U.PORTO

FEP FACULDADE DE ECONOMIA UNIVERSIDADE DO PORTO

Implementing Hybrid and Alternative Work Models in Local Government: A Case Study of Lubartów Municipal Office

Eng. Jan Ślifirczyk

Dissertation

Master in Management

Supervised by

Prof. Carlos Cabral Cardoso

2025/2026

Biographic note

Jan Ślifirczyk – spatial planning engineer, graduated from the Warsaw University of Technology in 2024. Participant in the ATHENS program at the Politecnico di Milano. Currently a student of management in a double degree program at the Warsaw School of Economics and the University of Porto. Professional experience in the public sector – local government institutions and in the private sector – Jeronimo Martins Poland

Acknowledgments

I extend my heartfelt thanks to my parents for their invaluable support, patience, and unwavering belief in me throughout my educational journey. I also wish to express my gratitude to Sonia Klimala, whose understanding, constant presence, and words of encouragement were my greatest motivation during moments of doubt. Special thanks go to my supervisor, Professor Carlos Cabral Cardoso, for his valuable guidance, time, and academic mentorship, all of which contributed significantly to the completion of this work.

Abstract

The COVID-19 pandemic has accelerated the spread of remote working, but there is still little research on its application in local government administration at the municipal level, especially in rural areas. The aim of this study is to assess the feasibility of implementing alternative working models: hybrid work, flexible working hours, and afternoon shifts at the Lubartów Municipal Office by identifying key determinants related to the job position, employee, and organizational culture, as well as taking into account the perspective of residents. The theoretical part defines key concepts, including remote and hybrid work, and reviews the concept of grouping determinants of remote work. It also analyzes aspects related to management in public offices and work models such as flexible working hours. The empirical part uses qualitative and quantitative research: interviews with office employees and a survey among municipality residents. Based on the theoretical part, a three-part model of determinants is proposed: those related to the job position, the employee, and the organizational culture, which forms the basis for the employee interviews. The research conducted allowed for a general and detailed picture of the situation in the office, on the basis of which proposals for directions of changes were developed. The second, later study aims to analyze residents' attitudes toward the proposed changes. By analyzing both parts of the study, final recommendations were developed. Although the work covers a case study of the rural Municipality of Lubartów, the solutions it contains can be applied to other rural municipalities of this type.

Keywords: municipal office, hybrid work, alternative work models, organizational culture, local government, working conditions, flexible working hours, administration

JEL-codes: J28 J24 J81 M54 O33

Table of Contents

Biographic note i

Acknowledgments i

Abstract ii

Table of Contents iii

List of Tables v

List of Figures v

1. Introduction 1

2. Literature review 3

2.1. Alternative work models 3

2.1.1 Definitions of remote work 3

2.1.2 Determinants of remote work 6

2.1.3 Different remote work configurations and alternatives 9

2.2. Evolution of work culture in the public sector 12

2.2.1 Digitization in the public sector 13

2.2.2 Management methods in the public sector 18

2.2.3 Limitations of remote work in public sector 20

2.3. Research gaps and justification for the study 24

3. Methodology 27

3.1. Methodological approach 27

3.2. Research design 28

3.2.1 Semi-structured survey of employees 28

3.2.2 Survey with residents of the municipality 29

3.3. Procedure of data collection 30

4. Results 32
4.1. Analysis of the employee survey 32
4.1.1 Readiness for remote working and a comparative analysis of departments 33
4.1.2 Analysis of the survey with residents of the municipality 39
4.2. Comparison between department 45
4.3. Test of Research Question 48
5. Conclusions 50
5.1. Limitations and suggestions for future research 50
5.2. Theoretical Implications 51
5.3. Managerial implications 51
5.4. Summary 55
References 56
Legislation 61
Appendixes 62

List of Tables

Table 1: DESI data for Poland, Portugal and the EU 15
Table 2: Integrated departmental assessment score 47
Table 3: Proposed Work organization models by Department 53

List of Figures

Chart 1: Remote Work Index by department 34
Chart 2: Inter-departmental links 36
Chart 3: Individual Remote Work Predisposition Index by age group, sector experience, and prior remote work experience. 37
Chart 4: Knowledge and use of modern management methods among officials 38
Chart 5: Frequency of visits to the office in the last year 39
Chart 6: Office visiting hours 40
Chart 7: Division of visits by department 40
Chart 8: Customer service quality assessment 41
Chart 9: Time required to deal with the matter at office 42
Chart 10: Assessment of extending the office's operating hours 43
Chart 11: Assessment of the electronic registration system 44
Chart 12: Assessment of hybrid solution 45

1. Introduction

The SARS-CoV-2 (COVID-19) pandemic in 2020 significantly changed the paradigms in office work models. Before the pandemic, only 4.6% of employees in Poland and 5.5% in the European Union worked remotely, but by the end of 2020, this number had risen sharply to 8.9% in Poland and 12.3% in the European Union (Eurostat, 2022), with the highest numbers in the financial services and insurance (36.1%), education (45.9%), and IT (66.8%) (Radziukiewicz, 2021). At the peak of the pandemic, during the most severe restrictions, almost 40% of employees worked remotely (Eurofound, 2020). Despite the significant changes that occurred during the pandemic, some companies returned to office work, and studies show that the number of people who usually or sometimes work remotely fell from 24% to 22.2% in the European Union (Desmarais, 2025). In recent years, there have been many studies on remote work, but few have focused on remote work in public administration, let alone local government at the lowest level in rural areas. The following study aims to assess the possibilities of implementing changes in working arrangements, e.g., hybrid work, by identifying the strengths and weaknesses of three determinants: job position, employee, and organizational culture. The work is a case study of the rural Municipality of Lubartów, but the conclusions may be universal for local government administration at the lowest level in rural areas.

This dissertation examines three key characteristics that influence hybrid work: factors related to the position, the employee's personality, and organizational culture. Furthermore, external factors related to the reception of changes by the office's customers will be taken into account in the work.

Although extensive research has been conducted on remote work in the private sector and central government, a comprehensive understanding of this phenomenon in local governments at the municipal level remains lacking. In particular, it remains unclear how specific technological and cultural barriers impact rural municipal offices. Although the literature points to various determinants of remote work, an integrated approach combining the perspectives of job specificity, employee characteristics, and organizational culture in the specific environment of a municipal office is lacking. Research combining the internal perspective of officials with the expectations of residents as office customers is also lacking.

Given the specific nature of public administration, the study applied a mixed-methods approach. A case study of the Lubartów Municipal Office was applied for several reasons: first, it allows for an in-depth understanding of the work of rural offices; second, it allows for the collection of data from over 75% of employees (n>30) through interviews; and third, it incorporates the voice

of the local community through surveys of residents (n>100). The study utilized, among other things, the Work Autonomy Index and the Five-Factor Model to assess personality traits.

The main contributions of this study can be summarized in three aspects. First, it examined the digital and organizational readiness of rural municipal offices for hybrid work. Second, it analyzed the impact of alternative working time arrangements on the accessibility of public services. Third, a code of good practice will be developed, which—although based on the case of the Lubartów Municipality —can be applied to other similar local government units, particularly in eastern Poland. These results have practical implications for public sector employers in terms of management and building a modern organizational culture.

2. Literature review

2.1. Alternative work models

The main objective of this chapter is to conduct a detailed literature review and conceptualize terms related to alternative work models, with particular emphasis on the specific nature of local-level public administration. Subsection 2.1 will address three key thematic areas.

The evolution and multidimensional nature of the definitions of remote and hybrid work, within which the terminological development will be analyzed—from the historical perspective of telecommuting in the 1970s, through the legal frameworks of the European Union and individual member states, to the provisions of the Polish Labour Code. Hybrid work will be defined here not only in terms of physical location but as a dynamic interaction of the physical, temporal, virtual, and social dimensions.

The second subsection organizes the factors scattered throughout the literature that influence the effectiveness of work outside the office. The study will analyze factors related to the nature of tasks and autonomy, those stemming from competencies, age, and personality traits, as well as those related to management style and intra-organizational relationships. Based on the existing body of research, an integrated, three-part model of determinants will be proposed and used in the next sections of this study.

The third section will analyze specific hybrid models and alternative work-schedule systems, including flexitime and afternoon shifts. Their direct impact on productivity, satisfaction, and human capital retention will be discussed. This section will provide an important contribution to the proposed solutions in the research part.

2.1.1 Definitions of remote work

A contemporary analysis of remote work models requires a precise distinction in terminology, which has evolved alongside technological progress. Interest in this form of work arrangement dates back to the 1970s, when the term "telecommuting" was introduced to describe replacing commutes to the office with working from home using information and communication technologies (ICT). The literature on the subject identifies three generations in the evolution of telecommuting: the home office, the mobile office, and the virtual office (Messenger, 2019). So, there is no single universal definition of remote work. One of the most popular dictionaries, Cambridge University Press, defines remote work as:

"*The practice of an employee working at their home, or in some other place that is not an organization's usual place of business* or *A situation in which an employee works mainly from home and communicates with the company by email and telephone"* (Cambridge University Press*,* 2025b*)*

In turn, the U.S. Office of Personnel Management defines remote work as: "R*emote work is defined as a flexible work arrangement in which an employee, under a written remote work agreement, is scheduled to perform work at an alternative worksite and is not expected to perform work at an agency worksite on a regular and recurring basis. A remote worker's official worksite may be within or outside the local commuting area of an agency worksite." (OPM, 2025)*

It is also worth referring to legislative acts in Poland and Europe. A key point of reference for European legal systems is the 2002 European Framework Agreement on Telework which defines remote work as *"Telework is a form of organising and/or performing work, using information technology, in the context of an employment contract/relationship, where work, which could also be performed at the employer's premises, is carried out away from those premises on a regular basis"*(Messenger, 2019, p.11) This definition emphasizes three elements: location (outside the office), technology (ICT), and work organization (regularity). Despite a common foundation in the form of the 2002 agreement, individual EU member states have implemented these principles into their national legal systems in different ways, a fact that became particularly evident following the COVID-19 pandemic.

Current Spanish legislation governing the private sector establishes a precise criterion for regularity. Regular remote work is defined as work performed remotely for at least 30% of the working time within a three-month reference period (Caprile et al., 2025). Earlier Spanish legislation emphasized the form of contract conclusion and equal rights. Telework agreements had to be formulated in writing, and the teleworker had the same rights as the other workers concerning health and safety, wages, training and representation. It is worth noting that in the case of the regional government of Catalonia (which has its own legislative powers), the definition is broader than in national law. The law applies to all hybrid workers regardless of the frequency of remote work.

Austrian definition from the Home Office Law, which strictly defines the place where duties are performed: "*a home office is defined as work carried out from home (including secondary residences or those of close relatives)*". (Caprile et al., 2025, p.20) In Finland's 2019 Working Time Act, the definition emphasizes working time rather than location "*working time is time spent on work regardless of the place*". (Caprile et al., 2025, p.19) Lithuanians define work from home as

Work performed by a person at home for a wage agreed on with the employer. (ETUC, UNICE/UEAPME & CEEP, 2002).

In Polish legislation, remote work is defined in the Labour Code, Chapter IIc, Article 67 *Work may be performed entirely or partially at a location specified by the employee and agreed upon with the employer on a case-by-case basis, including at the employee's place of residence, in particular using means of direct remote communication (remote work). (*Labour Code, 2025, art. 67)

The last definition cited is that of the European Foundation for the Improvement of Living and Working Conditions, where telework is understood as: *"a work arrangement in which work is performed outside a default place of work, normally the employer's premises, by means of information and communication technologies (ICT). The main features of telework are the use of computers and telecommunications to change the usual location of work, the frequency with which the worker is working outside the employer's premises and the number of places where workers work remotely (mobility)."* (Eurofound, 2025).

The key elements of each definition are performing work outside the normative workplace (office). Due to the scope of this paper, the definition from the Polish Labour Code seems to be the most useful, as it is the one that applies in the area under study. However, given the broad scope of remote work as defined by Polish law, the concept of hybrid work has also been included in this paper. According to the Cambridge University Press, it can be described as: *"Methods of working that involve employees sometimes being present in an office or other place owned by their employer, and sometimes working using the internet from home or another place."* (Cambridge University Press, 2025a)

Another definition, based on an analysis of scientific publications proposed by Lauring and Jonasson (2025), emphasizes the complexity of hybrid work: Hybrid work entails ongoing switches between interrelated traditional and non-traditional work modes in relation to modality, location, and temporality where an equal balance between working in traditional and non-traditional work modes represents the highest level of hybridity. Hybrid work can be gauged as ongoing and interrelated switches between work modes at the personal level as individual task execution or the collaborative level as participation in joint task execution. (Lauring & Jonasson, 2025).

Eurofound documents define hybrid work as *"a way of organising work in a way that can be performed partly on-site and partly remotely*" Here, too, hybrid work is not viewed solely through the lens of location, but as the interaction of four key elements:

- Physical: the workplace (office vs. home/other locations).

- Temporal: the time and frequency of work in different locations.
- Virtual: digital technologies and tools enabling connectivity.
- Social: relationships, communication, and trust-building within a distributed team.

Eurofound documents also classify hybrid work based on specific organizational models used in practice across EU countries:

Rigid (office-first): low frequency of remote work (approx. 20%), fixed days in the office, little flexibility in working hours.

Structured/Balanced: remote work 40–60% of the time, high flexibility in working hours, decentralization of decision-making to line managers.

Flexible/Unconstrained: no top-down restrictions on remote work; a model based primarily on individual employee preferences (Cabrita & Eiffe, 2023).

It is worth noting that Polish law does not recognize the concept of hybrid work, and the definitions described above fall under the concept of remote work**.** In summary, the legal landscape of remote and hybrid work is characterized by a diversity of definitions across European jurisdictions, with criteria ranging from specific time thresholds (e.g., Spain's 30% rule) to location-based definitions (e.g., Austria's focus on the home office). While Polish legislation does not formally distinguish hybrid work, it provides a flexible framework where work can be performed entirely or partially at a location agreed upon by the employee and employer. Beyond simple location, hybrid work is increasingly understood through a multidimensional lens encompassing physical, temporal, virtual, and social elements, allowing for organizational models that range from rigid office-first approaches to unconstrained flexibility.

2.1.2 Determinants of remote work

Remote work, like hybrid work, is not always possible in the same configuration. In previous studies, researchers have selected various factors that they considered key factors. Modern analysis in the public sector suggests that the effectiveness of these models is not dependent on a single factor but on the synergy between infrastructure and the organizational culture of the unit (Caprile et al., 2025). According to Koziol-Nadolna, these can be grouped into five categories: legal, economic, technological, social, and psychological (Koziol-Nadolna, 2024). Legal determinants include legal conditions discussed in more detail in the chapter on the limitations on the remote work. Economic determinants include the costs and potential financial gains of remote work, e.g., the cost of renting parking spaces, office

space, and equipment for employees. On the other hand, there are factors that, thanks to the introduction of remote/hybrid work, contribute to improved financial results by significantly reducing costs associated with office restructuring and downsizing office space. Technological determinants refer to the possibility of performing work with the help of a computer and work autonomy (European Commission, 2020), as well as further technological development. A crucial foundation is technological readiness, which encompasses access to equipment, stable network infrastructure, and effective technical support (help desk). In the Polish public sector, a significant barrier remains the use of private devices for official tasks, which impacts data security (Kam, 2024). Conversely, the interoperability of systems—exemplified by Poland's mObywatel app or Austria's electronic file system (Elektronischer Akt)—acts as a determinant for reducing the need for physical presence. Psychological factors relate to the individual predispositions of the employee. Social factors, on the other hand, relate to the organizational culture of the company. This division is, of course, a gross simplification. Ishi et al. (2023) analyze remote work using determinants divided into employee factors and job factors. The former include age, education, earnings, working hours, and IT skills. The latter include work culture, employees' perceptions of remote work, task routine, task abstractness, manuality, and the ability to adapt to new technologies (Ishi et al., 2023). Expanding on the employee-related factors proposed by Ishi et al. (2023), it is impossible to ignore the social and demographic factors that, at the macro level influence individual employee decisions. One of the key changes, which has been increasingly occurring over the past few decades, is the "feminization" of the public sector. Women often prefer hybrid models to better integrate caregiving duties with professional life. In Portugal, the law mandates remote work access for parents of children up to the age of three and for caregivers of dependents, making family status a primary legal determinant of eligibility (Caprile et al., 2025).

