stress (Venkatesh et al. 2020), improved job quality (Lindsjörn et al. 2016), and increased team productivity (Hidalgo 2019). On the other hand, research indicates a more ambiguous assessment of dimensions of working conditions under ASD, for example, decreasing levels of work autonomy (Gustavsson et al. 2022), the creation of new hierarchies at companies (Hodgson, Briand 2013), the occurrence of conflicts between employees, managers, and clients (Mathew et al. 2022), and the reduction of democracy in the workplace (Jégou, Souayah 2021).

The source of these ambivalent working conditions can be found in the recent structural changes to organizational models in IT-related services. According to Kämpf (2018: 901–902) the IT industry fell into the “trap” of managing production with a strictly rational, technology-oriented approach, as was the case in the automotive industry. Learning from the practical lean solutions introduced in that industry, IT-sector employers began to implement ideas such as “lean development”—and, more commonly, ASD, which is one of the lean methods of software development—in their companies. Initially, they aimed to reduce costs, hence such solutions were applied on a small scale. Today, IT enterprises are employing strategies that restructure entire companies to transform processes for greater optimization of the companies' financial performance, at the expense of worsening working conditions. To show the more macrostructural landscape of these changes, it is worth looking more generally at the transfer of organizational models from manufacturing to services.

On the more general level of discussion, the transfer of organizational models between sectors of the economy, however, shows a nuanced situation involving the adaptation of these models from industry, such as car manufacturing, to IT and software development services. It seems that the cultural (e.g., Dauber et al. 2012) and structural (e.g., Ménard 2014; Coase 1992) dimensions may play the most crucial role in determining the success (or failure) of implementing various organizational models in services.

The following conclusions, based on a review of the literature containing examples of the implementation of selected lean methods into mostly IT-related services, show these nuances in the transfer of organizational models by addressing the following five crucial structural and cultural dimensions. First, the implementation of organizational models in IT services requires the model's adaptability to the company's organizational framework, the flexibility of the company's rules, and the innovativeness of the services the model provides. In other words, the more rigid the organizational framework model, the greater the chance



that the new method will fail when it is adopted in the enterprise (Razzak 2017). Second, in terms of the optimization of production processes, structured project management in services is a key way to provide customers with good-quality services (Adeodu et al. 2021). Third, companies need to hybridize organizational models in order to adopt their own version of “agile” management methods, that is, to customize and modify them to their own ends to have a better output (Hobbs, Petit 2017). Fourth, while hierarchization of structures is an inherent feature in manufacturing companies, in services, a more egalitarian and team-decision-oriented approach characterizes organizational models (Lee 2021). Finally, the role of the customer as a stakeholder in the production process in services is crucial, as the stakeholder is regarded as an equal party in the process of software development (Saiedian, Dale 2000; Lohan et al. 2011).

I will start by discussing some of the selected positive examples and cases of such implementations, with a particular focus on IT services. Research indicates (Näslund 2008) that, for example, the communication process and company management output is improved when methods such as Lean Six Sigma (LSS) are applied (Ibid.). LSS is a method whose main tasks are to identify barriers to efficient production (optimization of process), reduce the level of variability, and improve the process, based on data-driven decision-making. In regard to the application of Total Quality Management (TQM), studies report, for instance, improved performance and efficiency (Hashmi et al. 2022). This type of management is based on the continuous diagnosis and improvement of all elements of the service process in a company, and thus employees participate in management through teamwork, commitment, and continuous improvement of their skills.

In regard to failures in the application of “agile” management in IT companies, first, it is worth noting that methods such as “kanban” may not work well for IT services. This type of method resembles a system of visual process management, whose characteristic element is a billboard on which the elements of the process are visible to all employees, and the progress of the work and project can be tracked and analyzed. Other studies (Ahmad et al. 2016) indicate that, for example, the largest barriers to the use of this type of management in IT are lack of familiarity with the method, the resistance of managers to this approach, and managers’ preference for traditional methods. Other research (Obrutsky, Erturk 2017) points to barriers and limitations on the application of ASD in services, including organizational resistance to change, the previous framework used in the company, lack of sufficient workers with proper knowledge of “agile” methods, and concerns about lack of control over employees. Given the above, this article aims to answer the question of how biographical work experiences, individual resources, and the objective context—management methods, assigned tasks related to ASD roles in IT professional teams, a company’s degree of technological sophistication—influence specific types of work experience in the BPO industry under ASD conditions in Poland.

## Methodology

To analyze ways of experiencing work, biographies were collected in the form of spontaneous stories about each interviewee’s own life using the autobiographical narrative

interview (BNI) method. The interviews were conducted in the tradition of the biographical research conducted by Schütze (2016). The autobiographical narrative interview was used because biography is considered “as a topic” in this type of research (Helling 1990). In this case, the issue under study is the biography itself. Its analysis makes it possible to “establish the typical sequences of events in the lives of certain groups of people and the structure of meanings that are attributed to these events” (Rokuszewska-Pawełek 1996: 41). This way of analyzing biographical data relates directly to the method of research that the Fritz Schütze school practice (Schütze 1992). Such analysis aims to answer research questions “on the basis of a systematic, multistage, textual analysis of the dimension as biographical narrative. It is (...) about [an analysis—SP] of a relationship of homology: the structure of the narrative reveals the structure of the organization of experiences/events in the narrator’s life” (Rokuszewska-Pawełek 1996: 43). In other words, the question of *how* allows us to answer the question of *what* (Kaźmierska 2012: 114).

The autobiographical interviews consisted of three main parts. In the first, I asked the interviewees to tell me the story of their life from childhood to the present, including everything the narrator remembered and could say. Generally speaking, this part of the interview focused on the biographical story. I tried to sustain the narrative through non-verbal signs that made the interviewee feel I was interested in his/her story. Stage two involved a series of questions about events, topics, issues, or persons that had not been elaborated on or which had been—consciously or not—“cut” from the interviewee’s spontaneous story. In the final phase, I asked the interviewees about their various motives for making or not making certain decisions, for example, in relation to careers in and outside of various organizations, as well as educational, professional, and life choices, and so forth. In this part, in parallel to the questions about motives, I also asked questions from the list of dispositions for the interview. I tried to make these questions relate to the narrators’ spontaneous stories about their lives. In the third part, the interview topics were related to the period of school education, social relations at school, the stage of higher education or further, post-secondary education if any, the transition from education to the labor market, the first contact with IT technologies, values (including those related to work) in the lives of the interviewees, the structural context of work in business service centers in Poland (relations with colleagues, superiors, evaluation of the working conditions, as well as of the company’s management style, opportunities for promotion, etc.), and the cultural context (evaluation of the company’s policy, the “atmosphere” prevailing in the organization). During the third part, I also touched upon the issue of attitudes toward work and distinguished in this regard between instrumental and autotelic attitudes (Goldthorpe et al. 1968), which can be reconstructed in the form of a continuum. At one end, for example, there are attitudes related to various kinds of security, stability, work as a source of income, and so forth. At the other end can be placed attitudes such as self-realization, self-expression, passion, a hobby, or a vocation.

The initial sampling criteria for the biographical narrative interviews were related to the integration of the formal definitions of IT professionals proposed by ISCO-88 and Poland’s Ministry of Labor and Social Policy: first, with reference to the ISCO-88 standard (International Standard Classification of Occupations), which classifies computer scientists as a broad group of professionals encompassing those specializing in programming with digital languages, in analysis, and in the design of information systems (ISCO 1988);



and second, in considering the Classification of Occupations and Specialties for the Needs of the Labor Market in Poland (MPiPS 2014: 15, 22–23, 46–47) published in the Ordinance of August 7, 2014 (Dz.U. pos. 1145) by the Minister of Labor and Social Policy. When talking about IT professionals, I am referring to such technical professions as ICT designer/architect, ICT systems analyst or application developer, application improvement and development specialist, information systems software development specialist, and information technology development manager.