Another aspect is Generation Z employees, who are digital natives and expect geographic flexibility as standard, although they may require a more conscious transfer of "tacit knowledge," which is often lost in entirely remote environments. Another social change in recent years is the well-being and work-life balance concerns which have become decisive factors in attracting talent. European offices are increasingly implementing "employee budgets" for workplace improvements and dedicated mental health support services. However, barriers such as social isolation, presenteeism (working while sick), and

lack of ergonomic support at home continue to limit the effectiveness of remote work if they are not addressed in institutional policies (Kam, 2024).

Research on the determinants of remote work in the pre-pandemic era groups these determinants into three categories: technological factors, management factors, and work-related factors (Park & Jae, 2022). Managerial and organizational determinants have gained prominence as the "new normal" shifts from control-based supervision to management by results. Practice across the EU distinguishes three primary hybrid models that determine how work is organized:

- Rigid (office-first): Characterized by high management control and minimal remote frequency (approx. 20%)
- Structured (balanced): Typically involving 40–60% remote time, common in Poland and Austria, where line managers have significant leeway in organizing team schedule
- Flexible (remote-first): Based on individual preferences and high autonomy, characteristic of Nordic countries and the IT sector (Caprile et al., 2025).

In the Portuguese context, specific managerial determinants include high centralization and a strong reliance on interpersonal relationships and informal communication to build trust in dispersed teams. Portugal has implemented innovative "Focus Groups" to allow public servants to express concerns during organizational restructuring, which serves as a determinant for successful transition (IBRiS, 2025).

Another grouping is proposed by Fang in his work, who divided the factors into:

- Technological: emphasizing digitization, existing digital practices, and employee competencies,
- Organizational - company size, sector, and industry in which it operates
- Environmental - business environment and competitors on the market, geographical factors (Fang, 2025).

In summary, the authors group the determinants in different ways, but similarities and key common features can be found, such as technology, management, and employee competencies. In this study, we propose the following division of determinants: job-related, employee-related, and related to the organizational culture of the company. Breaking it down into details for each category, we can assign the following determinants:

Job-related determinants: these relate to the direct possibilities of the job to use remote working. This section should primarily include the indicator of computer use at work, the

manual nature of tasks, the routine nature of tasks, the time dimension, the possibility of adapting new technologies to the job, and the work autonomy index, consisting of:
- Task autonomy—ability to select work tasks; task variability; influence on workload; - selection of procedures, methods, and tools.
- Criteria Autonomy—ability to set work goals, define work performance, and pursue these goals consciously and purposefully.
- Scheduling Autonomy—ability to decide on the order, prioritization, and timing of task completion; determining breaks; independently dealing with disruptions and uncertainties.
- Working Time Autonomy—ability to determine the start and end of working hours. (Glock, 2025)

Employee-related determinants include, above all, age, education, computer and specialist software skills, earnings, emotional stability, character traits such as self-control, willingness to expand knowledge, resourcefulness, individualism, independence, motivation to work, ability to set goals and prioritize, agreeableness, conscientiousness, openness to experience, and extroversion (Gavoille, 2022).

Determinants related to the organizational culture of the company include the attitude and competence of the management staff towards remote work, good practices in the field of remote work, control of the effectiveness of remote work, resources to enable remote work, working in teams and task groups, and relationships between employees (Kissflow, 2025).

Based on these determinants, we can create questions that will allow us to examine the possibilities of remote or hybrid work for specific positions and define the strengths and weaknesses of the office that affect remote or hybrid work.

2.1.3 Different remote work configurations and alternatives

The contemporary professional environment, influenced by the transformation caused by the COVID-19 pandemic, has moved away from uniform models of work in favor of diverse configurations, which Bednarska-Wnuk (2023) refers to as the "new normal." Although the terminology is sometimes used interchangeably, the literature on the subject distinguishes several key models based on the criteria of location and time dimension. Leaving aside the fully remote model due to its incompatibility with the specific nature of the office's work, we can move on to the hybrid model (Hybrid Work). This is a strategy that combines traditional "office" work with remote work. It is a "mixed" model in which

employees rotate between the employer's headquarters and other locations, with the aim of balancing the need for direct cooperation with the benefits of autonomy (Chourasiya et al., 2025).

The practical implementation of the hybrid model takes various forms depending on the number of days spent outside the office. For example, research conducted in the United Kingdom indicates that the average number of remote working days in this model is 1.8 days per week, while the global average is 1.3 days (King's College London, 2025).

Taking the study by Krajčík et al. (2023) as an example, the following specific configurations can be distinguished:

- Office-based model: 1-2 days working from home and 3-4 days in the office.
- Remote-based model: 3-4 days working from home and 1-2 days in the office.
- Rotational model (e.g., biweekly): remote work every other week (Krajčík et al., 2023).

In addition to location, alternative working time systems, which often coexist with remote work are an important element of this work configuration.

Flexible Working Hours allow employees to decide when to start and finish work, which promotes the concept of Work-Life Flow (WLF), which assumes integration rather than separation of private and professional life (Wells et al., 2023).

Afternoon shifts, which are being considered by local government offices, allow for better accessibility of services to residents while increasing flexibility for employees. Work can also be divided into time blocks (e.g., 3-hour sessions with longer breaks), which is particularly popular among those combining work with caregiving responsibilities.

A comparative analysis of the hybrid model and the traditional on-site system conducted by Bloom et al. (2024), reveals significant benefits in the area of human capital management. The results of a six-month experimental study conducted at Trip.com show that implementing a hybrid schedule (3/2 model) reduces the turnover rate by 33%. Crucially, from the perspective of measurable outcomes, equivalence tests showed that working under this model does not negatively impact performance evaluations, promotion rates, or objective measures of productivity, such as the number of lines of code written by engineers.

The researchers conclude that the hybrid model thus emerges as a "golden mean" that allows for the preservation of innovation and teamwork while simultaneously increasing employees' job satisfaction (Bloom et al., 2024).

Research conducted in Hungary suggests that planning activities with regard to the temporal and spatial dimensions (e.g., creative tasks remotely, team collaboration in-office) will be key to maintaining productivity in the future (Mebane et al., 2026).

However, it is important to note discrepancies in the research findings: while some analyses point to higher productivity in a telework environment (Deole et al., 2021), studies by IT specialists suggest a decline in productivity in distributed models (Mebane et al., 2026).

In specific contexts, such as in the Hong Kong model, office work is preferred due to the limited space in residential units, which prevents the creation of a focused work environment, making the office a place with higher operational efficiency (Bloom et al., 2024). As in densely populated Hong Kong, research by Deole et al. (2021) in the UK shows that childcare responsibilities significantly undermine the positive impact of remote work on productivity, a trend that is particularly evident among working mothers (Deole et al., 2021).

The introduction of a hybrid model is becoming a key factor in building employee loyalty. An analysis of Italian workers' attitudes showed that as many as 60% of respondents prefer a hybrid arrangement, while only 8% express a desire to return to full-time on-site work (Mebane et al., 2026). A lack of flexibility regarding work location is perceived as a significant HR risk. Market research in the U.S. suggests that as many as 40% of employees might consider leaving their jobs if they were not offered the opportunity to continue working remotely after the pandemic (Smyk et al., 2022). Alternative work arrangements have an asymmetric but positive impact on the retention of different employee groups. For women, particularly mothers, access to flexible forms of employment (including hybrid arrangements) is a factor that allows them to maintain their working hours after childbirth and remain in human capital-intensive professions during periods of high family demands (Chung & van der Lippe, 2020).

The analyzed articles indicate that the hybrid model can reduce commuting-related stress (which is crucial for employees living far from the office) and increase motivation by granting employees the "gift of flexibility," for which they reciprocate with greater engagement (Bloom et al., 2024).

In summary, the hybrid model can be viewed as a "safe compromise" that helps avoid social isolation and feelings of loneliness (typical of fully remote work), while retaining the benefits of saving time on commutes and achieving a better work-life balance—factors that can have a significant impact on work efficiency.

In the literature on this subject, the distinction between control over the location where tasks are performed (flexiplace) and control over the time at which they are performed (flexitime) is of key importance. While remote work (telework) focuses on eliminating spatial barriers, a flexible work schedule system allows employees to adjust the start and end times of their workday or the number of hours worked per week.

A distinction is made between work-time autonomy, which provides nearly complete freedom in setting one's schedule, and flexitime, which typically imposes a restriction in the form of so-called core hours, during which the entire team is required to be available (Chung & van der Lippe, 2020).

In their article, Chung and van der Lippe (2020) demonstrate that flexibility in terms of working hours and location gives rise to different risks regarding the intensification of work. Research conducted in the United Kingdom indicates that while remote work in and of itself does not necessarily lead to a significant increase in unpaid overtime, a high degree of schedule control is strongly correlated with such an increase, especially among men seeking to improve their professional performance. This phenomenon is referred to as "gift exchange"—employees reciprocate the flexibility granted to them with greater commitment, which, however, can lead to a negative spillover of work into the private sphere (work-to-home spillover).

For women, flexible working hours more often serve to accommodate caregiving responsibilities, allowing them to maintain full-time employment after childbirth, but this is less likely to translate into financial bonuses, which are the domain of men who use flexibility to boost productivity.

In summary, the choice of a specific work arrangement depends on organizational goals, the nature of tasks, and other determinants. The above analyses suggest that a hybrid model is currently perceived as the optimal solution, preserving organizational culture and innovation while simultaneously meeting employee well-being needs. However, other alternative work arrangements like flexible work hours can complement hybrid work or replace it when work-from-home arrangements are not feasible.

2.2. Evolution of work culture in the public sector

Contemporary public administration is undergoing profound paradigm shifts, driven both by rapid technological progress and by growing public expectations regarding the accessibility and quality of services provided. This chapter is devoted to a multidimensional

analysis of these changes in the organizational culture of the public sector, with particular emphasis on the mechanisms of digitization, the evolution of management methods, and systemic constraints that determine the limits of flexibility in civil service work.

The first section presents the technological evolution of public administration—from the simple digitization of paper-based records, through the automation of procedures, to the strategic transformation of organizational structures. The section refers to the EU's "Digital Compass 2030" program, compares DESI indicators for Poland and Portugal, and discusses the five-stage e-service maturity model, which serves as the basis for assessing the digital advancement of government agencies.

The second section analyses the transition from rigid bureaucratic hierarchies – traditionally associated with public authorities – to market-based and efficiency-driven approaches drawn from the business world. The focus is on methods such as management by objectives (MBO), taking into account the SMART criteria, the Smart City concept, the Kaizen method, and the phenomenon of organisational ambidexterity, which requires public authorities to simultaneously improve current processes and explore innovation. This section also discusses methodologies for assessing the efficiency of public administration, whilst bearing in mind the specific nature of the public sector, where efficiency assessment must combine hard indicators of the fulfilment of statutory tasks with a subjective assessment by residents.

The final section identifies the key limitations to the implementation of alternative working models in local government. Particular attention was paid to infrastructural barriers and the constraints arising from Polish legislation, in particular the Labour Code. The restrictive information security requirements imposed by both national and EU law was analysed.

Sub-section 2.2 will be of significant assistance in drawing up the final recommendations, which could be applied in practice within the local authority, drawing not only on the findings of the research component but also on existing theoretical and practical studies.

2.2.1 Digitization in the public sector

In the 21st century, digitalization has become a transformative force that is fundamentally changing the way states design and deliver public services. This process goes beyond the implementation of technological tools, signifying a broad structural shift in public

management based on automation and data-driven decision-making (Valaskova et al., 2025). Local and regional authorities (LRGs) such as municipalities are at the forefront of this transformation, being key actors facilitating the delivery of digital solutions directly to citizens and local businesses (CEMR, 2022). In the literature, it is crucial to distinguish three stages of technological evolution. Following Valaskova et al. (2025), we can distinguish:

Stage one: Digitization – the process of converting analog information (e.g., paper documents) into digital formats.

Stage two: Digitalization – the automation of manual administrative processes through the implementation of IT systems and digital workflows.

Stage three: Digital transformation – the most advanced level, signifying a strategic reconfiguration of organizational structures and stakeholder relationships, which shifts the role of the public sector from a service provider to a coordinator of a platform that co-creates value (Valaskova et al., 2025).

The European Union is also involved in digitalization processes. According to the "Digital Compass 2030," the EU's priority is the digitalization of public services, with local governments playing a role as facilitators of local economic development (CEMR, 2022). The Digital Economy and Society Index (DESI) is a key tool for monitoring Member States' progress under the 'Roadmap for the Digital Decade' policy programme up to 2030 (DDPP). The objectives of the Digital Decade focus on four main pillars: digital skills, infrastructure, the digital transformation of business and, most importantly from the perspective of local authorities, the digitisation of public services. The assessment of the agency's performance in the Digital Decade also covers the readiness of the workforce. The EU's target is that, by 2030, 80 per cent of the population should have at least basic digital skills (European Commission, 2025). In line with EU objectives, by 2030, 100% of key public services should be available online to both citizens and businesses, and every EU citizen should have access to their medical records online and secure digital identification. These indicators provide an objective measure of the effectiveness of the authority's actions in the area of digital transformation. Flagship technical support projects focus on three key areas for municipalities: sustainable connectivity (including cybersecurity), the development of smart cities, and the interoperability of digital systems (European Commission, 2023).

The DESI 2025 survey included data from most European Union countries, including Poland and Portugal. For the purposes of this study, three areas were selected for

comparison: Infrastructure and Connectivity, Human Capital and Workforce Skills, and Digital Public Services.

Indicator	Poland	Portugal	EU
Infrastructure and Connectivity			
VHCN coverage (very high-capacity networks)	83.8%	94.6%	82.5%
Fibre-to-the-premises (FTTP) coverage	77.8%	93.2%	69.2%
Overall 5G coverage	89.3%	98.7%	94.3%
Edge nodes (estimates)	82	27	2257 (all in EU)
Human Capital and Workforce Skills			
Basic digital skills among the population	44.3%	56%	56% (80%- 2030 target)
ICT professionals	4.5%	5.2%	5%
National target for the number of ICT professionals by 2030	6%	7%	10%
Digital Public Services			
Digital services for citizens	70.7 pts.	84.5 pts.	82.3 pts.
Digital services for businesses	85.0 pts.	84.3 pts.	86.2 pts
Access to e-Health records	91.8 pts.	88.1 pts.	82.7 pts.

Table 1: DESI data for Poland, Portugal and the EU

Portugal's infrastructure is almost fully developed, which facilitates the implementation of remote working, whilst Poland is catching up in the area of 5G. Portugal has a significantly better fixed-line infrastructure (FTTP), which is crucial for stable connections for civil servants working from home. Poland's only advantage in this comparison is the number of edge nodes, which is important for future AI deployments and real-time data processing. In terms of human capital, Portugal has a higher proportion of people with basic digital skills, but both countries face difficulties with IT staff, leading them to lower their national targets in this area relative to the EU target. Poland leads the way in access to medical data, ahead of Portugal and the EU average. However, in terms of the overall standard of services for residents, Portugal is much closer to the EU standard.

Portugal demonstrates a higher level of strategic ambition – as many as 92% of its national objectives are fully aligned with the EU's Digital Decade trajectory; by comparison,

the figure for Poland stands at 71%. However, both countries allocate a similar proportion of their National Recovery Plan funds to digital transformation (21 %). It is worth noting that, according to Eurobarometer 2025, despite poorer hard indicators, Poles are more likely (78%) to believe that the digitisation of services makes their lives easier (71% in Portugal) (European Commission, 2025).

To summarise this comparison, it can be said that Portugal is building a digital public sector on the basis of mature infrastructure and higher levels of public competence, whilst Poland is focusing on the rapid roll-out of specific, advanced e-services (such as mObywatel-eID or e-health), despite less favourable baseline conditions.

Municipal governments are striving to implement e-government solutions that aim to improve the quality of life and increase the socio-economic attractiveness of the region while simultaneously meeting the growing expectations of residents (CEMR, 2022). Research indicates that effective implementation of digital technologies promotes accountability and transparency of public services (Mofokeng et al., 2025).

The effectiveness of digitalization in Polish local government is measured by the degree of maturity of e-services provided. In his research, Kołodziej (2023) distinguishes a five-level scale:

- Level 1 (Information): Publication of process data on the Public Information Bulletin (BIP) website.
- Level 2 (One-way Interaction): Ability to download forms for self-printing.
- Level 3 (Two-way Interaction): Electronic submission of applications with authentication.
- Level 4 (Transaction): Full online case management, including payments and receiving decisions electronically.
- Level 5 (Personalization): Automatic customization of services to the recipient's needs, for example, by pre-populating forms with data from state registers (Kołodziej, 2023).

Kołodziej (2023) case studies show that Polish municipalities are intensively developing the catalogue of services on the ePUAP platform, striving to achieve a transactional level in as many areas as possible, such as taxes or civic affairs (Kołodziej, 2023).

A study by Abele et al. (2023) compared the readiness for digital transformation and the competencies of public administration staff at local level in Mielec (Poland) and Vila Nova de Poiares (Portugal). The research revealed significant differences in staff structure, which determine the dynamics of implementing digitisation processes. The local authority in Mielec is characterised by a relatively older workforce (people over 55), whilst the Portuguese

municipality has a higher proportion of younger staff (under 35). In terms of length of service, the group with less than 10 years' experience predominates in Mielec, indicating significant staff turnover, whilst in Vila Nova de Poiares the structure is more stable.

An analysis of employees' subjective assessment of their skills indicates a higher level of digital confidence in Portugal, where employees rate their skills higher than their Polish counterparts in the categories of communication & collaboration, digital content creation, safety and problem-solving; in Poland, relatively lower scores were recorded, particularly in the areas of online collaboration, digital content creation and safety

A key indicator distinguishing the two groups is the standard deviation of self-assessment results; in Mielec, the results are more evenly distributed across all age groups, which means that the team has a similar skill level, facilitating the planning of standardised training programmes to enhance qualifications. In Vila Nova de Poiares, despite a higher average, there is a wide spread of results, which suggests the existence of a skills gap between technology leaders and those with low digital proficiency (Abele et al., 2023).

Despite the progress, the process of digitizing municipalities faces significant obstacles. Mofokeng et al. (2025) highlight, for example, a digital gap characterized by unequal access to technology and a lack of digital skills, particularly in rural communities, which risks excluding some residents. A lack of interoperability, i.e., difficulties in exchanging data between systems at different levels of government, hinders the implementation of the "once-only" principle. Financial and staffing constraints, caused by budget shortfalls for modern infrastructure and a shortage of qualified IT specialists in public offices, also pose challenges. Cultural resistance, however, manifests itself in a reluctance to change on the part of both officials and some citizens accustomed to traditional forms of communication (Mofokeng et al., 2025).

In summary, the digitization of the public sector as a transformative process based on automation and data of the public sector at the municipal level is an essential element of a modern state which evolves from the simple conversion of analogue information into digital form to a complete strategic reconfiguration of organisational structures. The documents highlight the complexity of this process in terms of both communications' infrastructure and digital skills. However, it requires a user-centric approach that ensures services are accessible, secure, and easy to use for all social groups (CEMR, 2022). The key to success is inter-municipal cooperation and support from EU programs and national digital strategies (European Commission, 2020; CEMR, 2022).

2.2.2 Management methods in the public sector

Modern public management is defined as a set of activities undertaken by public authorities to achieve specific goals while maintaining the principles of efficiency, effectiveness, and effective accountability of public managers for results (Wakuła, 2021). Unlike traditional administration, this approach is characterized by activity and creativity, transcending the rigid framework of bureaucratic hierarchy. The evolution of management methods in this sector includes a shift from the rule of law model and Weber's ideal bureaucracy, through New Public Management (NPM), to the concept of public governance (Wakuła, 2021). The New Public Management concept introduced a managerial approach that assumes the adaptation of efficiency mechanisms known from the private sector to public administration. As Skrzypek-Ahmed emphasizes, this model emphasizes public cost accounting, decentralization, and the use of market mechanisms to ensure cost-effectiveness and efficiency (Skrzypek-Ahmed et al., 2023). Key NPM principles include:

- Introducing professional management based on clearly defined standards and metrics.
- Moving from process control to focusing on achieving measurable results.
- Applying the "3E" principle: economy, efficiency, and effectiveness (Skrzypek-Ahmed et al., 2023)

One of the most established performance management methods in both the public and private sectors is Management by Objectives (MBO). According to Drucker, MBO involves systematically setting organizational goals in a participatory manner, with the superior and subordinate jointly defining areas of responsibility (Drucker, 1954). In the public sector, such as in European employment services, this system is based on a cycle that includes goal setting, real-time progress monitoring, and final performance evaluation. Ashfaq points out that goals in the MBO model should meet SMART criteria – they must be specific, measurable, achievable, realistic, and time-bound (Ashfaq, 2018). The effectiveness of this method depends on top management's commitment and maintaining the organization's relative autonomy from direct, ad hoc political interventions (Mosley et al., 2001). An example of this dynamic system is Sweden, where the "de-escalation" reform MBOR (Management by Objectives and Results) was introduced, aimed at reducing the excessive number of requests for operational information in favor of a more strategic approach.

In the face of dynamic socio-economic changes, public sector entities are increasingly turning to innovative management methods, such as: strategic and integrated management,

which allows for a holistic approach to territorial development by combining social, economic, and environmental dimensions; the Smart City concept, which leverages modern ICT technologies to optimize city services and reduce costs. Living Lab is a method for solving local problems with the direct participation of users (citizens) in the process of creating and testing innovations. Participatory budgeting, in turn, is a tool for involving the community in the financial decision-making process, which builds social capital and increases trust in authorities (Wiśniewska, 2020). The Kaizen method, also known from the private sector, can also be used in public sector management. Used, for example, in the Japanese city of Saitama, it involves engaging every employee in reporting small improvements that improve the quality of services and citizen satisfaction (Loeffler, 2017). Modern public organizations, such as the Indonesian Anti-Corruption Commission (KPK), strive to achieve what is known as organizational ambidexterity. This involves a simultaneous focus on exploitation—improving current processes—and exploration—searching for new opportunities and innovations. As Tukiran et al. (2022) suggests, this requires innovation in the design of organizational structures that combine mechanistic (ensuring efficiency) and organic (supporting flexibility) features (Tukiran et al., 2022). Effective management in this model is based on organizational learning, which promotes dialogue and knowledge exchange at all levels.

The management methods listed above must be consistent with the measurability of results. As local authorities differ significantly from private enterprises in terms of the nature of their tasks, concepts such as profit or loss, whilst important, are not the main factor determining the quality of a local authority's performance. Most studies use 13 factors to measure the performance of public authorities. Balanced Scorecard (BSC) based on four distinct perspectives, financial, customer, internal processes and learning and growth. The development of a measurable metric that programs or policies deliver tangible results. Benchmarking involves using indicators to assess the performance of public administration against set standards or international best practice at national or international level. Key performance indicators (KPIs) measure the extent to which specific objectives have been achieved using pre-defined performance indicators. The Customer Satisfaction Survey (CSS) determines the level of public satisfaction with government services. Data Envelopment Analysis (DEA) is used to measure an organisation's efficiency. The Performance Management System (PMS) provides a comprehensive and holistic view of an organisation's performance, with an emphasis on empowering stakeholders and creating long-term value.

The European Foundation for Quality Management (EFQM) framework provides an assessment of an organisation's performance. RA (ratio analysis) uses a range of financial indicators to assess the performance of an organisational unit. Participatory evaluation (PE) is carried out by stakeholders affected by conditions in public services. The Government Performance and Results Act (GPRA) focuses on strategy formulation and management performance. Social Return on Investment (SROI) focuses on measuring the impact of government policies and programmes. Open Government Initiatives (OGI): levels of transparency, public participation and government accountability (Satria et al., 2025).

In summary, management methods in the public sector are evolving toward more flexible, participatory, and customer-oriented models, while maintaining the rigors of accountability and economic efficiency. However, the choice of a specific method must be adapted to the institutional conditions, administrative culture of a given country, and the specific nature of the tasks being performed (Wakuła, 2021).

2.2.3 Limitations of remote work in public sector

Remote work (telework), although it has been successfully developing in the private sector for many years, has long been a rarity in public administration—and particularly at the local government level. This is because the specific nature of local government units (LGUs) relies on constant, direct contact with a broad group of stakeholders and the local community. The implementation of this form of work organization accelerated rapidly during the COVID-19 pandemic, when temporary regulations allowed employers to issue remote work directives to counter the spread of the virus while ensuring business continuity (Iwaniuk et al., 2021). As a result of these experiences, remote work was permanently enshrined in the Polish legal system through the introduction of a dedicated Chapter IIc to the Labour Code (Act of 1 December 2022 amending the Labour Code and certain other acts). Nevertheless, the specific nature of local government offices creates a number of technological, legal-organizational, security, and competency-related barriers that significantly limit the widespread adoption and effectiveness of this form of work.

The fundamental and indispensable condition determining the ability to perform official duties—as well as the effectiveness of such performance—while working remotely (teleworking) in public administration is access to modern and stable information and communications technology infrastructure (House of Lords Select Committee on Home-Based Working, 2025). In the local government sector, technological and infrastructural

barriers are widely identified as a key factor limiting the full realization of the potential of flexible forms of employment, making them the most serious obstacle to their widespread adoption. The complexity of this problem stems not only from delays in the digitization of government offices themselves, but also from technical limitations at civil servants' home workstations (Iwaniuk et al., 2021).

One of the most crippling barriers in the day-to-day operations of local government offices is the lack of access to traditional paper records stored in the office's physical archives. In a survey conducted among 136 municipalities and cities with county-level status in the Mazovia Province, as many as 73% of respondents identified this factor as the barrier with the greatest impact (a rating of 1-to-5 on a Likert scale) on the effectiveness of telework (Iwaniuk et al., 2021).

This situation is a direct consequence of the slow implementation of Electronic Document Management (EDM) systems. The lack of integrated EDM systems not only prevents paperless workflow but also affects security and compliance with information management standards. National statistics show that smaller municipalities often opt out of implementing formalized information security management systems (ISMS) precisely because they lack an EDM system (24.9% of surveyed offices without an ISMS cited this reason) (Iwaniuk et al., 2021).

Another significant aspect of technological barriers is the severe shortage of hardware and software. As many as 41% of local government offices cited the lack of laptops enabling secure work from home as a factor preventing or severely limiting telework, while 40% identified the lack of appropriate communication and utility software as a problem. An analysis of the impact of individual factors on effectiveness reveals that the lack of computer hardware was rated as a very significant barrier by 47% of the surveyed entities, while 43% of the entities considered limited access to specialized software dedicated to remote work to be an equally significant barrier (Iwaniuk et al., 2021). Although most government offices (81.0%) report maintaining accurate electronic records of their computer equipment, the actual ability to equip officials' home workstations is severely limited by local government budgets (Chodakowska et al., 2022).

Other major technological barrier is the lack of secure access to the agency's central servers and internal databases—a total of 58% of the local government entities surveyed considered this lack of access to be a barrier with a high or very high impact (Iwaniuk et al., 2021). As a result, government agencies face a dilemma: either risk losing control over the

confidentiality and integrity of the data they process, or drastically restrict the access privileges of remote employees—a move that, however, directly undermines their effectiveness and prevents them from carrying out most of their assigned substantive tasks (Souppaya & Scarfone, 2016).

It is worth noting that another equally important aspect of infrastructure is the quality of home and office Internet connections, which determines the stability of the network connection, as well as the lack of technical support for officials working remotely and the need for employees working from home to resolve IT issues on their own.

Alongside technological barriers, legal and regulatory conditions are a key factor determining the feasibility of widespread remote work in local government. While during the state of epidemic, remote work could be performed based on a simplified, unilateral directive from the employer to ensure operational continuity, the permanent legal framework has drastically limited this flexibility (Iwaniuk et al., 2021). Under normal operating conditions for local government units, implementing remote work requires going through a complex negotiation and formal procedure, which poses a significant organizational barrier for many offices.

The rules governing remote work must be set forth in an agreement concluded with labour unions, and in the absence of such an agreement, in remote work regulations developed after consultation with employee representatives. Such a document, in accordance with Article 67 § 6 of the Labour Code, must meticulously regulate, among other things, the groups of employees eligible for remote work, rules for covering costs, procedures for software installation and maintenance, and strict rules for occupational safety and health (OSH) and information security. Failure to develop such an agreement or set of regulations forces the agency to engage in time-consuming individual negotiations with each employee separately. The situation is further complicated by the statutory requirement to unconditionally grant requests for remote work submitted by certain protected groups of employees, including pregnant women, parents of children under 4 years of age, and caregivers of people with disabilities, unless the nature or organization of the work in question precludes it (Act of 1 December 2022 amending the Labour Code and certain other acts).

A significant legal limitation stems from the specific nature of administrative practices as regulated by the Act on Local Government Employees, which is structurally at odds with the concept of remote work. Pursuant to this Act, the work regulations of a given

local government entity must define internal procedures and work schedules in a manner that ensures citizens can conduct their business at a time convenient for them (Act on Local Government Employees, 2008), however, the most stringent restrictions on remote work in local government units are imposed by regulations concerning the protection of personal data (GDPR) and the security of information and communication systems.

Entities performing public functions are strictly required to comply with the Council of Ministers' Regulation on the National Interoperability Framework (KRI). The KRI requires government agencies to implement and maintain an Information Security Management System (ISMS), which must define the basic principles ensuring secure operations during mobile and remote work. Pursuant to this regulation, ICT systems must ensure full and reliable accountability for operations by recording user activities in system logs (Regulation of the Council of Ministers of 21 May 2024). Additionally, the amendment to the Act on the National Cybersecurity System (KSC) designates municipal offices employing at least 50 people as "critical entities". These entities must comply with stringent security requirements, including an inventory of ICT products, access rights controls, and testing of backups that are logically isolated from the production network. Failure by a local government unit manager to fulfill these obligations, or allowing a leak of personal data processed by an official via an unsecured home internet connection, exposes the offices to severe administrative penalties and subjects the managers themselves to personal financial and criminal liability (Act on the National Cybersecurity System, 2018).

Additionally, EU regulations on cybersecurity and personal data protection apply, most notably the GDPR and the NIS 2 Directive. The General Data Protection Regulation (EU) 2016/679 strictly requires government offices to implement technical and organizational measures that ensure accountability and the confidentiality of the processing of residents' sensitive data, in addition to the physical security measures in place at the office. These requirements are further reinforced by the NIS 2 Directive (EU) 2022/2555, which designates municipal offices as critical entities, compelling them to comply with stringent information security requirements (Act on the Protection of Personal Data, 2018).

This demonstrates that Polish local government units are still in the early stages of digital transformation, where traditional paper-based documentation dominates over digital formats, and the cost of the transition may turn out to be significant.

2.3. Research gaps and justification for the study

Despite the rapid growth of the literature on remote work following the COVID-19 pandemic, significant areas requiring additional analysis can still be identified. Most existing studies focus on the private sector or central government, while there is very little research on remote or hybrid work in local government administration at the municipal level.

Furthermore, existing public sector studies rarely account for the unique socio-technical and structural challenges of rural municipalities. In these units, technological infrastructure limitations—such as slower fiber-to-the-premises (FTTP) and 5G deployment compared to urban centers—and cultural resistance to modernizing public services are often far more acute. Although comparative frameworks, such as those by Abele (2023), offer valuable demographic and digital competence insights across different European municipalities, they do not systematically explore how these structural realities affect the day-to-day feasibility of hybrid models in small local government offices.

While the literature offers diverse classifications of remote work determinants—ranging from Koziol-Nadolna's five-category model (legal, economic, technological, social, and psychological) to Fang's (2025) categorization into technological, organizational, and environmental factors there is a lack of an integrated approach that simultaneously analyzes several groups of determinants, such as job specificity, employee characteristics, and the organizational culture proposed by Fang.