The initial sampling criteria of interviewees, which can be described as purposive sampling (Babbie 2019: 205), consisted of the following categories: 1) gender, 2) age, 3) nationality, 4) position (junior, senior, team leader) and responsibilities/roles in companies differing in terms of ownership (Polish and located in Poland with foreign investment), and 5) overall length of seniority in the BPO industry and the labor market. The respondents represented professions such as software developer, software architect, and software engineer. Some of them worked simultaneously in the roles of business analyst, team coach, and project manager. Most of the respondents (see Annex 1 for the full list of interviewees) were in the 21–36 age category (N = 48). A total of 51 BNIs (9 women, 42 men) were collected, and 12 remain to be conducted. The average length of employment of the IT specialists in the IT industry was about six years. The fieldwork was conducted in 2019–2020 and 2022–2023. Due to the pandemic, some interviews were conducted remotely (via Zoom and MS Teams). Due to the fact that several new categories were identified during the data analysis, in the next step I applied theoretical sampling (Glaser, Strauss 2017). The new categories related to career planning and working in centers in the context of lean management methods, that is, lean management (and IT-specific “agile” management methods). Therefore, I also decided to include criteria such as the interviewees’ practical and theoretical knowledge of running “agile” projects. I also tried to reach out to the leaders of the IT teams as well as to scrum masters in order to reconstruct the perspective of those managing the teams, and also to refer to career patterns whose temporal and spatial trajectories differed from those of the rest of the IT professionals interviewed. On the other hand, I have strived to research working conditions due to the importance of the objective context of the labor market at the national level and of job quality at the company level. In addition, in order to gain insight into ASD management from the perspective of practitioners and employees (Döringer 2020), two EX interviews were conducted with certified scrum masters. I also conducted two EX interviews with unionists to research working conditions in the BPO in greater detail.

Interviews were conducted with IT professionals employed in 45 companies operating in the BPO industry in Poland (companies with Polish and foreign capital), based in the following cities: Opole (two Polish companies, one international company), Katowice (one Polish—PL, two international—MNC), Wrocław (two PL, seven MNC), Warsaw (six PL, four MNC), Kraków (five PL, five MNC), and Łódź (four PL, six MNC). In the case of the Polish companies, these can be classified as small and medium-sized enterprises, employing up to 250 workers, while multinational companies have >250 employees. These cities were selected for the study based on the results of articles and reports published by expert associations such as Pro Progressio (2016) and ABSL (Association of Business Service Leaders 2023). The experts demonstrate that the aforementioned cities have

diverse conditions and resources for the economic and social development of the BPO industry. In short, Warsaw, Kraków, and Wrocław are at the highest level of the BPO industry development structure in Poland. Łódź and Katowice are placed as second-ranking locations. These cities are at the middle level of development of the BPO industry in Poland. The lowest position is occupied by Opole. The industry in this city is in an early state of development, with the local BPO industry being moderately dependent on other cities (e.g., Wrocław and to a lesser extent Katowice) in various dimensions such as personnel, infrastructure, technology, and so forth. The Polish companies provide such services as software and web application development, product design, blockchain solutions, UX design, the creation of e-commerce platforms, data management, consultants delivery, software and other services maintenance, and so forth. As far as subsidiaries of international companies in Poland are concerned, they provide cloud service, cybersecurity, customer service, content delivery, consulting, compliance solutions, and other types of services.

The analytical procedures of grounded theory methodology (Glaser 1978; Glaser, Strauss 2017), such as memoing, and open and selective coding, were used. ATLAS.ti was applied to code interview transcriptions and emerging categories. During open coding, categories emerged relating to, for instance, work and life experiences. Examples of these included career planning, developing technical and interpersonal skills, evaluating relationships with colleagues, leaders, and management staff, and working conditions. Then, coding selectively, I tried to capture the relationships and patterns occurring between the existing codes in such a manner as to encompass the mechanisms and types of experience of working in specific companies. Three key categories have been grouped into dimensions that interact with the categories of work experience. These are, respectively: a) biographical work experiences, b) ways of management in companies, and c) the importance of the individual narrators' resources, including cultural resources (developing skills, obtaining university/school diplomas), social resources (networking—participation in industry associations, business organizations, etc.) and economic resources (increasing salary).

To better understand and interpret the categories of work experiences, theoretical sensitivity was used during the data analysis (Glaser 1978: 2), which involved interpreting the concepts of capital and resources (Bourdieu 1986). Two analytical pathways were utilized. First, the interviews were subjected to thematic analysis (Floersch et al. 2010: 416–417) to reconstruct the most common issues related to the experience of working in an ASD setting. Second, analytical case summaries of the respondents were created from the notes of each interview conducted (Mrozowski 2020: 110–111). Through these two means of analysis, conceptual categories of the experience of work under ASD were progressively constructed to integrate these categories theoretically with the three dimensions referred to earlier.

### **Work Experiences in Agile Software Development Conditions —Introductory Remarks**

In the table below the most important characteristics of the three types are listed. In this section, I present the sociodemographic characteristics of each reconstructed category, while in the remainder of the article I elaborate on the reconstructed types.

Table 1

**Types of work experiences in Agile Software Development**

Type	Biographical experiences of work	Objective context	Individual resources
<b>Enthusiasm</b> <i>Contentment identity</i>	<ul style="list-style-type: none"> <li>• Work as an autotelic value</li> <li>• Seeking a job that provides personal and professional development</li> <li>• Work-life imbalance</li> </ul>	<ul style="list-style-type: none"> <li>• Modern technology in projects</li> <li>• Technical professions and team management</li> </ul>	<ul style="list-style-type: none"> <li>• Growing economic resources</li> <li>• Accumulation of cultural capital</li> <li>• Increasing networking</li> </ul>
<b>Instrumentalism</b> <i>Reluctance identity</i>	<ul style="list-style-type: none"> <li>• Work as an instrumental value, a source of income</li> <li>• Seeking work that provides economic security</li> <li>• Work-life balance</li> </ul>	<ul style="list-style-type: none"> <li>• Intermediate technology in projects</li> <li>• Mostly technical professions, rarely team management</li> </ul>	<ul style="list-style-type: none"> <li>• Active multiplication of economic capital</li> <li>• Accumulation of cultural capital</li> <li>• Stabilization of networking</li> </ul>
<b>Disenchantment</b> <i>Abandonment identity</i>	<ul style="list-style-type: none"> <li>• Work as an instrumental value</li> <li>• Inability to achieve self-fulfillment and loss of meaning in work</li> <li>• Work-life balance</li> </ul>	<ul style="list-style-type: none"> <li>• Modern or intermediate technology in projects</li> <li>• Technical professions only</li> </ul>	<ul style="list-style-type: none"> <li>• Active multiplication of economic capital</li> <li>• Stabilizing cultural capital</li> <li>• Reducing networking</li> </ul>

Source: own elaboration.

As far as “enthusiasm” is concerned, its characteristics can be observed in the case of interviewees with up to three years of tenure in IT, who self-identify as junior employees. There were 16 such cases in the collected sample (of which four were women). In terms of age, they were mainly employees between 22 and 28 years old. 12 of the interviewees were employed at Polish companies. The “instrumentalism” category was constructed based on analysis of 20 cases (of which five were women), who had approximately four to eight years of tenure in the industry being analyzed and who self-identified either as mid-level or senior employees (at an early stage). These interviewees were mainly 29-to-35-year-old IT professionals. 14 of these respondents worked at multinational companies. The “disenchantment” category is based on an analysis of the cases of interviewees who had nine or more years of experience, of which there were 12 in the sample. They identified themselves as senior employees. They were mainly 36 years of age or over. Eight of the narrators were employed at multinational enterprises.

### **Enthusiasm**

This type can be described in terms of the sense of satisfaction derived from work, which is the effect of the opportunity to realize one’s biographical plans. Work provides the occasion to gain experience, economic resources, and necessary acquaintances. Work enables self-realization. This category is named thus because its characteristics resemble the features of work in the late capitalist mode of production, and are also reminiscent of the characteristics

of post-Fordism, such as flexibility, working in narrowly specialized teams (in specific technologies), and the development of customized products. Enthusiastic approach is also crucial to maintaining relationships with customers. The idealization of the workplace may also involve the management's creation of favorable organizational conditions to shape a certain type of behavior (Kunda 2006) required from IT professionals. An important characteristic here is also the ideology of work that IT specialists legitimize in their daily activities: it is about self-development, individualism (Marody, Lewicki 2010), and planning one's own life and economic activity, in connection with "being an entrepreneur of oneself" (Foucault 1982).

The characteristics of this type of experience can be reconstructed from the narratives of young IT professionals, who tend to be in the transition phase between education and the labor market. The combination of factors may favor such professionals' idealization of the workplace, with the emphasis being placed on opportunities for personal and professional development, and optimal conditions in terms of career planning. Regarding the salary aspect of this type of employee, it can be said that the interviewees were usually at a stage that could be described as the initial accumulation of economic capital. Thus, the interviewees were willing to sacrifice their private lives in order to build their career, and working in IT was seen as a path that allowed them to acquire skills quickly, network with appropriate professionals, and earn big money.