Most public administration modernization research focuses strictly on internal operational metrics. However, according to modern public management paradigms, the quality of public administration cannot be measured solely through internal procedural compliance; it must also incorporate external citizen accountability and public satisfaction. Currently, there is a lack of research that links the internal readiness of civil servants to adopt alternative work models with the external attitudes, expectations, and satisfaction of the local residents they serve. Restructuring of working schedules (e.g., afternoon shifts or flexible hours) must ensure that the core principle of public utility and service accessibility is maintained.

According to the New Public Management concept, offices should adopt efficiency mechanisms from the private sector, such as flexible working hours and hybrid work, to increase their efficiency and savings. Employee well-being and work-life integration (Work-Life Flow) are also crucial. The introduction of alternative work models allows for a better

balance of professional and private responsibilities, which directly translates into the satisfaction and motivation of officials.

This study aligns with the goals of the EU's "Digital Compass 2030," which emphasizes the digitization of public services. Assessing an office's readiness for hybrid work effectively assesses its digital maturity and capacity for technological transformation.

To address these distinct gaps, this dissertation rejects the rigid, hypothesis-testing approach. Rigid statistical hypotheses are often incompatible with the highly contextual, legal, and institutional constraints of local government offices. Instead, this study is designed as an exploratory, mixed-methods case study of the Lubartów Municipal Office. The primary goal is to map the multidimensional feasibility of alternative work arrangements and explore the institutional receptiveness of both internal and external stakeholders. Although the study is a case study for the rural Municipality of Lubartów, the recommendations and code of good practices developed can be successfully applied to other local government units with similar characteristics, particularly small municipalities in eastern Poland.

To guide this exploratory inquiry, four interconnected Research Questions (RQs**)** are formulated, directly grounded in the theoretical frameworks established in previous chapters.

RQ1- Job-Related Feasibility

How do job-related characteristics such as task autonomy, computer reliance, and face-to-face client interaction shape the objective feasibility of implementing hybrid work configurations across different departments of a rural municipal office?

This question translates the theoretical definitions of hybridity and multi-dimensionality of work included in subsection 2.1.2 into a practical diagnostic tool to evaluate which municipal departments can structurally operate off-site. The result of this research component will be a remote work index, which will be compared with a broader analysis based on both legal limitations (Section 2.2.3) and other factors, such as individual factors and residents' opinions.

RQ2- Employee Receptiveness & Readiness

To what extent do individual employee attributes including self-reported digital competencies, demographic factors such as age, and prior experience in the private sector influence civil servants' attitudes and psychological readiness to adopt alternative work arrangements?

This question bridges the psychological and social determinants of work organization (Ishi et al., 2023; Kozioł-Nadolna, 2024) with empirical data, exploring if factors like prior experience in the private sector or previous remote work experience lower organizational

resistance to change. During the study, these two factors will be compared with each employee's overall individual performance.

RQ3- Organizational Culture & Institutional Capacity

How do organizational culture characteristics, interdepartmental cooperation networks, and systemic institutional barriers including legal, technological, and cybersecurity constraints determine the overall municipal capacity to sustain alternative work configurations?

This question bridges the organizational culture determinants (Kissflow, 2025) and modern management paradigms (Tukiran et al., 2022; Wakuła, 2021) with empirical findings regarding interdepartmental dependencies and systemic barriers. It explores how the centralization of administrative processes, low familiarity with modern agile management tools from the private sector, and strict legal compliance frameworks, impact the transition from a traditional bureaucratic model to flexible public governance.

RQ4- Public Service Accessibility & Resident Satisfaction

How does the local community perceive potential alternative configurations of municipal services such as the introduction of afternoon shifts and flexible office hours, and how do these adjustments affect the accessibility and perceived quality of public utility services from the residents' perspective?

Grounded in the principles of New Public Management (NPM) Seeking residents' input adds an important dimension to changes in the public sector's work model, highlighting a significant difference compared to the private sector. This question will use Customer Satisfaction Surveys (CSS) to explore the external social impact of restructuring working hours.

The proposed model and research questions will be verified in the empirical part of the work through interviews with employees of the Lubartów Municipal Office and a survey conducted among residents.

3. Methodology

3.1. Methodological approach

Choosing the appropriate research procedure and overall methodological paradigm is a crucial decision that sets the direction for the entire dissertation. This study is based on the pragmatist paradigm, which holds that the choice of research methods should be dictated primarily by the nature of the problem itself, rather than by a dogmatic adherence to a single, rigid theoretical orientation (Creswell, 2009). Pragmatism focuses on the consequences of actions and the search for practical, useful solutions ("what works"), which allows the researcher to freely combine quantitative and qualitative techniques in order to gain a full understanding of the phenomenon under study (Trusz, 2017).

As Trusz (2017) points out, a complete and more multidimensional picture of the reality under analysis emerges when the researcher rejects the artificial distinction between quantitative and qualitative research and opts for a complementary approach. Similarly, Onwuegbuzie and Leech (2005) advocate conducting social analyses and teaching methodology without a rigid division into quantitative and qualitative paradigms.

The use of a semi-structured survey for civil servants is an extremely flexible tool that combines quantitative measurement with qualitative insight. It is a hybrid approach that combines a structured quantitative questionnaire with a qualitative guide to topics. On the one hand, the Semi-Structured Survey provides a consistent structure for the questions asked of all respondents, which allows for the statistical calculation of indicators such as the Work Autonomy Index or the assessment of competencies and personality traits. On the other hand, this approach guarantees the researcher flexibility and the ability to ask spontaneous follow-up questions, which helps reveal the individual context of each position, the specifics of the software used, operational barriers, and previously unforeseen cultural and institutional difficulties.

The external study, on the other hand, is based on the Customer Satisfaction Survey, which collected quantitative data from a larger sample of residents. As Dudek and Bis (2023) demonstrate, regularly monitoring these indicators through the Customer Satisfaction Survey allows organizations to systematically improve service standards and the accessibility of public services.

To ensure high validity and reliability of the exploratory study designed in this way, the principle of triangulation was applied. Triangulation helps eliminate systematic errors and research subjectivity (Guion et al., 2011). Data triangulation involves gathering information from various sources and from different stakeholder groups within a given organizational ecosystem (Guion et al., 2011). In this study, data triangulation is manifested in the comparison of the internal

perspective of the municipal office with the external perspective of the municipality's residents as recipients and clients of public services (Creswell, 2009; Yin, 2003). This allows for the comparison of information and the identification of areas of consistency and divergence in the expectations of both groups.

The combined results of both studies will enable the development of balanced implementation recommendations that will increase the flexibility and comfort of civil servants' work, while ensuring the continuity, efficiency, and greater availability of public services for the local community

3.2. Research design

The research project was divided into two main parts, allowing for a multidimensional analysis of the problem:

- The internal part – research from the office's perspective – involves conducting semi-structured survey with employees of the Lubartów Municipal Office. The aim of this phase is to diagnose the office's strengths and weaknesses in the context of three groups of determinants: job position, employee characteristics, and organizational culture through live interviews with each employee. The semi-structured survey is based on a face-to-face survey that collects data from closed-ended questions, allowing for a statistical summary of general aspects, while the researcher explores the questions further through conversation with the respondent, which allows for the acquisition of an individual perspective, as well as knowledge that could not be obtained through a survey. To ensure a reliable result, at least 75% of the office's staff will be tested.
- The external part – research from the customer's perspective – includes a survey addressed to residents of the municipality. This aims to assess their attitudes, current assessment by the local authority and expectations regarding the proposed changes, such as the introduction of afternoon hours and flexible service options, which are crucial for maintaining high-quality public services. To ensure a reliable result, at least 100 residents will be tested representing 0.84% of the municipality's total population.

The final element of the project is the synthesis of the results from both stages in order to develop a recommendation for local government units.

3.2.1 Semi-structured survey of employees

The semi-structured survey will be divided into three parts according to the categories of determinants:

The first part will address job-related aspects and determinants, distinguishing between remote and hybrid work. The second part will address individual employee characteristics based

on personal feelings and experiences working during the COVID-19 pandemic; potential willingness to adjust work hours—e.g., starting work later—will also be assessed here. The choice between remote work and benefits. The third part will focus on organizational culture, i.e., awareness.

The semi-structured survey format was chosen due to the wide variety in how individual departments operate. The basis for the questions is an employee survey, and the specific questions concern the software used by staff, interactions with the public, setting individual goals and their measurability, personal feelings about remote work, and whether their position is suitable for hybrid work. This format allows for the collection of both general data, necessary for statistical and scientific analysis, and the identification of nuances that provide a broader perspective on the office's operations, which vary significantly between departments. The survey consists of three thematic sections and a section with demographic data. The questions are closed-ended; this approach aims to collect numerical data, such as a numerical rating of the truthfulness of a statement. For this purpose, a 10-point Likert scale was used. The even-numbered scale excludes the "I don't know" option, ensuring that all responses fall on one of the two key sides (true, false), while the relatively wide scale allows for nuance. For questions involving percentages, the 10-point scale ranges from 1–10 % to 10–100 %. Three of these questions are the opposite of the others; therefore, to ensure they fit properly into the methodology, the response scores were converted using the formula 10 - x, where x is the response score. Based on the theoretical background, the researcher assigned weights to selected questions.

The first part of the study was based on a sample of 31 employees of the Lubartów municipal office, representing over 75% of all office staff.

In addition to the traditional surveys, semi-structured survey was also conducted to provide a broader context for the data on specific positions, highlighting the unique characteristics of individual roles and departments.

The third segment of the employee survey focused on knowledge of management methods. The methods presented were Kaizen, the PDCA Cycle, Lean Management, 5S, Scrum, and Management by Objectives (MBO). Respondents were asked to select one of four options: I have not heard of it (no selection), I have heard of it, I have heard of it and use it myself, or I have heard of it, use it myself, and use it as a team.

3.2.2 Survey with residents of the municipality

The questionnaire is divided into four separate thematic sections, using closed-ended, ordinal and nominal scales.

Section I is designed to collect basic socio-demographic data, including age, education, gender and employment status. The aim is to segment the target population and analyse potential differences in preferences between individual demographic groups.

Section II focuses on the frequency of visits over the past year (ordinal scale: 0–5, 6–10, 11–15, 15+), preferred time slots for visits (7.30–8.30, 8.30–12.00, 12:00–15:00, after 15:00) and the departments where respondents carried out their business. These variables enable the identification of peak times and the basic demand for services.

Section III measures residents' perceptions of service quality and the speed and quality of the handling of administrative matters using a 5-point Likert scale (for the question on the quality of customer service: ranging from 1 'uncooperative' to 5 'helps you navigate the administrative process', and for the question on the duration of service, on a scale from 1 'very long' to 5 'immediate').

Section IV assesses the public's reaction to proposed changes in the organisation of work, such as extended opening hours – open until 4.30 pm, a hybrid operating model: reserved time slots (7.00–8.30 am and 3.00–4.00 pm), as well as helpful solutions such as digital appointment booking.

In summary, this research framework, based on a dual perspective, effectively links the internal operational capabilities of the Lubartów Municipal Office with the external needs of residents. By combining quantitative indicators derived from semi-structured surveys conducted amongst staff with the empirical views of the municipality's residents, the research project provides a reliable, evidence-based foundation. This approach ensures that the resulting policy recommendations for the Lubartów Municipal Office are both operationally feasible for staff and directly aligned with the local community's expectations regarding services.

3.3. Procedure of data collection

The study will be conducted using Google Forms surveys. Google Forms ensuring a standardised format for collecting quantitative data and complete anonymity for respondents. This method was adopted due to the significant operational, procedural and technological differences between the various departments of the office. The researcher will collect surveys in person during visits to the office while simultaneously gathering data from conversations. The research procedure was carried out in accordance with the following steps:

1. Obtaining formal consent from the mayor of Lubartów Municipality to carry out the research and informing the HR manager of the purpose and procedure of the research.

2. One-to-one meetings with staff members. Each meeting consisted of two parts. First, in the researcher's presence, the respondent completed a structured electronic form using Google

Forms. Then, based on the quantitative responses provided, the researcher conducted an informal conversation designed to reveal the specific nature of the role.

The survey covered 31 employees of the Lubartów Municipal Office. This figure represents over 75% of the office's total staff, which meets the representativeness criterion for a case study of a single institution.

Resident surveys were collected online through groups on Facebook and What's App. The study collected data from over 100 residents of the Lubartów Municipality. This figure represents approximately 0.84% of the municipality's total population, which constitutes a sufficient sample size for exploratory research and allows for the formulation of reliable conclusions and implementation recommendations tailored to the expectations of the local community.

4. Results

This chapter provides a detailed presentation and analysis of the empirical data collected during quantitative and qualitative research conducted at the Lubartów Municipal Office (an internal survey of employees) and among the local community (an external survey of residents).

To summarize the part of the study concerning workstations, we can group them into three categories:

1. On-site work
2. Hybrid work one day a week
3. Hybrid work (up to two days a month on demand)

The index of individual aptitude for remote work was compared with three variables: respondents' age, work experience in the private sector, and remote work experience. In the first comparison, the results were not straightforward. The highest index scores were recorded among respondents in the 30–39 and 40–49 age groups, at 8.42 and 8.04, respectively. The lowest index score was recorded for the 50–59 age group (7.04); the other groups recorded the following results: 18–29 – 7.94, and the 60+ group – 7.46. The second comparison concerns individuals with experience in the private sector; here, the scores for those with such experience are higher, at 8.25, compared to 7.41 for those who have not previously worked in the private sector. The final comparison concerns the aptitude of individuals who have worked remotely in the past. Here, those with such experience achieved an average score of 8.07, compared to 7.73 among those who had not previously worked remotely.

Due to the small number of responses in the last two categories, it was decided to combine them into a single response. The least popular tool is the Scrum method, which only 35.48% of respondents had heard of, and no one uses it; the second least-used method is 5S, which 41.94% of respondents had heard of. The PDCA cycle received the same response rate (41.94%), though only 3.23% of employees use it. 45.16% have heard of lean management, and 3.23% of respondents use it. Over half of the respondents (54.84%) have heard of the Kaizen method, but no one uses it. Management by Objectives (MBO) is the most popular method; 61.29% of respondents have heard of it, and 16.13% use it. To summarize this segment, a significant percentage of people have not heard of the management methods mentioned, and even fewer employees use them.

4.1. Analysis of the employee survey

The first part of the study regarding employees of the Lubartów Municipality Office focuses on 3 key areas.

The first area of analysis focuses on the objective, technical and organisational characteristics of the tasks carried out in the individual departments of the office. The basis for the assessment is a proprietary Remote Work Index, calculated as the weighted average of the Work Autonomy Index (Work Autonomy Index; weighting 0.3), which assesses the degree of decision-making freedom in terms of tasks, criteria and scheduling, and the Job Suitability Index (Job Suitability Index; weighting 0.7), which examines, amongst other things, the degree of digitisation of work, the need for direct customer service and the manual nature of tasks. This analysis allows for the precise categorisation of the office's organisational units in terms of the permissible scope and configuration of hybrid working.

The second research section shifts the focus to the subjective aspect of work organisation, analysing the aptitudes of the employees themselves. The key analytical tool here is the Individual Remote Work Predisposition Index, which is derived from a self-assessment of digital competences and an integrated personality factor based on the classic five-factor model. These results were subjected to a comparative analysis in relation to demographic and occupational factors, such as employees' age, their previous experience of remote working, and their length of service and profile of professional experience in the private sector.

The third area is dedicated to identifying the management competencies and organisational cultural maturity of the institution under review. The level of knowledge and the actual, operational implementation of agile and efficiency-oriented management methods were assessed. Identifying these aspects is crucial, as the transition to a decentralised model requires a shift from traditional, hierarchical bureaucratic supervision towards modern Management by Results, which is one of the cornerstones of the New Public Management paradigm.

4.1.1 Readiness for remote working and a comparative analysis of departments

A key element of the analysis was the calculation of the average Remote Work Index (RWI) for individual organisational units of the Lubartów Municipal Office. These results illustrate the degree of task structuring, the level of digitalisation and the nature of interactions with members of the public in individual departments. It is also worth recalling the method used to calculate the indices.

The Work Autonomy Index is calculated as the arithmetic mean of three sub-indices: Task Autonomy, Criteria Autonomy and Schedule Autonomy. These sub-indicators were determined on the basis of respondents' ratings on a 10-point Likert scale, multiplied by their assigned theoretical weights:

$$\{\text{Task Autonomy}\} = (Q1 \times 0.4) + (Q2 \times 0.4) + (Q3 \times 0.2)$$

$$\{\text{Autonomy of Criteria}\} = (Q4 \times 0.25) + (Q5 \times 0.5) + (Q6 \times 0.25)$$

{Schedule Autonomy} = (Q7 × 0.35) + (Q8 × 0.25) + (Q9 × 0.25) + (Q10 × 0.15)

Job Suitability Index calculated on the basis of 9 detailed questions including reverse-scored questions according to the formula 10 – x, (e.g. concerning the manual nature of tasks or direct face-to-face customer service) with specific weights reflecting.

{Job Suitability Index} = (Q11 × 0.075) + ((10 – Q12) × 0.075) + (Q13 × 0.075) + (Q14 × 0.2) + ((10 – Q15) × 0.2) + (Q16 × 0.1) + (Q17 × 0.1) + ((10 – Q18) × 0.075) + (Q19 × 0.1)

The preceding indicators are used directly to calculate the final Remote Work Index for a given role, in accordance with the following weighted average equation:

{Remote Work Index} = ({Work Autonomy Index} × 0.3) + ({Job Suitability Index} × 0.7)

To calculate the Remote Work Index for the department, the average of the individual scores of the department's staff was taken.

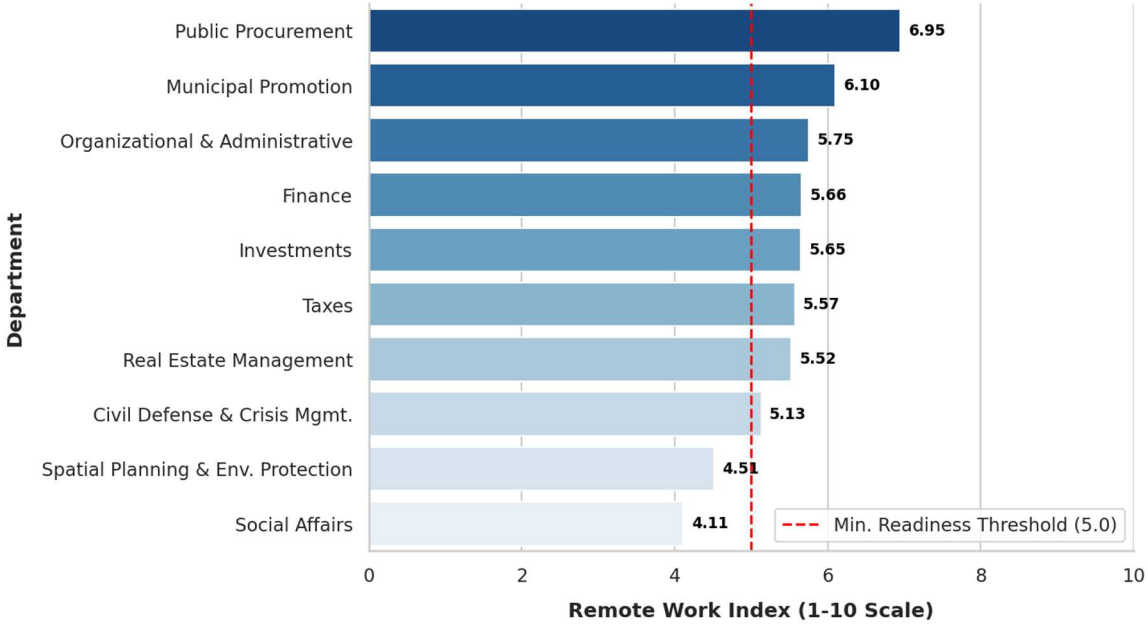


Chart 1: Remote Work Index by department

The horizontal chart shown here presents the Remote Work Index for ten departments and divisions of the Lubartów Municipal Office, measured on a scale of 1 to 10. The key reference point on the graph's axis is the red, dotted vertical line marking the minimum readiness threshold for implementing flexible working models, set at 5.0 (Min. Readiness Threshold). The chart shows that most departments exceed the minimum value, but none of them achieve a score above 7.

By adding the information gathered whilst exploring the topic in greater depth during the discussions, we gain a more complete picture of the papers. The key conclusions drawn from the discussions for each department are:

Department of Social Affairs (4.11 RWI): Operations are heavily dependent on visitor traffic and monthly/quarterly reporting cycles. Although team management is decentralized

("everyone knows their tasks"), employees clearly preferred flexible working hours over remote models.

Tax Department (5.57 RWI): Despite a high ratio, significant barriers exist, including the need for physical document handling (printing/copying) and statutory restrictions on removing files from the office. Direct "face-to-face" interaction remains the preferred form for both staff and the public.

Department of Spatial Planning and Environmental Protection (4.51 RWI): This department's heavy reliance on physical documentation (90% of which is paper-based) and specialized equipment (CAD systems, plotters) ties it to the office. The specific nature of individual applications requires in-person consultation to avoid misunderstandings.

Organizational and Administrative Department (5.75 RWI): This unit is characterized by internal heterogeneity:

- Civil Registry Office: Limited by access to the internal system and low substitutability.
- Council Support: Highly autonomous and compatible with remote work, though constrained by the session calendar.
- Volunteer Fire Department (OSP) Support: Characterized by non-standard working hours and field duties, preferring an irregular/flexible schedule.

Investment Department (5.65 RWI): Since only 20% of tasks require direct contact with citizens, employees prefer a hybrid model. Reported benefits include increased focus on "deep work" at home, despite challenges related to low substitutability and infrequent feedback.

Civil Defense and Crisis Management (5.13 RWI): Tasks are primarily digital (email), though limited by data confidentiality clauses and the need for remote server access.

Municipal Promotion (6.10 RWI): This department is characterized by the greatest flexibility, and 95% of tasks can be performed outside the office. The nature of the work is dynamic and variable, requiring high availability.

Public Procurement (6.95 RWI): With the highest readiness score, this department operates 100% on the basis of digital documentation and specialized platforms (e-procurement). Flexible working hours are valued even more than the hybrid model itself.

Real Estate Management Department (5.52 RWI): Currently hampered by a lack of digitization and GDPR concerns, though interest is evenly split between the hybrid, on-site, and flexible models.

Finance Department (5.66 RWI): Although the work is theoretically compatible with remote models, there are significant technical bottlenecks, including server instability and interdepartmental dependencies. Flexible working hours are currently the highest-rated preference.

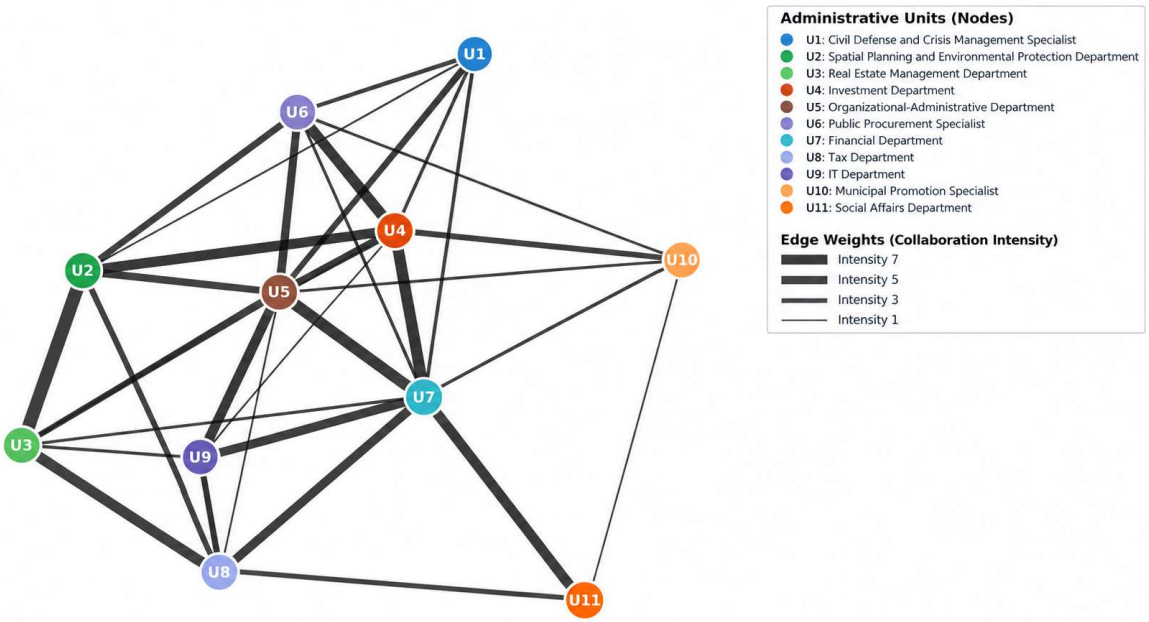


Chart 2: Inter-departmental links

The weighted collaboration graph presented in Chart 2 illustrates the structure and intensity of communication and process links between the 11 departments at the Lubartów Municipal Office. Nodes (U1–U11) represent individual departments and independent administrative posts. Each has been assigned a unique identification code and a colour in the legend. Edges (connecting lines) reflect working relationships and the flow of documentation and information between units. Edge weights (Line thickness) measure the intensity of cooperation between two departments on a scale from 1 (weakest, sporadic cooperation) to 7 (strongest, operational interdependence).

The structure of the organisation chart allows for a clear division of the departments into an operational core and satellite posts. The majority of processes within the office pass through the departments located in the core; they either require the involvement or approval of these departments, or act as distributors of information. The units located in the core are: Finance Department, Organizational and Administrative Department and Investment Department. On the periphery of the network are posts with a low degree of interconnection, which operate independently. Such units include Civil Defense and Crisis Management, Public Procurement and Tax Department.

It is worth noting that links between departments, whilst providing important information, do not constitute an absolute determinant of remote working; rather, they add additional context to the previous indicators. Departments with low network centrality are the first and most natural candidates for remote working. Their physical absence from the office building does not cause disruptions or delays to processes carried out by other organisational units. By contrast, any

transition to a remote working model for staff from units with high centrality carries a high operational risk.

To assess psychological and competency readiness was used the Individual Remote Work Predisposition Index, which is the average of the Computer Proficiency Index- self-assessment of proficiency in specialist software and remote working tools and the Personal Coefficient.

{Computer Proficiency Index} = (Q20 + Q21 + Q22 + Q23 + Q24 + Q25) / 6

{Personal Coefficient} = (Q26 × 0.07) + (Q27 × 0.07) + (Q28 × 0.12) + (Q29 × 0.096) + (Q30 × 0.097) + (Q31 × 0.12) + (Q32 × 0.12) + (Q33 × 0.07) + (Q34 × 0.097) + (Q35 × 0.07) + (Q36 × 0.07)

{Individual Remote Work Predisposition Index} = ({Personal Coefficient} + {Computer Proficiency Index})/ 2

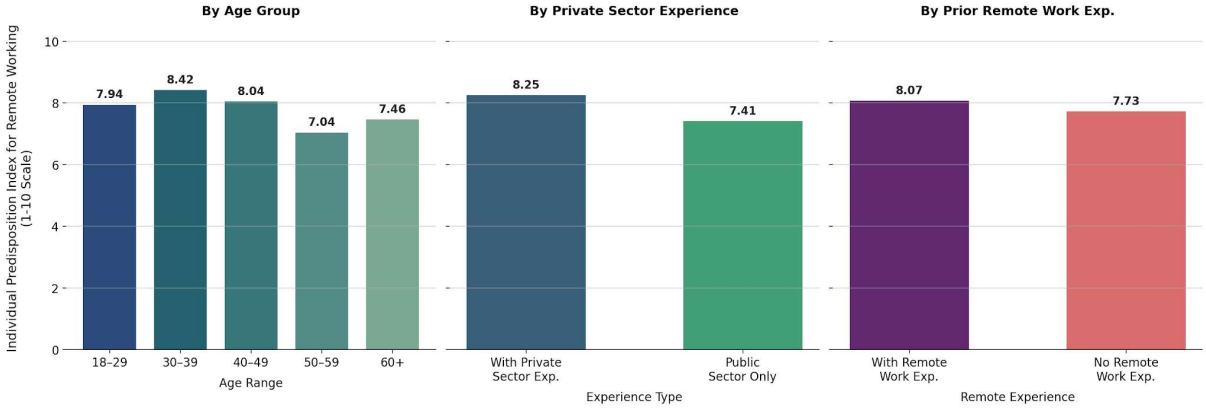


Chart 3: Individual Remote Work Predisposition Index by age group, sector experience, and prior remote work experience.

The Individual Remote Work Predisposition Index was cross-referenced with the following employee characteristics: Age Group, Sector Experience, and Prior Remote Work Experience. Analysis of the index by age reveals the nonlinear nature of this empirical variable. The highest mean index value was recorded in the 30-39 age group (8.42), closely followed by employees aged 40-49 with a score of 8.04. After this period, a significant decline in individual readiness was observed, reaching its minimum in the 50-59 age group (7.04). Interestingly, in the oldest age group (60+), the index increased again to 7.46, while the youngest civil servants (18-29) showed a stable score of 7.94.

An analysis of employees' work experience revealed a significant disparity in the level of individual predispositions of officials to remote work, depending on their prior career profile. Employees of the Lubartów Municipal Office who have professional experience in the private sector on their resumes achieved an average predisposition index score of 8.25. This value is 0.84

points higher compared to the group of officials whose entire career path developed solely within public administration structures (7.41).

The last area analyzed tests the hypothesis regarding the impact of previous teleworking practices (e.g., during the pandemic) on current levels of individual predispositions. Surveyed officials who had already performed their duties remotely achieved an average score of 8.07. Employees who had never used this form of work organization achieved an index 0.34 points lower, reaching 7.73.

Each of these comparisons provides important perspective on remote work at the municipal office. This knowledge will allow for better adaptation of work model changes, defining groups requiring greater support, and also designating change agents—individuals who will adapt to changes more easily and quickly.

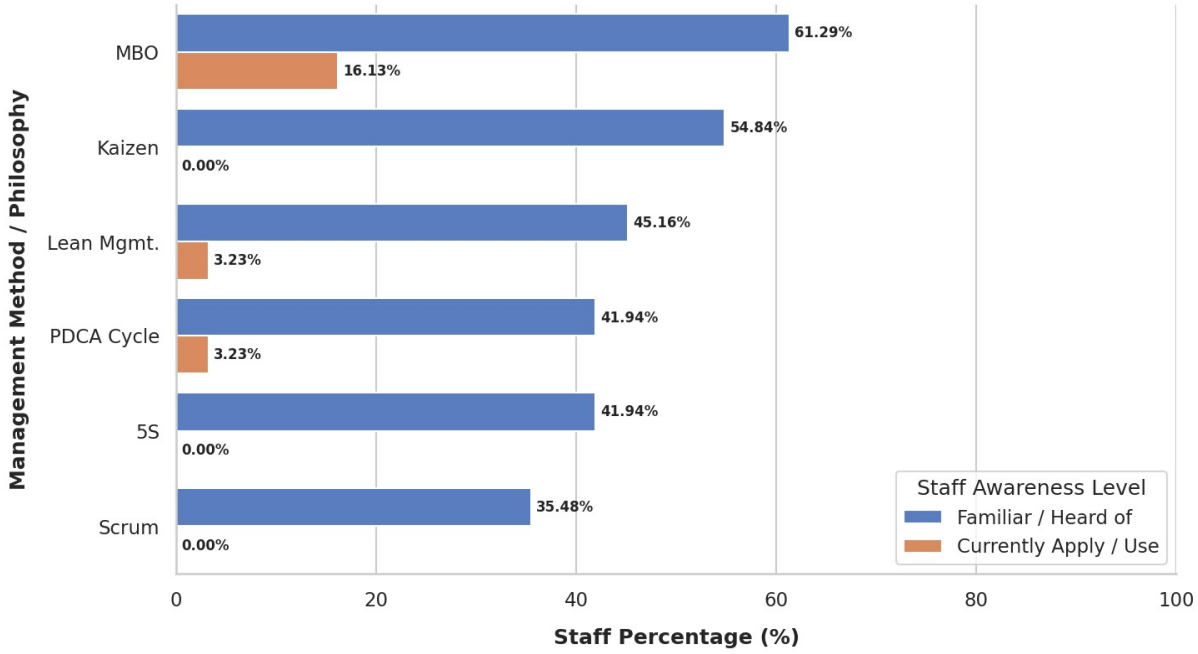


Chart 4: Knowledge and use of modern management methods among officials

Another area examined was the knowledge and use of modern management methods originating from the private sector, which determine an office's readiness to transition from a traditional control model to performance management.