Analysis revealed that such professionals typically had previously earned money outside IT. This situation was particularly the case for students. On the one hand, students often undertake activities such as tutoring, which, in addition to extra income, allows them to develop their skills. On the other hand, the interviewees were entrepreneurial, primarily trying to run companies during their studies, or simultaneously working in a company and running a training-related business or non-profit project outside of working hours. Another characteristic of this type is also activity in the industry and/or in the professional community in the form of attending free training courses or skill enhancement workshops, or participating in various industry associations and conferences. Thus, it can be said that IT professionals of this type strive for networking, which can translate into various kinds of amenities (e.g., a better flow of information about job offers, the possibility to develop one's skills through contacts with people with better skills, etc.). In the narratives, holiday or casual work is interpreted as a source of income, as education is more important and they do not want to neglect it in favor of work. If experiences of being in a relationship are included in the narrative (in the case of, e.g., Ireneusz, a 23-year-old student and junior software developer), the relationship is usually seen as an obstacle to a spectacular career or acquiring a large amount of capital.

When it comes to the objective context of working in BPO centers, one of the main aspects is the combination of roles assumed within the organization, for example, being a programmer and at the same time a team leader, project manager, and scrum master. The interviewees deliberately combined separate roles in order to acquire new skills that would increase their chances in the job market and meet the desire for self-fulfillment and satisfaction in work, which is also seen as a hobby. One important dimension for these interviewees was the opportunity to improve not only their own competences but also those of their teammates, and to maintain relationships with other IT professionals

who were passionate about their own work. Such activity also involved maintaining social relationships with colleagues after work (hanging out after-hours) or nurturing shared hobbies (hackathon meetings, attending conferences, etc.).

In the Enthusiasm category, “agile” management is an almost ideal solution to the day-to-day problems facing organizations in the BPO industry. Work is usually described as satisfying and enabling self-fulfillment (Franciszek, 26, junior software developer). One essential element in ensuring job satisfaction is participation in innovative projects that use modern technology and provide opportunities to develop skills. When the workplace no longer meets their expectations, the interviewees are willing to change jobs and frequently do so (sometimes even every year).

After a while it started to bother me, this back-end<sup>2</sup> of mine, which is C#;<sup>3</sup> I get almost nothing [out of it], so after, I don't know, after six months, as we were working there, the moment the project finished—well, it wasn't like that either, in the middle of the project—I said, “Okay, I'm leaving, deal with it” (Wioletta, 27, software developer).<sup>4</sup>

It can be said that IT professionals are at the stage of cultural capital accumulation. In other words, they are striving to enlarge the range of their technical skills and expertise. From this perspective, the modern technology used in the project is important: it is not only a matter of rarely used programming languages but also about which software architecture is used, which code libraries, and which applications are developed. All these characteristics provide opportunities for precise skill development.

Another important dimension of this type of work experience is the lack of separation between work and non-work life (Nippert-Eng 1996), which can negatively affect social relationships outside of work. Intense work can also have several consequences. IT professionals often feel that they are constantly lacking the right skills to adapt to the ever-changing organizational conditions associated with “agile” management and market circumstances. This could create in the narrators a sense of inadequacy in adapting to the flexible labor market and company conditions. A strategy of rationalization (related to the “reduction” of the sense of mismatch) then involved looking for causes in inadequacies in the individual or in a lack of appropriate skills, aptitudes, and competencies, rather than seeing the sources of such a situation in objective socio-economic conditions.

And I don't know if I'm held back by that year at university, which was a good time, when you can read a lot, and here suddenly you have to do things in a week, or if it's just not my style and that's it. I had just been doing my PhD on my own for those seven years probably, interspersed with projects. And here [at his new company] I've had, like, four projects in over a year, but still, the variation and adaptation suits me a bit (Piotr, 36, software developer).

It is also worth noting at this point that these types of arguments can involve practical actions. Throughout the interview, Piotr frequently raised the theme of self-improvement and the extent of his competence. In doing so, he used an internalized neoliberal language when describing his aspiration to “be perfect” (Foucault 1982) in his work and private life (working through the divorce with his wife). He also emphasized that he constantly

---

<sup>2</sup> The term refers to developing the functionality/product of what is on the server and to which the user does not have direct access.

<sup>3</sup> The reference is to a programming language that is not currently very popular.

<sup>4</sup> The names of respondents have been anonymized to protect their identity.

strove to overcome his skill limitations by using various types of tests, including Gallup psychological tests, which aim to identify areas of competence that a person should focus on and improve. Such measures may also indicate that the work has an autotelic value for the narrators.

The narrators' interpretation of "agile" management is closely related to their mode of argumentation in the interviews. Employees recognize to some extent the technical drawbacks of this type of management. For example, a large number of daily stand-ups, sprint planning, and retrospective meetings can throw off the rhythm of daily work. In addition, frequent meetings, which require focus and energy, may tire employees and thus reduce, in their view, their efficiency in project work, especially when tasks have to be abandoned in order to go to meetings.

Despite the above-mentioned disadvantages connected with the number of meetings, the respondents believed that managing the computer software production process using a Scrum framework, that is, ceremonies and artefacts, was highly effective and allowed for the rational planning of future tasks in order to deliver the product/service to the customer (Wiktor, 30, software developer). Therefore, the feedback received from clients, supervisors, and the team was important. Although the meetings might annoy workers—as was emphasized in the narratives—they are significant tools of Scrum methodology.

IT professionals believe that the largest obstacle to the full introduction and effectiveness of "agile" management in the workplace is people themselves, or rather the type of people who are unable to adapt to the constantly changing conditions of flexible work organization in companies. Often it is about people who have not acquired an appropriate code of conduct or have different management manners acquired from previous companies, or who simply have habits that are not compatible with a new and agile work organization and who are thus prevented from being flexible, proactive, enthusiastic, and so forth.

In the narratives of the respondents these people were usually referred to as seniors/older employees who were competent in outdated software production methodologies (e.g., waterfall) and thus did not follow ASD principles.

Furthermore, according to the interviewees, the scrum master's role is important. This role is usually seen as supporting or mentoring junior IT professionals to develop their team collaboration skills, and imparting practical competencies. The same is true for the role of product owner. In the narratives, this person is presented as someone who is the "brain" of the team in some manner. When the product owner's poor management of the team causes a lack of coordination, the employees complain about inefficiency, as they are unable to prioritize tasks and items in a given sprint, and this affects the meeting of deadlines and the level of quality of the delivered functionalities in the product (Krystyna, 30, software developer).

### **Instrumentalism**

This category is characterized by instrumental attitudes toward work and a focus on the sphere of private life. Work is seen as a venue for accumulating the economic resources needed to plan one's life on a basis of social stability, economic security, and a foreseeable



career, and to focus on building social relationships with people outside the sphere of work. Work is viewed as secondary to life outside the company. This category has characteristics that have been typical for interpretations of IT careers in Poland, which focus on social and economic stability (Pilch 2023: 84–86). Corporate working conditions are characterized by employees' growing frustration with deteriorating relationships with their superiors and colleagues, and furthermore, the intensity of work and frequent overtime produce stress. Discouragement in regard to "agile" approaches (Beck et al. 2001) and flexible work organizations promoted by employers can also be observed. This type of work identity can be detected in the narratives of IT professionals with unrealized biographical plans related to the non-completion of a specific stage of education or to a specific profession (or contradictions in these plans). Older IT professionals with more seniority, which they have usually gained in other industries, tend to fall into this type. The work of an IT specialist in the BPO industry is the result of a confluence of structural factors, and the profession (or position) itself in this industry ensures a certain social status or promotion, or it is a means to a good life and decent job. Sometimes, however, working in this industry is a conscious choice related to life and career plans. Such a choice may also involve a belief in the "IT aristocracy myth"<sup>5</sup> in the professional IT market. From this point of view, job offers in the industry seem attractive due to the high salaries even for junior IT positions and the apparent low entry threshold into the industry. As described by the narrators, IT jobs are supposed to reward the years spent acquiring skills or to compensate for the experience of "exploitation" in other industries.

Of course, yes, because I say, if it [income] wasn't important, I would do what makes me happy. [Developing] these [video] games, for example—I would create [them] if I were working for my ideals, or I could create some open-source software, but [what I'm doing] is completely against my ideals, so there's none of that. So the work is to provide money and on the other hand, it shouldn't stress me out (Mariusz, 34, software developer and team leader).