These results reveal a significant competency and cultural barrier within the municipal structure. The most well-known tool is Management by Objectives (MBO) – 61.29% of respondents have heard of it, and 16.13% declare its use in their daily work. This may be due to the fact that MBO concepts are partially consistent with statutory management control requirements. The remaining methods demonstrate an extremely low level of implementation. The Kaizen method, despite its relatively high recognition (54.84%), is not used by any of the respondents (0.00%). The least popular method was Scrum (only 35.48% recognition, no practical

implementation), confirming that project management is unfamiliar to municipal officials accustomed to the traditional, hierarchical division of roles.

4.1.2 Analysis of the survey with residents of the municipality

In the resident survey, 105 people responded, which exceeds the projected number of respondents (100). Women constituted 60.6% of respondents, men 39.4%. The age range varied: those aged 18-29 constituted 19.2%, those aged 30-39 15.4%; 40-49 35.6%; 50-59 26%, and those over 60 3.8%. In terms of education, 64.4% of respondents had a higher education degree, 32.7% declared secondary education, and 2.9% had primary education. In the employment category, 70.2% of respondents reported professional work (all types of contracts except self-employment), 10.6% were entrepreneurs (self-employed), 11.5% were students, 5.8% were unemployed, and 1.9% were retirees.

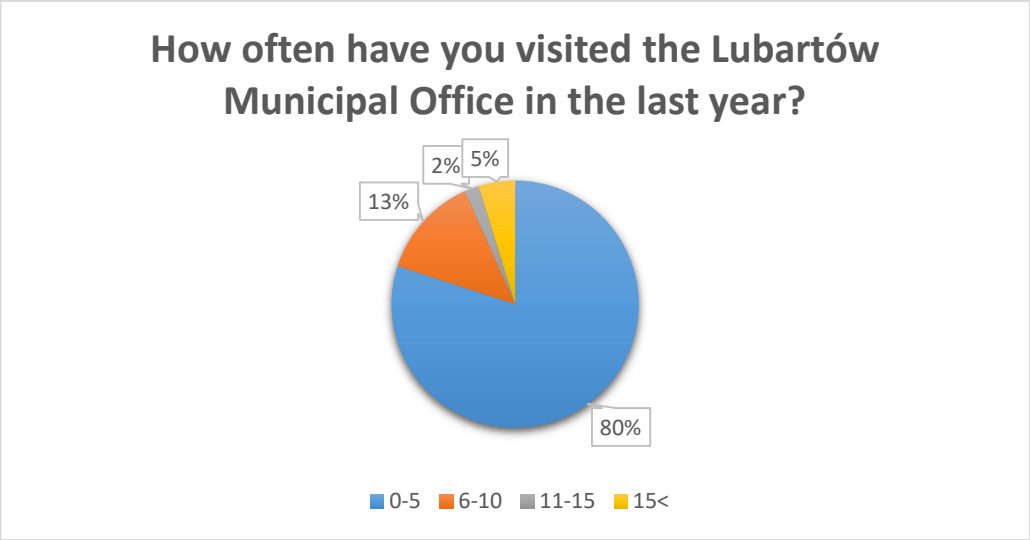


Chart 5: Frequency of visits to the office in the last year

Respondents to the question "How often have you visited the Lubartów Municipal Office in the last year?" provided the following answers: the majority (79.8%) visited the office up to 5 times in the last year, 13.5% of respondents visited the office between 6 and 10 times, and 9.7% visited the office more often. It is worth noting that men visited the office more often – a total of 31.71% for responses 6-10 and 11<, compared to only 12.7% for women. Full-time employees also visited the office more often than employed individuals. None of the students, unemployed, or retirees visited the office more often than five times a year. The age groups that visited the office more often were the 30-39 age group (18.75% of this group visited the office more than 5 times a year), 40-49 (24.32%) and 50-59 (29.62%).

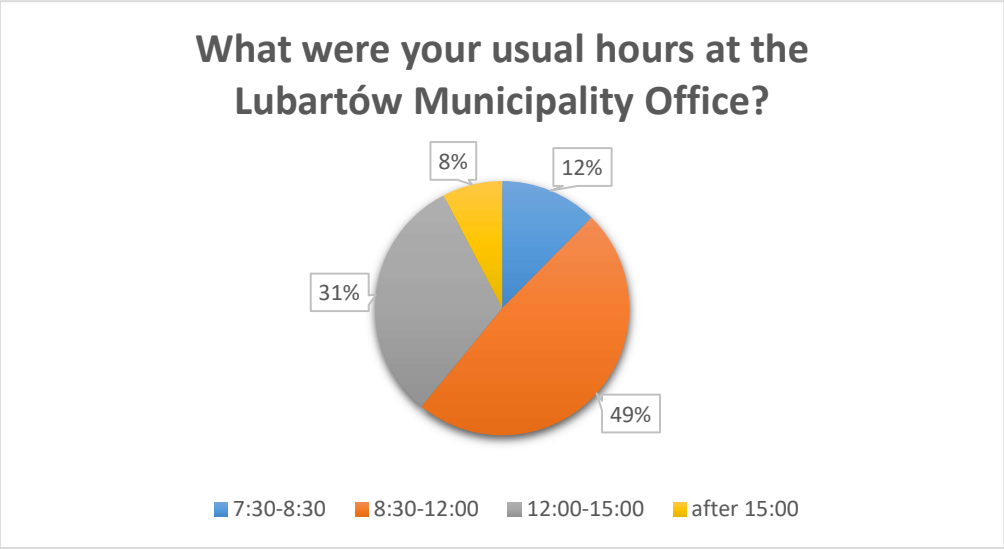


Chart 6: Office visiting hours

In the next question, "What were your usual hours at the Lubartów Municipality Office?", the majority of residents (79.8%) chose the options 8:30 a.m.–12:00 p.m. and 12:00–3:00 p.m., with 48.1% choosing the former. Those who visit the office more frequently (6<) even reinforce this trend (85.71% in total). Those who visit the office in the morning between 7:30 a.m.–8:30 a.m. (12.5%) and at the end of its working hours: after 3:00 p.m. (7.7%) are mostly women (76%) and those who visit the office up to 5 times a year.

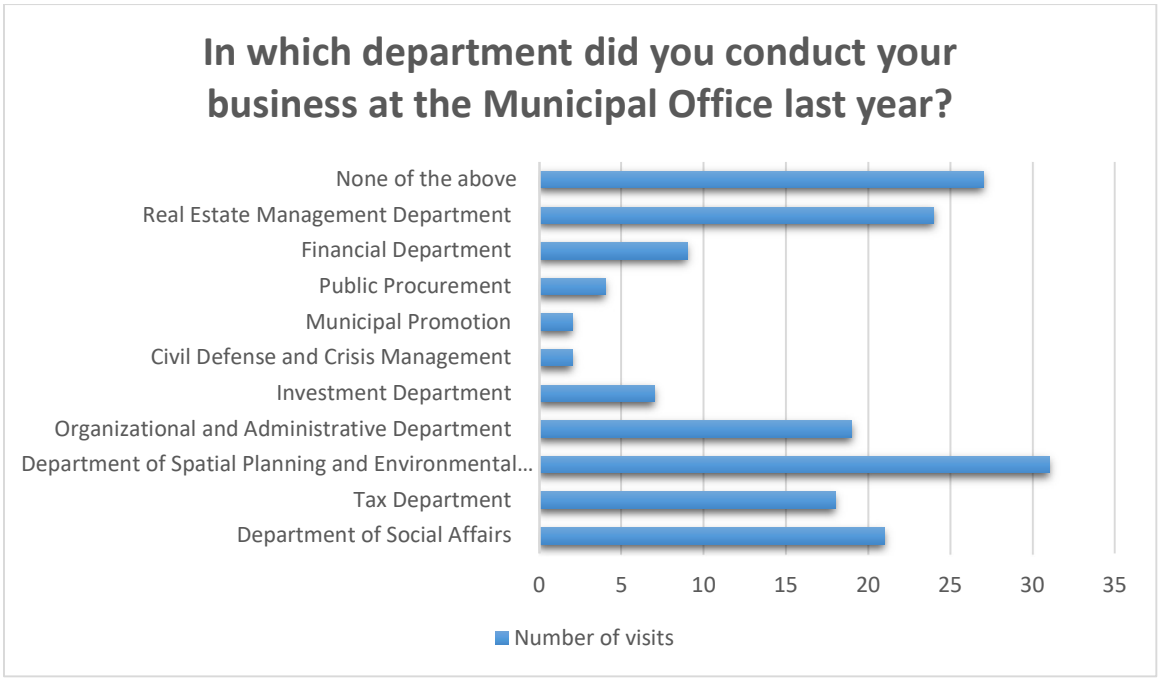


Chart 7: Division of visits by department

One of the most crucial questions was "In which department did you conduct your business at the Municipal Office last year?" Based on this, we can determine which departments are the busiest:

- Spatial Planning and Environmental Protection Department - last year, it was visited by 29.8% of respondents, with over half of the applicants being men (51.6%) and those aged 40-49 (48.4%). 77.4% of respondents visited this department between 8:30 a.m. and 3:00 p.m.

- Real Estate Management Department - visited by 23.1% of respondents, with 66.7% of applicants being women, and the age distribution was more even than in the previous department: 33.3% were aged 40-49, and the 30-39 and 50-59 age groups each accounting for 20.8%. - Department of Social Affairs - visited by every fifth resident (20.2%), two-thirds of whom were women, and 47.6% of applicants were aged 50-59.

- Tax Department - visited by 17.3% of residents, 44% of whom were men. 94.4% of applicants visited the office between 8:30 a.m. and 3:00 p.m.

- Organizational and Administrative Department - visited by 15.4% of residents, 43.8% of whom were men, and every fourth applicant was aged 18-29. It is worth noting that 25% of respondents visited the department between 7:30 a.m. and 8:30 a.m.

The remaining departments did not exceed the 10% threshold of visiting residents. The Finance Department achieved a result of 8.7%, the Investment Department 6.7%, the Public Procurement 3.8%, the Council Support 2.9%, the Municipal Promotion 1.9%, and the Civil Defense and Crisis Management 1.1%. It is worth noting that 26% of respondents selected the "none of the above" option, suggesting that over a quarter of respondents had not visited the municipal office in the last year.

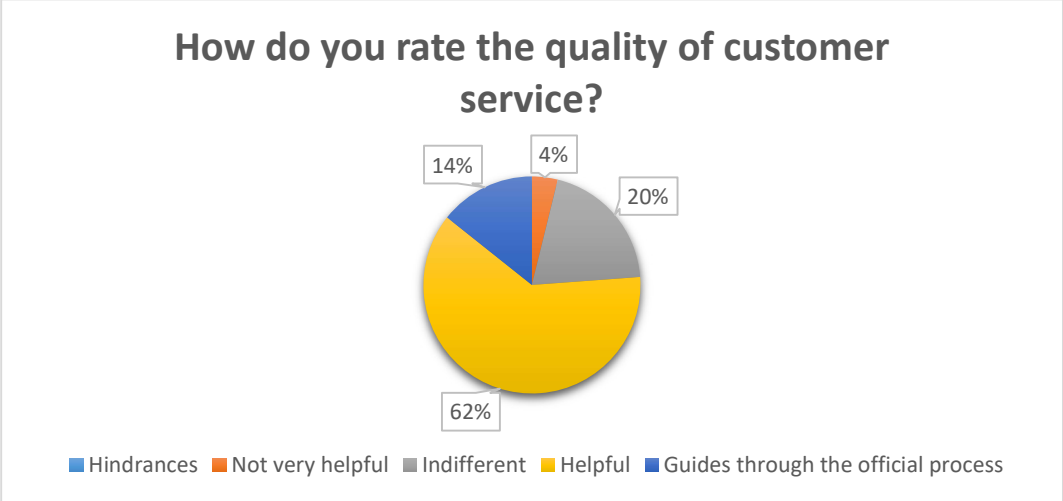


Chart 8: Customer service quality assessment

Customer service quality was rated favorably by the office. 61.5% of respondents rated the officials as helpful, 14.4% as guiding the client through the process, 20.2% rated them as "indifferent" (⅗), and only 3.8% rated the officials' assistance negatively. Among men, the highest rating was "guides through the official process" (12.2%), compared to 15.9% for women. 68.3% of men and 55.6% of women rated 4/5 "helpful." By education, the highest rating was given by 10.8% of those with secondary or primary education and 16.4% with higher education, "helpful," 59.5% of those with secondary or primary education and 62.7% with higher education, and "indifferent" was given by 27% of those with secondary or primary education and 16.4% with higher education. More people with higher education (4.5%) gave a negative assessment than those with secondary or primary education (2.7%).

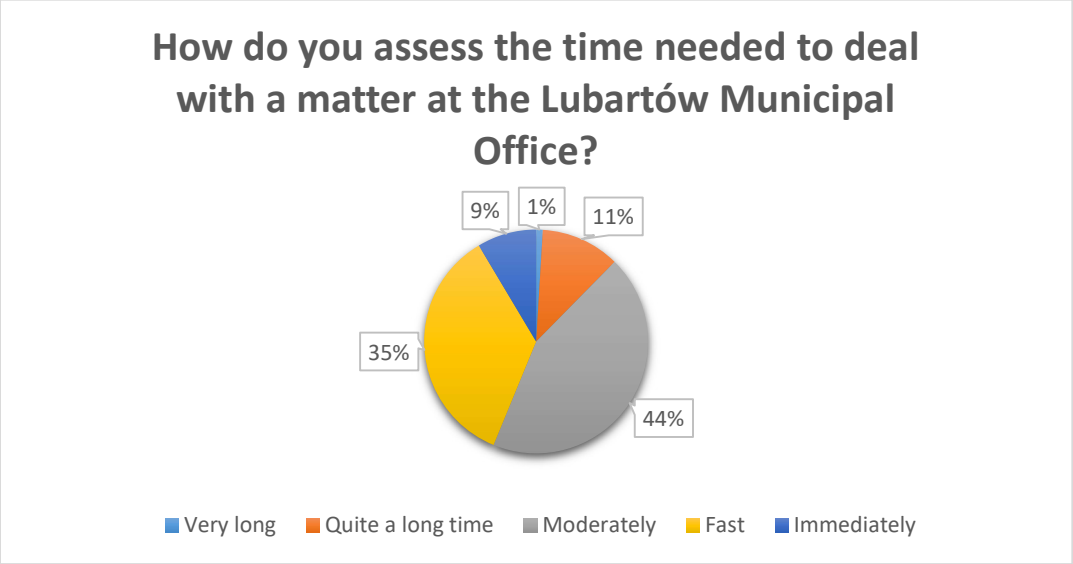


Chart 9: Time required to deal with the matter at office

In the next question, "How do you assess the time needed to deal with a matter at the Lubartów Municipal Office?" the highest rating was "immediately," 35.6% gave "quickly," 43.3% gave "moderately," 11.5% gave "quite a long time," and the lowest was "very long" by only 1%. Among men, the highest rating was "immediately" less prevalent – 7.3%, compared to 9.5% for women. 39% of men and 33.3% of women gave a 4/5 "quickly" rating. In terms of education, the highest rating was given by 10.8% of those with secondary or primary education and 7.5% with higher education, a "fast" rating was given by 24.3% of those with secondary or primary education and 41.8% with higher education, and a "neutral" rating was given by 45.9% of those with secondary or primary education and 41.8% with higher education. Fewer people with higher education (9%) than those with secondary or primary education (18.9%) gave negative ratings.

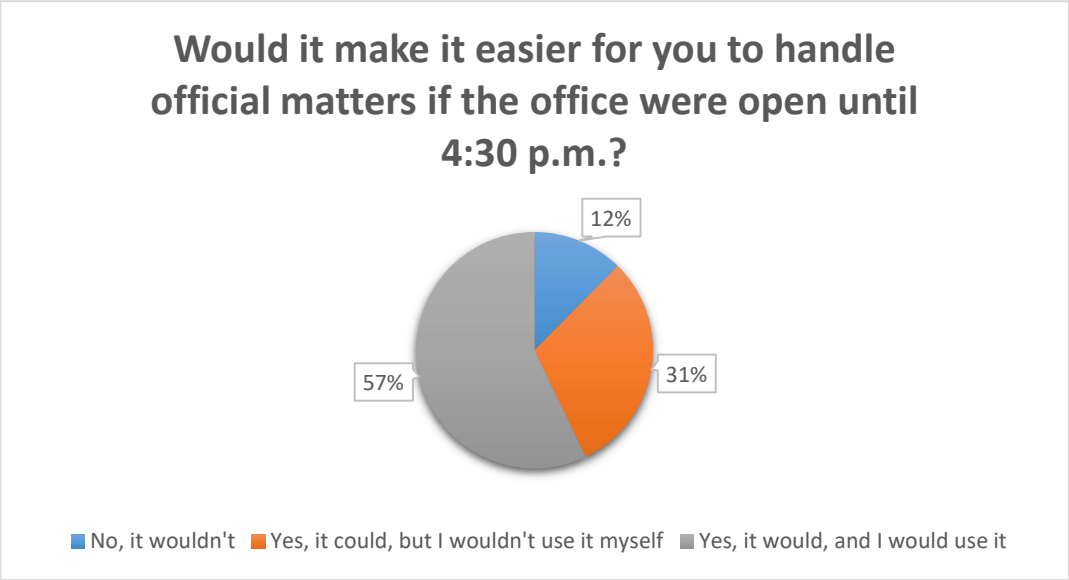


Chart 10: Assessment of extending the office's operating hours

The next questions concerned proposed changes. To the question, "Would it make it easier for you to handle official matters if the office were open until 4:30 p.m.?" 57.7% responded, "Yes, it would, and I would use it," 30.18% said, "Yes, it could, but I wouldn't use it myself", while 11.5% said, "No, it wouldn't." The distribution by gender, age, and education among those who chose the first option ("Yes, it would, and I would use it myself") did not differ from the general distribution among all respondents. However, differences are visible among respondents who chose the second option, "Yes, it could, but I wouldn't use it myself." 31.3% of those who chose this option were in the 18-29 age group, 43.8% were men, and 59.4% had higher education. Among those who answered "No, it wouldn't," the majority were in the 50-59 age group (50%) and those with secondary education (58.3%).

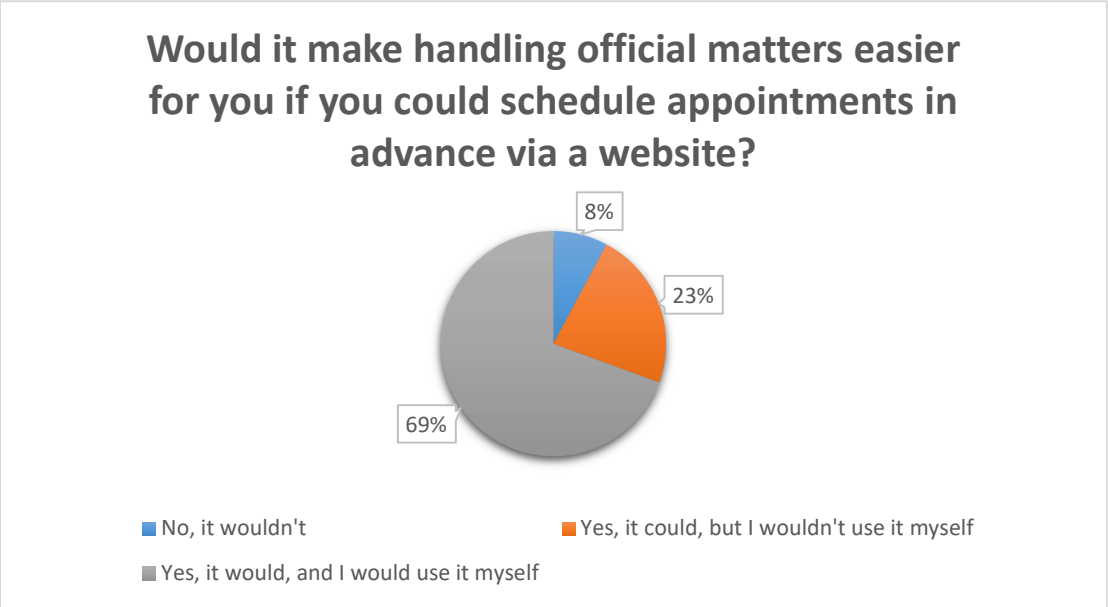


Chart 11: Assessment of the electronic registration system

In response to the question, "Would it make handling official matters easier for you if you could schedule appointments in advance via a website?", 69.2% answered "Yes, it would and I would use it myself", 23.1% stated, "Yes, it could, but I wouldn't use it myself", while 7.7% believed, "No, it wouldn't" A breakdown of the responses by demographic group reveals that 23.6% of those who chose "Yes, it could, but I wouldn't use it myself " belonged to the youngest age group (18–29)—representing 85% of the respondents in that category—while women accounted for 56.9% of this group. Among respondents who chose "Yes, it could, but I wouldn't use it myself" 41.7% were over the age of 50, and 75% held a higher education degree. Among those who expressed a negative view of the proposal, 62.5% were over the age of 50, with educational attainment split evenly (50/50) between higher and secondary education.

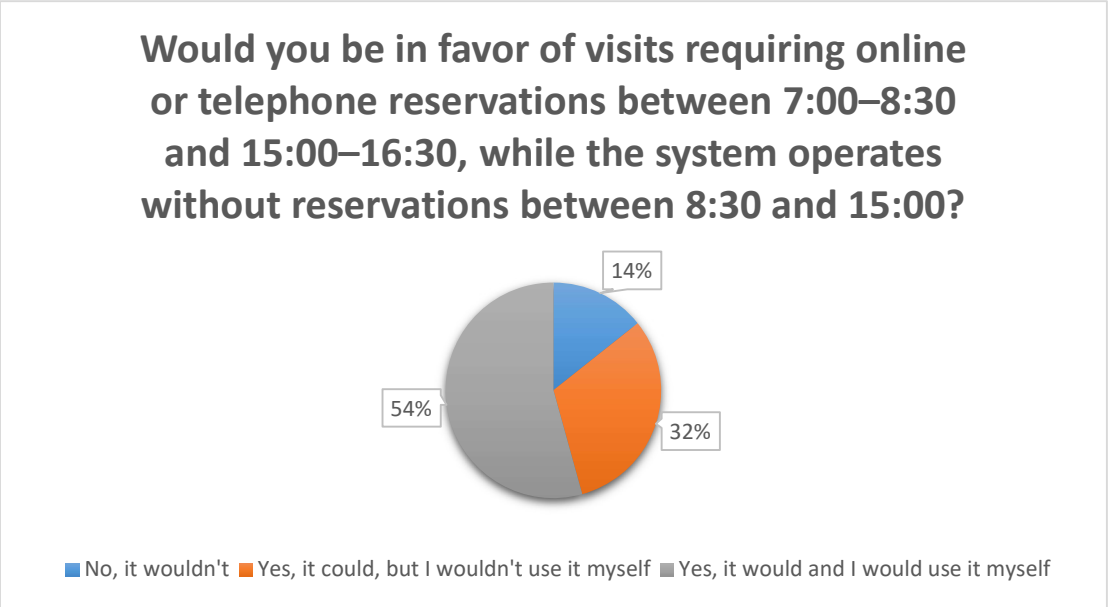


Chart 12: Assessment of hybrid solution

Responses to the question "Would you be in favor of visits requiring online or telephone reservations between 7:00–8:30 and 15:00–16:30, while the system operates without reservations between 8:30 and 15:00?" were distributed as follows: " Yes, it would and I would use it myself" – 54.8%; "Yes, it could, but I wouldn't use it myself " – 30.8%; and "No, it wouldn't make things easier" – 14.4%. The group selecting the first option can be characterized as follows: 45.6% were aged 40–49, and 73.7% held a higher education degree. The response "Yes, it could, but I wouldn't use it myself" was chosen more frequently by individuals over the age of 50 (accounting for 34.4% of those selecting this option). Similarly, the final option—" No, it wouldn't"—was selected by individuals over 50 (46.7% of those choosing this answer) and, additionally, by those with a secondary education (66.7%).

4.2. Comparison between department

Department	Work Autonomy Index	Barriers identified through the individual discussions	Individual Remote Work Predisposition Index (dep. Average)	Inter-departmental links	Resident visits	Result
Spatial Planning and Environmen	4.51	total blockage of the reform	8.15	7	31	3.89

tal Protection Department						
Real Estate Management Department	5.52	total blockage of the reform	7.56	8	24	4.06
Tax Department	5.57	significant impact	8.22	5	18	5.44
Organizational and Administrative Department	5.75	minor impact (Council Support) moderate impact (Volunteer Fire Department Support) total blockage of the reform Civil Registry Office)	8.14	10	16	5.64
Finance Department	5.80	moderate impact	8.35	9	9	5.67
Investment Department	5.65	moderate impact	7.75	7	7	6.00
Municipal Promotion	6.1	minor impact	4.42	6	2	6.32
Civil Defense and Crisis	5.13	significant impact	4.42	3	2	5.73

Management						
Public Procurement	6.95	minor impact	9.90	5	4	7.71
Department of Social Affairs	4.11	significant impact	7.49	4	21	5.18

Table 2: Integrated departmental assessment score

The comparative analysis involved comparing and juxtaposing factors from previous parts of the study. The final result represents the average score in each category; for the category "barriers identified through individual discussions," a scoring system of 0 for "total blockage of the reform," 2.5 for "significant impact," 5 for "moderate impact," and 7.5 for "minor impact" was applied. For the "Inter-departmental links" category, an inverted scoring method was used (applying the formula 10-x, where x is the category's score). In the penultimate column, "Resident visits," the formula (50-x)/5 was applied, with x representing the category's score. These transformations ensure that all columns are measured on a scale of 0 to 10, where a higher score indicates a greater degree of adaptation to remote work.

An analysis of the table revealed that the individual departments achieve similar results, with all categories indicating limited scope for implementing reforms. However, there are departments that perform well in several categories yet are held back by a single one. It is worth noting that such an outlier can be interpreted in two ways: the first applies particularly to categories like the " Individual Remote Work Predisposition Index " or "Inter-departmental links," where the impact might be mitigated during the implementation of remote work—for instance, through new document workflows or employee training. The second option, relating specifically to "Barriers identified through individual discussions" and "Resident visits," has a direct, significant impact on the overall result; these are variables that are extremely difficult, if not impossible, to modify or eliminate. Examples include issues concerning cybersecurity and legal restrictions, the volume of service users, or a significant lack of digitalization.

Based on this table, a final proposal for alternative work models at the Lubartów Municipal Office will be designed.

4.3. Test of Research Question

The conducted research part allowed us to answer the research questions.

The assessment regarding RQ1 *How do job-related characteristics such as task autonomy, computer reliance, and face-to-face client interaction shape the objective feasibility of implementing hybrid work configurations across different departments of a rural municipal office?* is based on an analysis of the components of the Remote Work Index (RWI). Empirical results reveal significant variation in RWI values across the office's organizational units. Positions demonstrating the highest readiness within the agency's structure are characterized by work based entirely on digital documentation and e-procurement platforms, negligible face-to-face interaction with clients, and very low centrality within the collaboration network. Conversely, the departments with the lowest scores are constrained by the analog nature of their archives and the requirement to operate on stationary, internal systems.

In summary, the objective feasibility of implementing hybrid work is determined primarily by the digital nature of the tasks and the elimination of direct face-to-face contact (JSI factors), and secondarily by the employee's decision-making autonomy (WAI). This means that an official's self-reliance and high level of autonomy will not enable remote work if the position entails the physical circulation of paper documents or the continuous handling of in-office queues.

The Individual Remote Work Predisposition Index was used to assess question RQ2- *To what extent do individual employee attributes including self-reported digital competencies, demographic factors such as age, and prior experience in the private sector influence civil servants' attitudes and psychological readiness to adopt alternative work arrangements?* Empirical verification revealed variations in the IRWPI indicator influenced by three main cross-sectional variables: age, and prior experience in the private sector.

Demographic factors and professional backgrounds exert an influence on the psychological and competency-related readiness of civil servants. The primary pool of "agents of change" consists of individuals aged 30–49 with private-sector experience, whereas employees aged 50–59 with a career history exclusively in the public sector require targeted support and digital adaptation programs.

The answer to research question RQ3- *How do organizational culture characteristics, interdepartmental cooperation networks (such as department centrality), and systemic institutional barriers (including legal, technological, and cybersecurity constraints) determine the overall municipal capacity to sustain alternative work configurations?* is provided by the study results, which demonstrate that the Lubartów Municipal Office's institutional capacity to flexibly shape work models is significantly constrained by a deeply rooted deficit in competencies and management capabilities. A key organizational barrier is the lack of familiarity with—and operational application of—modern, agile management methods derived from the commercial sector.

Furthermore, national regulations strictly prohibit working on private equipment and hold the municipality head personally criminally and financially liable for the protection of databases, which also constitutes an implementation barrier.

Without systematic training for management staff on new management methods and the purchase of secure mobile workstations, the municipality's institutional capacity to sustain teleworking remains severely limited.

Research question RQ4- *How does the local community perceive potential alternative configurations of municipal services (such as the introduction of afternoon shifts and flexible office hours), and how do these adjustments affect the accessibility and perceived quality of public utility services from the residents' perspective?* was verified based on an external questionnaire survey conducted among the residents of the Lubartów Municipality. Results of an external survey conducted among residents of the Lubartów Municipality provide evidence of a public mandate to reform the office's current working-time arrangements. The attitude of the staff is highly rated, with 75.9% of residents viewing it positively.

Implementing alternative working-time models and e-services significantly improves the public perception of the office's accessibility, provided a dual-track approach is strictly applied: digitalization and e-appointment booking for the working-age population and younger residents, alongside the maintenance of traditional, walk-in counter service for seniors.

5. Conclusions

5.1. Limitations and suggestions for future research

Despite the application of the principle of methodological triangulation, the empirical study conducted is subject to a number of structural, measurement, and contextual limitations. Identifying these barriers is essential for maintaining scientific rigor, correctly interpreting the limits of the conclusions' applicability, and defining precise directions for future research.

The study focused on a single rural local government unit: the Lubartów Municipal Office. While the internal sample ensuring high internal validity and representativeness within the organization analyzed—the specific geographical, structural, demographic, and budgetary conditions of a small rural municipal limit the ability to directly extrapolate the results to other types of local governments. A valuable direction for theoretical development would be to extend the research scope to a representative sample of local government units.

The external questionnaire was distributed exclusively via digital channels. This method introduced a twofold sampling bias: an overrepresentation of individuals with high digital literacy and higher education levels and an underrepresentation of the oldest resident demographic. Consequently, the study may have underestimated the extent of resistance to the digitalization of public services at risk of digital exclusion, for whom traditional in-person contact remains the sole channel of interaction with public authorities.

Key individual indicators rely on employees' self-assessments. This type of psychosocial measurement carries the risk of social desirability bias or the Dunning-Kruger effect—manifesting as over-optimism regarding one's own digital competencies and personality traits particularly in a workplace-based study.

The identified limitations point to promising areas for future research into work reorganization within public administration.

It is recommended to conduct studies using a pre- and post-implementation model to evaluate the actual effects of implementing the proposed solutions. A longitudinal study would allow for measuring the real impact of flexible models. Future research should aim to replace subjective self-reported measures with objective operational indicators. When examining the residents' perspective, a multi-channel sampling approach is recommended. This will allow for a more comprehensive inclusion of the voices of older adults and the precise design of e-services free from digital exclusion barriers.

5.2. Theoretical Implications

This study makes a significant contribution to the literature on public governance, and research into digitalization and flexible work models in the public sector. This study addresses a clear research gap by analyzing the conditions for and feasibility of organizational changes within the specific and rarely studied environment of local government administration at the rural municipal level.