The narrators of this type were also characterized by their high level of cultural resources. Indeed, the BPO industry may provide a desirable social position when such a position is measured by, for example, a high salary and the possession of rare skills and competencies (education, analytical skills, etc.). In this type, IT professionals no longer strive so actively to acquire new skills related to competencies other than those they already possess. They are less likely to participate in upskilling or courses in the development of interpersonal skills, as in the case of the Enthusiasm category. They tend to work in technical positions (they tend to manage smaller teams, without taking on the role of project manager) and prefer to focus on expanding their expertise in this area. Social resources also do not play a significant role here and are only a means by which to participate in a social network. This type of professional has access to a flow of information, for instance, about attractive job offers. New contacts are not actively sought.

The narratives of biographical experiences of work for this type go back to the first years in which the interviewees were economically active. For these narrators, earning money was a source of additional income, most often with the intent of becoming financially

---

<sup>5</sup> "IT aristocracy" is an in vivo category (Glaser, Strauss 2017: 40), i.e., one that is drawn from the language used by the respondents. The researcher "literally sees them [categories] occur" (*ibid.*).

independent from their parents. In the professionals' narratives, it is possible to observe clear situations of combining education with full-time work—with better or sometimes worse outcomes (a situation causing casual work to be chosen over full-time work). Most often, however, there were situations where people gave up work or interrupted their studies/education under the influence of numerous factors, above all biographical and structurally determined ones.

Concerning jobs in the BPO industry, the interviewees of this type changed employers less frequently. However, such stability came at the price of certain negative emotions. First, there could be rapidly decreasing job satisfaction and constant stress in connection with their opportunities to develop skills in each company. Second, the interviewees spoke of deteriorating job quality. Third, an emerging syndrome of professional burnout could be observed in their narratives. Professional burnout syndrome is rooted in biographical experiences. The interviewees' lack of opportunity to pursue their passions or hobbies or to complete related studies, which would guarantee a well-paid job afterwards, promoted the more rapid development of burnout. In the Instrumentalism category, the narrators were more likely to have chosen "compromise" academic studies (e.g., related to the economy) that would allow them to get a stable and well-paid job, but at the cost of a more frequent feeling of frustration at work or of depressive states, leading them to look for other employers (in different industries) every few years, where the work was not always better in terms of social relations and work atmosphere, but the earnings were satisfactory. It is a kind of vicious circle. Some characteristics of this syndrome can be observed in an excerpt of an interview with Alicja.

Well, I've also often left work angry because, again, we're not doing things according to design. I'm being asked to finish these unfinished functionalities, and I'm responsible for making sure they're finished. And because of that I acquired this constant impatience, because at work I constantly had this sense of pressure and rush. I didn't have time for anything. And in general, I was quite irritable (Alicja, 39, application software developer).

The factors that characterize Instrumentalism at work are as follows: 1) a too-low level of technological sophistication, which did not allow the interlocutors to improve their skills sufficiently to be competitive in the professional labor market; 2) experiencing a situation where the employer/manager imposes unwanted roles in the project; 3) a lack of desire to take on roles related to controlling other employees (being a project manager), which requires interpersonal skills and other competences; and 4) a lack of desire to be promoted or to have more responsibility for tasks/the team.

When it comes to social relations in the workplace, most often IT professionals of this type do not put much emphasis on their informal dimension (e.g., integration meetings). They prefer to focus on building family relationships and on nurturing intimate relationships, though they have a group of close friends at work with whom they like to socialize informally. They therefore separate the spheres of life and work. Mariusz is an example. He is trying to build a relationship with a new partner, after separating from his previous one after ten years due to, among other things, his lack of work-life separation. He described his work attitude at the time in terms of a "workaholicism from which he managed to recover," but he was not able to rebuild the relationship with his previous partner. "Agile" management, in the narratives of IT professionals, also involves taking

valuable time from employees and the excessive proliferation of procedures in a project, or the overlap of tasks assigned to specific team roles. It can therefore be observed that there is an emerging discouragement in regard to the implementation of this type of method in companies. Indeed, IT professionals do not blame individuals for the lack of functionality of “agile” methodologies in projects. Rather, they criticize the system and therefore the assignment of roles in this methodology in a top-down, textbook manner. This is especially true of the scrum-master role. Typical reluctance in regard to this kind of management is expressed by Krystian, a 27-year-old programmer and team leader working for a Polish company. It is worth mentioning that the narrator himself had worked in the role of a scrum master, although at the time of the interview he considered the role unnecessary in the organization, because IT professionals in teams can manage their own work and do not need someone to supervise them top down. Interestingly, research on ASD implementation in IT software development organizations indicates that “the more formalized an agile method becomes, the sooner it will be considered dysfunctional” (Ivori, Ivori 2019: 517). Usually, management in a given company takes a hybrid form, that is, it includes some software production techniques that are typical of waterfall projects—a methodology that was popular before agile management started to supplant it. Sometimes managers try, with better or worse results, to introduce elements of ASD management into projects. Such situations can arise because companies decide to implement popular management solutions in which textbook agile management is used, that is, all the model project roles are created and special project “ceremonies” are also implemented. In other words, the narrators were, on the one hand, somewhat critical of such solutions, but, on the other hand, they treated the agile method instrumentally, that is, only those of its solutions were selected that would work for a given project.

### Disenchantment

This category is understood in the sense of Weber’s “disenchantment of the world” (Weber 1979, 1966), that is, a social process in which there is a transition from perceiving social reality as “magical,” or “supernatural,” toward the gradual rationalization and formalization of social relations and a focus on the realization of rational goals through an appropriate selection of given means. Spheres of social life begin to be subject to scientific explanation, quantification and optimization of action. In the case of modern organizations, their organizational cultures are oriented toward scientific management (Hampden-Turner 1998). Formal rationality (laws, rules, regulations) serves to select optimal means to achieve one’s goals not only in work, but also in life (Weber 1979).

In other words, IT professionals reach the point of becoming fully aware that the world of work in IT-related industries and technology are not as “magical and enchanted” as they used to be, at the beginning of their career. Their initial “enthusiasm” turns to “disenchantment” over time. Disillusionment (with no prospects of improvement in the future) is associated with the demystification of the “IT aristocracy” myth, the realization that their working conditions are poor (that is, employment on non-standard contracts, which do not guarantee stability even though they guarantee a high income and might serve

as a means to achieve other life goals). Thus, it is possible to speak of reconfigurations of life goals in the category analyzed.

On the one hand, long-term work in the industry leads to neglect of the life sphere. One strategy is to leave the organization after accumulating sufficient resources to guarantee the possibility of improving one's situation and possibly returning to work in the industry or reflecting on a change of profession. Most importantly, the narrators were aiming to spend more time repairing damaged social relationships, rebuilding family relationships, renewing friendships, finding time for hobbies, finding a passion in general, and so forth. On the other hand, long-term work in the industry might have severe consequences in the form of a deterioration of health. The process of "disenchantment" may be accompanied by cumulative "professional burnout" and health problems, both mental and physical, in connection with biographical experiences such as suffering and chaos (Schütze 2016). This type of professional can also be described as having mental health problems in the form of depressive episodes. Some of the narrators attended therapy sessions or took antidepressants to recover from their sometimes very severe conditions.

Another characteristic of the "disenchantment" category is the feeling of losing the meaning of the work, of not being able to achieve self-fulfillment and a sense of happiness (understood as passion) from developing software, programming, and so forth. Such feelings might be evidenced by, for instance, deliberately and without reason leaving the company, or choosing a better paid offer when the opportunity arises. A lack of trust in the person's employer (and sometimes, though not very often, colleagues) can be observed, as can a tendency to criticize the organization's performance, the working conditions, or the management staff and company policies (corporate values are perceived as corporate "nonsense" and as serving as a tool of control over workers). However, such criticism does not translate into practice. It is not voiced out loud, in front of everyone, but rather kept to oneself, which exacerbates the sense of frustration and disappointment with the job. In other words, it is a critique without action.

I feel like my job is meaningless, I don't feel that I'm bringing anything to the work (...). I was developing an internal website for a [previous] company and it was pretty useless. It was supposed to be accessible just for the employees. And I wasn't seeing in this new website any upgrade compared to the older version. We were just making it look visually better (Ricardo, 30, software engineer).

Self-realization is a very false idea (...). There are people who have to do this job [being an IT professional], without necessarily self-actualizing (...). I did not consider that I was doing a good job there [at his previous employer]. Mainly because I thought my work was not useful (...) and it was just to fit into this whole process, to go through all these steps and so on. (...) I don't have any emotional [ties] with IT. So I can say no thank you to the industry for now (Zbigniew, 46, software architect).

The reason for losing the sense of work is that IT professionals do not feel that their work (e.g., in the form of an application or functionality produced within a project) contributes value to society or that it has an impact on "changing the world." Such characteristics can be interpreted by recalling Graeber's (2018) concept of a "bullshit job," which is a "form of employment that is so completely pointless, unnecessary, or pernicious that even the employee cannot justify its existence" (*ibid.*: 22). While the description does not fully fit the work of IT professionals, Graeber compares coding and low-qualified tasks such as developing non-core services/products (a widespread phenomenon in the outsourcing industry)

to duct-taping—in other words, it is a type of work exemplifying a “bullshit job.” Moreover, self-fulfillment and a sense of job satisfaction are closely related to work quality (Sennett 1999) under capitalism. The sense of a loss of meaning at work, of “disenchantment,” can be interpreted in line with an emphasis on employee productivity combined with cuts in labor costs, which leads to a decrease in job satisfaction.

The strategy chosen by most of the narrators of this type is to change jobs very often—sometimes every two years—or as soon as the working conditions and atmosphere (the social relations) at work start not to suit them. Such employees are characterized by the attitude that “what matters is IT” (Maciej), that is, the technical part of the company and not the management-business part, which wants to dominate the employees and impose its conditions of work and cooperation with the client. Another characteristic of this type of employees is the possession of rare and valuable skills: “the work I want should be here for me [in the city where he lives], not me for the work” (Maciej, 34, software developer and team leader). It can also be said that in the “disenchantment” category a reduction in networking, as a result of having left jobs in an atmosphere of “dispute”, is a typical characteristic. Interviewees of this type no longer generally care about having a large social network. They are experienced enough (in a technical sense) that they can find another job very quickly. They also do not focus on actively and continuously developing their technical skills but rather prioritize working in a narrow area of specialization. The rarer the skills they have, the better for them in terms of marketplace bargaining power (Schmalz et al. 2018). It is therefore also important for them that the companies for which they work are as up-to-date as possible to enable the technical development of their IT skills and thus to increase their opportunities for lucrative employment. Such an instrumental attitude to technology is like the perception of this same aspect in the “instrumentalism” category.

I brought a whole [IT] project, such a big one, for huge millions [of money] to Poland. So when I came back [from another EU country], I wanted to be at the head of that project. And here, at the Polish corporation, you have to prove you deserve it first. You have to go through recruitment interviews inside the company; everyone has to agree that you're cool. Some people agreed, and some people said they wanted to think about it. But yes, in six months they said no. I said, oh, hey guys, if it's no, then no, I quit (Maciej).

In their workplace, these employees present themselves as “ideal” workers to their colleagues and supervisors. They wear a “mask,” in Goffman’s (1956) sense of this concept, to achieve personal gains. On the one hand, this may be a survival strategy in the company, as employees often feel estranged and isolated, as well as having a feeling that social relations have become meaningless, which in some sense resembles Sennett’s (1999) idea of the corrosion of character and other personal consequences of working in capitalism. In other words, people present one personality when they are at work and another when they are at home or in other informal situations. This can lead to a loss of self-authenticity in the eyes of relatives or co-workers. It also results in individuals becoming confused and feeling a loss of meaning at work, with a consequent search for it in non-work spheres, or in psychotherapy sessions. On the other hand, this strategy might be manifested in the fact that very experienced employees use their practical knowledge of how to function in an organization to circumvent, or even reject, official company procedures and regulations without consequences, in favor of adhering to “unwritten” rules. Such behavior can be interpreted in the category of work counter-ideologies (Walczak-Duraj 2015: 32), which

presuppose the emergence of values or norms internally inconsistent and in opposition to the principles the management imposes and promotes. In other words, regulations with which an employee disagrees are ignored, while those with which he or she agrees are followed. The success of such a strategy is determined, among other things, by the reputation (the “authority”) and tenure of the IT professional concerned. This approach might be described as very pragmatic—to the point that perhaps from the viewpoint of the employers such workers may be perceived as cynical and opportunistic, and as taking advantage of the company’s position and resources. One of the aims of applying this strategy could be to gain time for activities that are perceived to be more important than the work itself. In Zbigniew’s case, the stimulus was his health (he was diagnosed with diabetes a few years before the interview); he wanted to travel abroad, which is his hobby but for which he lacked the time because of his work.

I wanted to make an honest living and do useful things, but now everything has changed completely. I’ve decided that I’m not going to do stupid things [working at BPO company] anymore.

Thus, it can also be said that, as for the “instrumentalism” type, the separation of life and work is an important characteristic of the “disenchantment” type of professional. However, whereas in the “instrumentalism” category the narrators focused on strengthening their relationships with their relatives, spending time with family, on their hobbies, with friends, and so forth, in the “disenchantment” category, although the interviewees used their time to search for hobbies as a counterbalance to work, they also focused on improving their physical and mental health.

In comparison to the previous types, the attitude of the “disenchantment” type differs in regard to “agile” methodologies. The narrators were more critical of this type of methodology and had a dismissive attitude toward it, although their stance was mainly declarative. At the level of practice, the instrumental approach described in regard to the previous type dominates. The interviewees viewed the methodology in terms of its creating business opportunities: for instance, they could open training companies to teach it. The interviewees did not perceive that ASD had any value in supporting employees in their daily work on projects, or in “humanizing” working conditions, as the authors of the program document have declared (Beck et al. 2001).

And it’s often the case that in the IT industry there are a lot of different buzzwords, right? That is, such base acronyms of various acronyms and so on, right? Sometimes there aren’t any combinations of letters left. And sometimes a whole huge chunk of the industry forms behind such a buzzword. A few training companies are emerging. It’s a bit like with agile methodologies (Zbigniew).

In addition, narrators were critical of such “ceremonies” as daily meetings and sprint review, finding them to be of little use and taking up valuable time. They were of the opinion that they had enough practical experience to be able to plan the scrum sprint, their tasks, and their deadline themselves, and that any meetings should be limited to the minimum or communicated via email. They would not learn much more from a sprint retrospective meeting, so it was not necessary either. When it comes to the meaning of roles such as scrum master or product owner, here too the narrators did not tend to have a positive opinion, as they believed that their own expertise was superior to that of the people in those positions, who usually did not have as much seniority and, according to the narrators, were not sufficiently competent.



While in the earlier category, criticism was directed at systemic conditions that prevented the effective use of this type of management, in the “disenchantment” category, the idea itself was criticized, along with its lack of feasibility in practice, as an excerpt from an interview with Szymon shows:

The manager [of his project] said we are going to do scrum, but it’s also supposed to be very egalitarian. I mean everyone has something to say. We’re going to be experts and it’s going to be nice. Well, in practice, it’s something terrible, because it turns out that the older people with seniority but less experience [in scrum] were basically imposing ways of working and solutions on the older people with more experience [in scrum], as well as on the younger people with more seniority and on those who just came in (Szymon, 38, software developer).

In this category there is also a critique of the original, overall management “philosophy” embodied in scrum. The ASD is rather seen, especially for those in management positions, as a management tool for increased control of employees in a team, based on the “divide and rule” principle (Przemysław, 28, software developer, project manager).

### Discussion and Conclusions

Working in the BPO industry under ASD conditions in Poland has given rise to the myth of the “IT aristocracy.” Such a work setting is associated with ideal working conditions, that is, high wages, opportunities for broad skill development and creativity, vast work autonomy, and the high technological sophistication and innovativeness of companies in the industry. The research, however, paints a different picture, according to which the experiences of working in such conditions are much more varied, while the employees are not a homogenous occupational group in terms of working experiences. Additionally, companies are not characterized by similar working conditions. The research was conducted in order to understand these experiences in relation to the narrators’ overall biographical experiences (including their individual capital configurations), the objective situation of the industry, the institutional conditions of the Polish economy, and organizational variables such as the impact of “agile” management on work.

In a broader sense, the implementation of lean-related management in software development, that is, ASD, requires employees to adapt to new experiences, which obliges them to be mentally resilient enough to cope with a lack of autonomy and to adapt to a narrow bureaucratic framework consisting of rigid rules and formalized principles (Durand 2019: 99). Such a situation has its consequences in terms of shifts of identity in the workplace in connection with changing working conditions and experiences. The categories reconstructed in my research draw on Durand’s (2019) concepts of identity in the workplace (“contentment identity,” “reluctance identity,” and “abandonment identity”), while pointing to the important role of the narrators’ resources (Bourdieu 1986) and their configuration. Combined with the application of biographical methodology (Schütze 1992) and (still ongoing) extensive qualitative fieldwork, my approach may be somewhat of a novelty in sociology, as the context of biographical determinants is also not commonly used in this type of research.

The reconstructed categories of work experience under ASD conditions in Poland can be viewed in the form of a continuum consisting of three types. The initial “enthusiasm,” with its work-derived passion and satisfaction and the desire for self-development, changes

over time into “instrumentalism” in the case of younger narrators, who focus on gaining work experience and deliberately bridge the gap between life and work spheres. The latter category is characterized by an instrumental orientation toward work in the context of non-work life (e.g., the accumulation of economic resources allows for a focus on social relations in non-work life; the income provides economic security). “Instrumentalism” turns into “disenchantment” over time. In practice, the latter may manifest itself, first, in the feeling that the daily project-related tasks and work in general have lost their meaning. Second, it may stem from a lack of separation of work-life relationships due to years of neglect and the intensification of work, which results in professional burnout and makes focusing on rebuilding one’s health and non-work social relationships a priority. Third, it may derive from a lack of development of the employee’s own skills, in connection with the company’s technological limitations. The Polish economy is not technologically advanced, due to its dependent market economy model (Nölke, Vliegenthart 2009), low spending on R&D, and role as an “assembly platform” for semi-standardized services.

The BPO industry in Poland, however, is one of the most attractive destinations in the world for global capital, as indicated by reports (e.g., UNCTAD 2022). Due to these conditions, production in IT-related industries may resemble Fordist mass production. Poland is therefore a subcontractor of global technological powers and not a “local technological power”; it has the status of a semi-peripheral (Zarycki 2009) economy offering attractive conditions for this type of business (e.g., public aid, low labor costs, a highly qualified workforce, cultural and geographical proximity, a high rate of STEM graduates and students, etc.). In other words, the Polish economy is rather labor intensive than technologically intensive. The research has verified these findings, showing that in spite of IT professionals in the Polish BPO industry being highly skilled, and the Polish economy being in a semi-peripheral position and manifesting some traits of a digital economy (Śledziwska, Włoch 2021), these workers cannot make full use of their creative and innovative potential because of structural constraints. The BPO industry, which is a global phenomenon, previously had no equivalent in Poland. In countries where there is a persistent lack of domestic capital, global capital has often been the only means of financing various kinds of investment, and therefore MNCs have dynamically entered high-tech and business-related industries. There has particularly been a large number of investments related to the outsourcing of business services from economically and technologically developed countries to countries like Poland, which have become semi-peripheral recipients of international transfers of technology, ideas, human resources, and management methods.

In regard to the transfer of organizational models, and of ASD specifically, research has confirmed that ASD in companies in the Polish BPO industry is adjusted, configured, and adapted first to meet the needs of clients, and then in connection with the employees, the team, and the project (Hobbs, Petit 2017: 11). Most of the narratives I collected referred to the use of “hybrid” management models, which combined elements of ASD management (Scrum) with components of other types of methods (Waterfall). In other words, first, the hybridization of organizational models can be observed in the Polish IT industry as well, and second, this fact also indicates that the narrators, who were from the Polish BPO industry, were not working on innovative projects and in flexible/“agile” work settings.

Furthermore, other research indicates (Jørgensen 2018) that, in contrast to “traditional” (waterfall) methods, ASD is more likely to realize its full potential in medium-size or large projects, that is, where there is a huge budget and a large number of teams. The company can then achieve much better financial results. My research has confirmed these observations. Although in the categories reconstructed, the majority of respondents were working in an ASD/“hybrid” environment (34 out of 51) in MNCs, they were not entirely satisfied (especially those in the “disenchanted” category) with this type of management.

The results also confirm that ASD can contribute to the emergence of structural and cultural conflicts between clients, employees, and employers. On the one hand, these tensions are based on differences in the organizational culture of capitalism (Hofstede et al. 2010) in Poland, where norms and values are centered around categories such as authority, hierarchy, and so forth. On the other hand, these disputes are based on the “manor” culture of Polish SME companies (Czarzasty 2014), which have autocratic and individual decision-making processes, as well as paternalistic relations at work. In other words, there is the paradox of the reconciliation of ASD rules with the hierarchical and patriarchal management style typical of Polish companies, and this situation has to some extent been verified in my research. My research also shows that although some of the respondents had indicated that at some point in their career they had to deal with Polish organizational culture and had noticed its negative consequences, they did not make the generalization that this type of management was typical of Polish companies but rather viewed it in terms of individual circumstances (e.g., the personalities of the owners of such companies; colleagues/supervisors who tolerated such behavior in companies). In other words, the research tends to point to the need for workers to have increased autonomy and decision-making influence in companies, as is in line with ASD principles but is not realized in practice (even in some MNCs), according to the respondents.

On the other hand, structural conflicts between customers, supervisors, and workers in outsourcing and IT services (Mathew et al. 2022; Ó Riain 2010) can also be observed. My research has confirmed these results. Companies tend to favor the customer over their employees. From the workers’ perspective, clients exploit IT professionals because they are concerned to obtain the best quality product, without taking into account the company’s time and financial resources, including their employees (their working time). In practice, companies and clients expect IT professionals to work long hours to perfect a product. Customers and managers—according to the employees—are not able to specify their own needs and are not familiar with the realities of the work of IT professionals, which creates conflict. The present research shows that in the case of the BPO industry in Poland the role of the customer is an ambivalent one. This stakeholder is not perceived as an equal party but rather as a kind of obstacle in the software development process.

### Acknowledgments

The author would like to thank two anonymous reviewers, as well as Professor Adam Mrozowicki and Dr. Mateusz Karolak, whose comments significantly enriched the text. The author would also like to thank the interviewees, who took the time to participate in the research and share their stories.

### Funding

National Science Centre, Poland (UMO-2021/41/N/HS6/00557).

### References

- ABS L. 2023. Sektor nowoczesnych usług biznesowych w Polsce 2023. Retrieved from: <https://absl.pl/pl/news/c/raporty> [Accessed: 15.10.2023].
- Adeodu, A., Kanakana-Katumba, M., Rendani, M. 2021. Implementation of Lean Six Sigma for production process optimization in a paper production company, *Journal of Industrial Engineering and Management* 14(3): 661–680.
- Ahlstrand, R., Gautié, J. 2022. Labour–management relations and employee involvement in lean production systems in different national contexts: A comparison of French and Swedish aerospace companies, *Economic and Industrial Democracy* 44(3).
- Ahmad, M., Markkula, J., Oivo, M. 2016. Insights into the Perceived Benefits of Kanban in Software Companies: Practitioners' Views, 17th International Conference, XP 2016, Edinburgh, UK, May 24–27, 2016, Proceedings.
- Babbie, E. 2019. *Badania społeczne w praktyce*. Warszawa: PWN.
- Beck, K., Beedle, M., van Bennekum, A., Cockburn, A., Cunningham, W., Fowler, M., Grenning, J., Highsmith, J., Hunt, A., Jeffries, R., Kern, J., Marick, B., Martin, R., Mellor, S., Schwaber, K., Sutherland, J., Thomas, D. 2001. Manifesto for Agile Software Development. Retrieved from: <https://agilemanifesto.org/> [Accessed: 10.01.2019].
- Blumer, H. 1954. What is Wrong with Social Theory, *American Sociological Review* 18: 3–10.
- Boes, A., Kämpf, T. 2007. The nexus of informatisation and internationalisation: a new stage in the internationalisation of labour, *Work Organisation, Labour & Globalisation* 1(2): 193–208.
- Bokszański, Z. 1986. Koncepcja tożsamości jednostki w pracach Anselma L. Straussa, *Studia Socjologiczne* (101)2.
- Bokszański, Z. 1989. *Tożsamość. Interakcja. Grupa*. Łódź: UŁ.
- Bourdieu, P. 1986. The forms of Capital, in: J. Richardson (ed.), *Handbook of Theory and Research for the Sociology of Education*. Westport: Greenwood, pp. 241–258.
- Carter, B., Danford, A., Howcroft, D., Richardson, H., Smith, A., Taylor, P. 2013. Taxing times: lean working and the creation of (in)efficiencies in HM revenue and customs, *Public Administration* 91(1): 83–97.
- Conboy, K. 2009. Agility from First Principles: Reconstructing the Concept of Agility in Information Systems Development, *Information Systems Research* 20(3): 329–354.
- Coase, R. 1992. The Institutional Structure of Production, *The American Economic Review* 82(4): 713–719.
- Czarzasty, J. 2014. Stosunki pracy w małych i średnich prywatnych przedsiębiorstwach, *Problemy Polityki Społecznej. Studia i Dyskusje* 26(3): 135–153.
- Dauber, D., Fink, G., Yolles, M. 2012. A Configuration Model of Organizational Culture, *SAGE Open* 2(1).
- Döringer, S. 2020. The problem-centred expert interview. Combining qualitative interviewing approaches for investigating implicit expert knowledge, *International Journal of Social Research Methodology* 24(3): 265–278.
- Durand, J.-P. 2019. *Creating the new Worker. Work, Consumption and Subordination*. London: Palgrave Macmillan.
- Foucault, M. 1982. The Subject and Power, in: H. L. Dreyfus, P. Rabinow, M. Foucault (eds.), *Beyond Structuralism and Hermeneutics*. Chicago: University of Chicago Press, pp. 777–795.
- Floersch, J., Longhofer, J. L., Kranke, D., Townsend, L. 2010. Integrating Thematic, Grounded Theory and Narrative Analysis, *Qualitative Social Work* 9(3): 407–425.
- Glaser, B. 1978. *Theoretical Sensitivity: Advances in the Methodology of Grounded Theory*. Mill Valley: Sociology Press.
- Glaser, B., Strauss, A. 2017. *Discovery of Grounded Theory: Strategies for Qualitative Research*. New York: Sage.
- Goffman, E. 1956. *The Presentation of Self in Everyday Life*. New York: Doubleday.
- Goldthorpe, J., Lockwood, D., Bechhofer, F., Platt, F. 1968. *The Affluent Worker: Industrial Attitudes and Behaviour*. Cambridge: Cambridge University Press.
- Graeber, D. 2018. *Bullshit Jobs: A Theory*. New York: Simon & Schuster.

- Greineder, M., Blohm, I., Leicht, N. 2021. Conceptualizing the agile work organization: a systematic literature review, framework and research agenda. 33rd bled e-conference enabling technology for a sustainable society. BLED Proceedings, 265–276.
- Gustavsson, T., Berntzen, M., Stray, V. 2022. Changes to team autonomy in large-scale software development: a multiple case study of Scaled Agile Framework (SAFe) implementations, *International Journal of Information Systems and Project Management* 10(1): 29–46.
- Hardy, J. 2009. *Poland's New Capitalism*. London: Pluto Press.
- Hashmi, S., Shahzad, K., Izhar, M. 2022. Proposing total quality management as a buffer between global software development challenges and project success, *The TQM Journal* 34(5): 1432–1447.
- Helling, I. 1990. Metoda badań biograficznych, in: J. Włodarek, M. Ziólkowski (eds.), *Metoda biograficzna w socjologii*. Warszawa: PWN, pp. 127–135.
- Hidalgo, E. 2019. Adapting the scrum framework for agile project management in science: case study of a distributed research initiative, *Heliyon* 5, e01447, doi: 10.1016/j.heliyon.2019, accessed: 10.12.2023.
- Highsmith, J. 2009. *Agile Project Management: Creating Innovative Products*. London: Pearson Education.
- Hobbs, B., Petit, Y. 2017. Agile Methods on Large Projects in Large Organizations, *Project Management Journal* 48(3): 3–19.
- Hodgson, D., Briand, L. 2013. Controlling the uncontrollable: 'Agile' teams and illusions of autonomy in creative work, *Work, Employment and Society* 27(2): 308–325.
- Hofstede, G., Hofstede, G., Minkov, M. 2010. *Cultures and Organizations—Software of the Mind: Intercultural Cooperation and Its Importance for Survival* (3rd ed.). New York: McGraw Hill.
- ISCO-88. 1988. International Standard Classification of Occupations. Retrieved from: <https://www.ilo.org/public/english/bureau/stat/isco/isco88/> [Accessed: 07.01.2019].
- Iivari, J., Iivari, N. 2011. The relationship between organizational culture and the deployment of agile methods, *Information and Software Technology* 53(5): 509–520.
- Jasiecki, K. 2013. *Kapitalizm po polsku: Między modernizacją a peryferiami Unii Europejskiej*. Warszawa: Wydawnictwo IFiS PAN.
- Jégou, O., Souayah, F. 2021. What Do Workers Get Out of Agility? Examining Workers' Capability for Democratic Self-Government of Work, in: S. Pfeiffer, M. Nicklich, S. Sauer (eds.), *The Agile Imperative, Teams, Organizations and Society under Reconstruction?* London: Palgrave Macmillan, pp. 203–224.
- Jørgensen, M. 2018. Do Agile Methods Work for Large Software Projects?, in: J. Garbajosa, X. Wang, A. Aguiar (eds.), *Agile Processes in Software Engineering and Extreme Programming, XP, Lecture Notes in Business Information Processing*, 314. Cham: Springer, pp. 179–190.
- Kaźmierska, K. 2012. Metoda biograficzna — problemy teoretyczno-metodologiczne. Wprowadzenie, in: K. Kaźmierska (ed.), *Metoda biograficzna w socjologii*. Kraków: Nomos, pp. 107–121.
- Kämpf, T. 2018. Lean and White-Collar Work: Towards New Forms of Industrialisation of Knowledge Work and Office Jobs? *Triple C: Communication, Capitalism & Critique* 16(2): 901–918.
- Kunda, G. 2006. *Engineering Culture. Control and Commitment in a High-Tech Corporation*. Philadelphia: Temple University Press.
- Lacity, M., Khan, S., Willcocks, L. 2009. A review of the IT outsourcing literature: Insights for practice, *The Journal of Strategic Information Systems* 18(3): 130–146.
- Lindsjörn, Y., Sjöberg, D., Dingsøy, T., Bergersen, G., Dybå, T. 2016. Teamwork quality and project success in software development: A survey of agile development teams, *Journal of Systems and Software* 122: 274–286.
- Lee, S. 2021. The myth of the flat start-up: Reconsidering the organizational structure of start-ups, *Strategic Management Journal* 43(1), 58–92.
- Lohan, G., Conboy, K., Lang, M. 2011. Having a Customer Focus in Agile Software Development, *Information Systems Development*. 19th International Conference on Information Systems Development (ISD 2010).
- Marody, M., Lewicki, M. 2010. Przemiany ideologii w pracy, in: M. Marody, J. Kochanowski (eds.), *Kultura i gospodarka*. Warszawa: SCHOLAR, pp. 89–128.
- Mathew, J., Srinivasan, V., Croucher, R., Gooderham, P. 2022. Managing human resource management tensions in project-based organisations: Evidence from Bangalore, *Human Resource Management Journal*.
- Ménard, C. 2014. Embedding organizational arrangements: towards a general model, *Journal of Institutional Economics* 10(4): 567–589.
- Miller, P. 2010. Konstruowanie tożsamości ratownika górskiego. Analiza symboliczno-interakcjonistyczna, *Przegląd Socjologii Jakościowej* VI(1): 1–121.

- Mrozowicki, A. 2011. *Coping with Social Change: Life Strategies of Workers in Poland's New Capitalism*. Leuven: Leuven University Press.
- Mrozowicki, A. 2020. Badania biograficzne nad młodymi pracownikami sprekaryzowanymi: kontekst metodologiczny, in: A. Mrozowicki, J. Czarasty (eds.), *Oswajanie niepewności. Studia społeczno-ekonomiczne nad młodymi pracownikami sprekaryzowanymi*. Warszawa: Scholar, pp. 100–116.
- MPiPS. 2014. Rozporządzenie Ministra Pracy i Polityki Społecznej z dnia 7 sierpnia 2014 r. w sprawie klasyfikacji zawodów i specjalności na potrzeby rynku pracy oraz zakresu jej stosowania. Retrieved from: [https://stat.gov.pl/Klasyfikacje/doc/kzs/kzs\\_pp.htm](https://stat.gov.pl/Klasyfikacje/doc/kzs/kzs_pp.htm) [Accessed: 18.10.2023].
- Näslund, D. 2008. Lean, six sigma and lean sigma: fads or real process improvement methods?, *Business Process Management Journal* 14(3): 269–287.
- Nippert-Eng, Ch. 1996. Calendars and keys: The classification of “home” and “work,” *Sociological Forum* 11(3): 563–582.
- Nölke, A., Vliegenthart, A. 2009. Enlarging the Varieties of Capitalism: The Emergence of Dependent Market Economies in East Central Europe, *World Politics* 61(4): 670–702.
- Obrutsky, S., Erturk, E. 2017. The Agile Transition in Software Development Companies: The most common barriers and how to overcome them, *Business and Management Research, Business and Management Research* 6(4): 40–53.
- Ó Riain, S. 2010. The Missing Customer and the Ever-Present Market: Software Developers and the Service Economy, *Work and Occupations* 37(3): 320–348.
- Pilch, S. 2023. A Career in IT? The Meanings of a Career at Business Process Outsourcing Centers in Poland from a Biographical Perspective, *Qualitative Sociology Review* 19(1): 76–100.
- Poppendieck, M., Poppendieck, T. 2003. *Lean Software Development: An Agile Toolkit*. New York: Addison-Wesley Professional.
- Pro Progressio. 2016. Deutscher Outsourcing Verband. Retrieved from: <https://www.outsourcingverband.de/downloads/destination-guide-poland2/> [Accessed: 10.02.2019].
- Razzak, M. 2017. “An Empirical Study on Leanness and Flexibility in Distributed Software Development”, arXiv:1711.01097, accessed: 10.12.2023.
- Rokuszewska-Pawełek, A. 1996. Miejsce biografii w socjologii interpretatywnej. Program socjologii biografistycznej Fritza Schütze, *ASK. Społeczeństwo. Badania. Metody* 1: 37–54.
- Saiedian, H., Dale, R. 2000. Requirements engineering: making the connection between the software developer and customer, *Information and Software Technology* 42(6): 419–428.
- Sauer, S., Nicklich, M., Pfeiffer, S. 2021. The Agile Imperative: A Multi-Level Perspective on Agility as a New Principle of Organizing Work, in: S. Pfeifer, M. Nicklich, S. Sauer (eds.), *The Agile Imperative. Teams, Organizations and Society under Reconstruction?*. New York: Palgrave Macmillan, pp. 1–15.
- Sawicka, M., Karlińska, A. 2021. Survival or Self-Actualization? Meanings of Work in Contemporary Poland, *Polish Sociological Review* 214(2): 199–219.
- Schmalz, S., Ludwig, C., Webster, I. 2018. The Power Resources Approach: Developments and Challenges, *Global Labour Journal* 9(2): 112–134.
- Schütze, F. 1992. Pressure and Guilt—War Experiences of a Young German Soldier and Their Biographical Implications (part I), *International Sociology* 7(2): 187–208.
- Schütze, F. 2016. Biography Analysis on the Empirical Base of Autobiographical Narratives: How to Analyse Autobiographical Narrative Interviews, *Sozialwissenschaftliche Prozessanalyse, Grundlagen Der Qualitativen Sozialforschung*. Leverkusen: Verlag Barbara Budrich, pp. 75–116.
- Sennett, R. 1999. *The Corrosion of Character: the Personal Consequences of Work in the New Capitalism*. New York, London: W.W. Norton & Co.
- Silver, B. 2003. *Forces of Labor: Workers' Movements and Globalization since 1870*. Cambridge: Cambridge University Press.
- Śledziewska, K., Włoch, R. 2021. *The Economics of Digital Transformation: The Disruption of Markets, Production, Consumption, and Work*. New York: Routledge.
- Stewart, P., Mrozowicki, A., Danford, A., Murphy, K. 2016. Lean as ideology and practice: A comparative study of the impact of lean production on working life in automotive manufacturing in the United Kingdom and Poland, *Competition and Change* 20(3): 147–165.
- Stewart, P., Pulignano, V., Mrozowicki, A. 2019. ‘Lean Production is Dead, Long Live Lean Production’: Lean, Neo-Liberal Crisis, Turbulence and the Consolidation of Regimes of Subordination, *Warsaw Forum of Economic Sociology* 10(19): 7–34.
- UNCTAD. 2022. World Investment Report 2022. <https://unctad.org/webflyer/worldinvestment-report-2022> [Accessed: 10.12.2023].



- Venkatesh, V., Thong, J., Chan, F., Hoehle, H., Spohrer, K. 2020. How agile software development methods reduce work exhaustion: Insights on role perceptions and organizational skills, *Information Systems Journal* 30(4): 733–761.
- Walczak-Duraj, D. 2015. Kontrideologia pracy jako czynnik dezintegracji społecznej, in B. Pactwa, U. Swadźba, M. Żak (eds.), *Praca — więź — integracja. Wyzwania w życiu jednostki i społeczeństwa. T. 1: Praca, przedsiębiorczość, gospodarka oparta na wiedzy*. Katowice: UŚ, pp. 51–68.
- Weber, M. 1966. *The Sociology of Religion*. London : Methuen.
- Weber, M. 1979. *Economy and Society: an Outline of Interpretive Sociology. Vol. 1*. Berkeley–Los Angeles–London: University of California Press.
- Womack, J., Jones, D., Roos, D. 1990. *The Machine That Changed the World: The Story of Lean Production*. New York: Harper Perennial.
- Zagórski, K. 1994. Hope factor, inequality, and legitimacy of systemic transformations: The case of Poland, *Communist and Post-Communist Studies* 27(4): 357–376.
- Zarycki, T. 2009. *Peryferie. Nowe ujęcia zależności centro-peryferyjnych*. Warszawa: SCHOLAR.

*Biographical Note:* Szymon Pilch (Ph.D.) is a research assistant at the Institute of Sociology at the University of Wrocław. His main research areas include the sociology of work, the digital economy, economic sociology, platform work, outsourcing, and industrial relations. Currently, he is a member of the Horizon EU project “INCA” (<https://inca-project.eu/>) and PI in a project funded by the National Science Centre, Poland.

ORCID iD: 0000-0002-4595-5455

E-mail: [szymon.pilch@uwr.edu.pl](mailto:szymon.pilch@uwr.edu.pl)

**Annex 1**  
**The List of Interviewees**

No.	Name	Gender	Age	Tenure in IT (in years)	Position and role in company	Type of company
1.	Alicja	F	39	7	Senior application software developer	MNC
2.	Bruno	M	29	6	Senior software engineer	MNC
3.	Fiodor	M	22	2	Junior software developer	PL
4.	Franciszek	M	26	1	Junior software developer	PL
5.	Ireneusz	M	23	<1	Junior software developer	PL
6.	Ivan	M	22	2	Junior software developer	MNC
7.	Jarosław	M	36	11	Senior software architect	MNC
8.	Juan	M	29	6	Senior software engineer	MNC
9.	Maciej	M	34	11	Senior software developer, team leader	PL
10.	Mariusz	M	34	10	Senior software developer, team leader	PL
11.	Piotr	M	36	1	Mid-level software developer, skill coach	MNC
12.	Sylvia	F	27	2	Junior software developer	MNC
13.	Tadeusz	M	35	1	Junior software developer	PL
14.	Wioletta	F	27	4	Mid-level software developer	MNC
15.	Andrzej	M	33	8	Senior software developer	MNC
16.	Barbara	F	27	2	Junior software developer	PL
17.	Filip	M	28	7	Senior software engineer	MNC
18.	Jan	M	36	1	Junior software developer	PL
19.	Katarzyna	F	23	1	Junior software developer	PL
20.	Kazimierz	M	31	7	Senior software developer	PL
21.	Krzystian	M	27	5	Senior software developer, team leader	PL
22.	Marcin	M	27	1	Junior software developer	PL
23.	Marek	M	35	7	Senior software engineer	MNC
24.	Rafał	M	26	2	Junior software developer	MNC
25.	Ricardo	M	30	11	Senior software engineer	MNC
26.	Witold	M	28	2	Junior software developer	PL
27.	Zbigniew	M	46	24	Senior software architect	MNC
28.	Marta	F	24	3	Mid-level software developer	MNC
29.	Mateusz	M	29	8	Senior software engineer	MNC
30.	Krzysztof	M	29	9	Senior software developer	PL
31.	Szymon	M	38	12	Senior software engineer	MNC
32.	Patryk	M	25	3	Mid-level software developer	PL
33.	Przemysław	M	29	9	Senior software developer, project manager	PL
34.	Maurycy	M	25	5	Senior software architect	PL
35.	Cezary	M	29	5	Mid-level software developer	MNC
36.	Joanna	F	39	6	Mid-level software developer	PL
37.	Ksawery	M	29	5	Senior software developer	PL
38.	Grzegorz	M	27	<1	Junior software developer	PL
39.	Wiktor	M	30	<1	Junior software engineer	MNC
40.	Wojciech	M	29	7	Senior software developer	MNC
41.	Jacek	M	32	4	Mid-level software developer	MNC
42.	Jakub	M	27	4	Mid-level software developer	PL
43.	Adrian	M	28	5	Senior software engineer	MNC
44.	Antoni	M	33	8	Senior software developer	MNC
45.	Zofia	F	30	4	Mid-level software engineer	PL
46.	Franek	M	34	9	Senior software engineer	MNC
47.	Krzystyna	F	30	3	Junior software developer	PL
48.	Konrad	M	33	8	Senior software developer	MNC
49.	Zbyszek	M	35	13	Senior software developer	MNC
50.	Marian	M	38	11	Senior software engineer, team leader	PL
51.	Dariusz	M	23	2	Junior software developer	PL