The introduced and empirically verified three-factor model of determinants represents a significant step toward a holistic assessment of the digital-organizational maturity of public sector entities.

The study demonstrates that analyzing the feasibility of remote work cannot rely solely on examining indicators of decision-making autonomy. A key theoretical conclusion is that high autonomy regarding tasks, criteria, and schedules is insufficient to shift work outside the office if the position is characterized by a low level of technical-operational adaptability. Furthermore, certain factors can effectively rule out remote work; for instance, legal requirements may necessitate that a position remain office-based, despite high scores on other indices.

This study provides empirical evidence regarding the psychosocial factors influencing public officials' readiness to work in a distributed environment. A strong positive correlation was found between the Individual Remote Work Predisposition Index (IRWPI) and prior professional experience in the private sector. The study challenges common assumptions about a linear decline in digital competence with age. It revealed a peak in readiness among those aged 30–49, a dip in the 50–59 age group, and a slight resurgence among those aged 60 and older. The lower composite index score for the youngest group compared to the 30–49 age group is due to a shorter total length of service and relatively limited experience.

Incorporating a survey of residents' opinions into the analysis of the feasibility of implementing hybrid work serves as a key point that crystallizes the specific nature of the public sector.

Future research building upon this work could delve deeper into the topics of remote work in rural municipal offices and equitable digitalization grounded in equal opportunities and social participation.

5.3. Managerial implications

The process of implementing alternative work models in local government offices requires numerous steps and is constrained by many factors. First, there are regulatory limitations. Documents regarding accessibility or classified information severely restrict remote work. As a

result, some departments are, in a sense, tied to the office. The second challenge involves technical and financial constraints—the municipality does not have a sufficient number of mobile work phones or laptops to enable remote work. Furthermore, the equipment must be properly secured, e.g., with restricted disk access. All of this means that changes can only be implemented to a very limited extent.

Hybrid work one day a week is a solution for positions that are not directly related to the public or are only minimally so. Furthermore, their work can be scheduled so that certain tasks are performed on specific days.

A hybrid work model of two days per month is a solution for departments that have frequent contact with individual clients. Remote work can be used, for example, for training or catching up on documentation. This configuration would also allow for savings on equipment and would not compromise customer service.

The third type of proposed employment arrangement is on-site work with flexible hours. Other departments cannot operate in a hybrid format or face significant limitations in doing so. However, in an effort to offer flexibility, flexible working hours between 7:00 a.m. and 4:30 p.m. have been proposed. Work under this model would be mandatory from 8:30 AM to 3:00 PM; the remaining 1.5 hours would be scheduled by the employee in consultation with their supervisor one week in advance.

Work Organization Regime	Recommended Flexibility Dimension	Departments
Permanent Hybrid Work	Hybrid work one day a week (20% of working time)	-Public Procurement -Finance Department -Municipal Promotion -Council Support
On-Demand Hybrid Work	Hybrid work model of two days per month (on-demand)	-Investment Department -Environmental Protection in the Department of Spatial Planning and Environmental Protection

On-site work with flexible hours	Flexible working hours between 7:00 a.m. and 4:30 p.m. have been proposed. Work under this model would be mandatory from 8:30 AM to 3:00 PM	-Spatial Planning and Environmental Protection Department - Real Estate Management Department - Tax Department -Organizational and Administrative Department - Civil Defense and Crisis Management - Department of Social Affairs

Table 3: Proposed Work organization models by Department

Building a new organizational culture is a key pillar for the successful implementation of hybrid work and flexible working hours in local government administration. A shift toward Management by Objectives and Management by Results is essential. Management staff require training on defining SMART indicators. The measure of a civil servant's value shifts from "time spent in the office" to the quality, timeliness, and completeness of public tasks performed.

Creating an informal network of "Change Ambassadors" comprising employees with commercial experience and digital leaders. They act as internal mentors, helping colleagues adapt to digital tools, setting examples, and supporting less experienced staff in acquiring tacit knowledge. Managers must foster an environment where mistakes made while learning new systems are not penalized but viewed as a natural part of professional development. Actively involving employees in the procedure design process (e.g., using focus groups) reduces resistance to change.

Flexible working hours carry the risk of blurring the boundaries between professional and private life and creating pressure to remain constantly reachable via email or phone. Promoting a culture that prioritizes well-being could prevent burnout and foster high levels of employee engagement.

The municipality could introduce afternoon shifts; this change would not require hiring additional staff or paying overtime, as it could be implemented through flexible working hours for officials. Implementing a simple e-booking module eliminates random spikes in office queues, helps department heads distribute workloads more evenly, and reduces the perceived waiting time for residents.

The implementation of e-booking systems and flexible working hours for staff must under no circumstances lead to the elimination of the traditional in-person service model. A potential solution would be a digital assistance point, where a staff member helps elderly residents on-site to book future appointments or submit electronic applications. Such measures will prevent the risk of excluding certain groups of residents.

In summary, the proposed tiered solutions are tailored to the existing capabilities of individual departments. External factors—specifically the views of local residents—were taken into account, ensuring the proposed changes align with public expectations. The flexible working hours model warrants particular attention, as it will initially apply to the largest number of departments. The proposals also include fostering a new organizational culture within the office, which will facilitate the future adoption of alternative work models. Finally, the plan includes provisions for supporting marginalized groups among both staff and service users. Despite their complexity and the need to alter the status quo, these alternative models are feasible to implement and align with the expectations of employees and the public, as well as the broader trend toward the digitalization of public administration.

5.4. Summary

In summary, the theoretical considerations in this study did not merely serve as passive descriptive background; rather, they actively shaped the structure of the measurement tools and the research indices developed by the author. The empirical results enabled the verification, modification, and significant enrichment of existing concepts found in the literature. The theoretical conceptualization of autonomy dimensions (WAI) and operational adaptability (JSI) allowed for the precise measurement of role suitability via the RWI index. However, the empirical findings tested these theoretical assumptions, demonstrating that decision-making autonomy alone is insufficient to implement remote work if the position is characterized by a low level of digitalization and a requirement for direct contact with the public. The study yielded several conclusions crucial to both the theory and practice of public management.

References

- Abele, L., Jermolajeva, E., & Alksne, L. (2023). Assessment of Knowledge and Habits for Planning Dematerialization of Municipalities. Latvia University of Life Sciences and Technologies / Liepaja University. DOI: https://doi.org/10.5593/sgem2023/5.1/s21.43
- Ashfaq, M. (2018). Managing by Objectives (MBO) and Government Agencies: A Critical Review. European Journal of Business and Management, 10(28), 49–53.
- Bednarska-Wnuk, I. (2023 Hybrid or remote? The importance of work form in shaping engagement to work in a post-pandemic reality. Organizacja I Kierowanie, 194(3), 191–208. DOI: https://doi.org/10.33119/OiK.2023.194.3.8
- Bloom, N., Han, R., & Liang, J. (2024). Hybrid working improves retention and does not damage performance. Nature, 630(8018), 920–925. DOI: https://doi.org/10.1038/s41586-024-07500-2
- Cabrita, J., & Eiffe, F. (2023). Hybrid work in Europe: Concept and practice. Publications Office of the European Union. DOI: https://doi.org/10.2806/26474
- Cambridge University Press. (2025a). Cambridge Dictionary: Hybrid working. https://dictionary.cambridge.org/dictionary/english/hybrid-working
- Cambridge University Press. (2025b). Cambridge Dictionary: Remote work. https://dictionary.cambridge.org/dictionary/english/remote-work
- Caprile, M., Arasanz Días, J., Bednorz, J., Makarevičiūtė, A., Sadauskaitė, A., & Sanz de Miguel, P. (2025). Hybrid workplaces in the EU: Lessons from case studies in the public and private sectors (Eurofound Working Paper). Eurofound. https://www.eurofound.europa.eu/en/publications/all/hybrid-workplaces-eu-lessons-case-studies-public-and-private
- CEMR. (2022). Principles for a digital transition in European local and regional governments. Council of European Municipalities and Regions. https://ccre-cemr.org/wp-content/uploads/2024/04/CEMR_position_paper_Digital_services_for_all_EN_annex.pdf
- Chodakowska, A., Kańduła, S., & Przybylska, J. (2022). Cybersecurity in the Local Government Sector in Poland: More Work Needs to be Done. Lex Localis - Journal of Local Self-Government, 20(1), 161–192. DOI: https://doi.org/10.4335/20.1.161-192(2022)
- Chourasiya, P., Jain, K., & Pande, K. (2025). Work-from-home vs. hybrid work models: A comparative study. International Journal for Multidisciplinary Research (IJFMR). DOI: https://doi.org/10.36948/ijfmr.2025.v07i05.59106

- Chung, H., & van der Lippe, T. (2020). Flexible working, work–life balance, and gender equality: Introduction to the special issue. Social Indicators Research, 151(2), 365–381. DOI: https://doi.org/10.1007/s11205-018-2025-x
- Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches (3rd ed.). SAGE Publications. https://www.ucg.ac.me/skladiste/blog_609332/objava_105202/fajlovi/Creswell.pdf
- Deole, S. S., Deter, M., & Huang, L. (2021). Home sweet home: Working from home and employee performance during the COVID-19 pandemic in the UK (GLO Discussion Paper No. 843). Global Labor Organization. https://www.econstor.eu/bitstream/10419/231328/1/GLO-DP-0791.pdf
- Desmarais, A. (2025). Five years on, did the COVID pandemic have a lasting effect on how we work in Europe? Euronews. https://www.euronews.com/next/2025/03/22/how-did-the-covid-19-pandemic-affect-remote-work-in-europe
- Drucker, P. F. (1954). The practice of management. Harper & Row.
- Dudek, D., & Bis, J. (2023). Study of customer satisfaction in service offices on the example of selected business lines of one of the Polish energy conglomerates. Journal of Modern Science, 54(5), 635–655.DOI: https://doi.org/10.13166/jms/176397
- Eurofound. (2020). Living, working and COVID 19: First findings. https://www.eurofound.europa.eu/en/publications/all/living-working-and-covid-19-first-findings-april-2020
- Eurofound. (2025). Teleworking. https://www.eurofound.europa.eu/en/topics/teleworking
- European Commission. (2020). Strategic Plan 2020-2024: Directorate-General for Informatics. https://commission.europa.eu/publications/strategic-plan-2020-2024-informatics_en
- European Commission. (2023). 2023 Flagships Technical Support projects: Digital transformation for regional and local authorities. https://reforms-investments.ec.europa.eu/digital-transformation-regional-and-local-public-administrations_en
- European Commission, Joint Research Centre. (2020). Telework in the EU before and after the COVID-19: where we were, where we head to (JRC120945). https://joint-research-centre.ec.europa.eu/document/download/1ccf7717-ab52-4215-b14a-08d74e9d44fc_en
- Eurostat. (2022). Rise in EU population working from home. https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20221108-1

- ETUC, UNICE/UEAPME, & CEEP. (2002). Framework agreement on telework. European Commission. https://ec.europa.eu/social/BlobServlet?mode=dsw&docId=10418&langId=en
- Fang, T. (2025). Determinants and Effects of Remote Work Arrangements: Evidence from an Employer Survey. SSRN Electronic Journal. DOI: https://doi.org/10.2139/ssrn.5362831
- Gavoille, N. (2022). Personality traits and telework. International Labour Review, 161(3), 415–439. DOI: https://doi.org/10.16995/ilr.18853
- Glock, N. (2025). Digitalization reshaping job autonomy? Z. Arb. Wiss. 79, 369–390. https://doi.org/10.1007/s41449-025-00480-7
- Guion, L. A., Diehl, D. C., & McDonald, D. (2011). Triangulation: Establishing the validity of qualitative studies (Publication No. FCS6014). University of Florida IFAS Extension.DOI: https://doi.org/10.32473/edis-fy394-2011
- House of Lords Select Committee on Home-Based Working. (2025). Is working from home working? (HL Paper 196). Authority of the House of Lords. https://publications.parliament.uk/pa/ld5901/ldselect/ldhomework/196/196.pdf
- IBRiS. (2025). Diagnoza rozwiązań well-being oraz work-life balance w krajach sieci EUPAN: Przewodnik po dobrych praktykach. https://www.gov.pl/attachment/da9c1ddd-fc1c-439c-9fb3-c0af847261ed
- Ishi, K., Yamamoto, K., & Nakayama, S. (2023). Potential benefits and determinants of remote work during the COVID-19 pandemic: Evidence from Japanese Household Panel Data. Journal of the Japanese and International Economies, 70, Article 101285. DOI: https://doi.org/10.1016/j.jjie.2023.101285
- Iwaniuk, A., Hawrysz, L., Bulińska-Stangrecka, H., & Huras, P. (2021). Barriers to the effectiveness of teleworking in public administration. Scientific Papers of Silesian University of Technology. Organization and Management Series, 153, 165–178. DOI: https://doi.org/10.29119/1641-3466.2021.153.12
- Kam, A. (2024). Economic Effectiveness of Remote Work in Organizations of the Public Utility Sector (Unpublished doctoral dissertation). University of Lodz. https://repozytorium.uni.lodz.pl/handle/11089/55463
- King's College London. (2025). Working from home now 'defining feature' of UK labour market. https://www.kcl.ac.uk/news/working-from-home-now-defining-feature-of-uk-labour-market

- Kissflow. (2025). Building an effective remote work culture. https://kissflow.com/digital-workplace/remote-work/building-effective-remote-work-culture/
- Kołodziej, D. (2023). E-Government Solutions in Poland: The State of E-Services Provided by a Selected Local Government Unit. Journal of Public Governance, 2(64), 46–62. DOI: https://doi.org/10.15678/PG.2023.64.2.04
- Kozioł-Nadolna, K. (2024). Advantages and disadvantages of remote work from the perspective of a Polish employee during the Covid 19 pandemic, Procedia Computer Science, 246, 3859-3867. DOI: https://doi.org/10.1016/j.procs.2024.09.159
- Krajčík, M., Schmidt, D. A., & Baráth, M. (2023). Hybrid work model: An approach to work–life flexibility in a changing environment. Administrative Sciences, 13(6), Article 150. DOI: https://doi.org/10.3390/admsci13060150
- Lauring, J., & Jonasson, C. (2025). What is hybrid work? Towards greater conceptual clarity of a common term and understanding its consequences. Human Resource Management Review, 35(1), Article 101044. DOI: https://doi.org/10.1016/j.hrmr.2024.101044
- Loeffler, E. (2017). Kaizen in Saitama City: Staff improving quality and efficiency of public services. Governance International. https://www.govint.org/our-resources/case-studies/case-study/kaizen-in-saitama-city-staff-improving-quality-and-efficiency-of-public-services
- Mebane, M. E., Martini, E., Greco L., & Furlan, C. (2026). What the future of smart working holds for Italian society. Italian Sociological Review, 16(1), 1–27\. DOI: https://doi.org/10.13136/isr.v16i1.832
- Messenger, J. C. (Ed.). (2019). Telework in the 21st century: An evolutionary perspective. Edward Elgar Publishing / International Labour Organization. DOI: https://doi.org/ 10.4337/9781789903751.00005
- Mofokeng, S., Ramolobe, K. S., & Bogopa, D. L. (2025). Assessing the impact of digital technologies on service delivery in local government. Journal of Local Government Research and Innovation, 6, Article a234. DOI: https://doi.org/10.4102/jolgri.v6i0.234
- Mosley, H., Schütz, H., & Breyer, N. (2001). Management by objectives in European public employment services (Discussion Paper No. FS I 01-203). WZB Berlin Social Science Center. https://bibliothek.wzb.eu/pdf/2001/i01-203.pdf
- Onwuegbuzie, A. J., & Leech, N. L. (2005). On becoming a pragmatic researcher: The importance of combining quantitative and qualitative research methodologies. International

Journal of Social Research Methodology, 8(5), 375–387. DOI: https://doi.org/10.1080/13645570500402447

- OPM – U.S. Office of Personnel Management. (2025). Remote work – Frequently asked questions. https://www.opm.gov/frequently-asked-questions/telework-faq/remote-work/
- Park, S., & Jae, M. M. (2022). Determinants of teleworkers' job performance in the pre-COVID-19 period: Testing the mediation effect of the organizational impact of telework. *Journal of General Management*, *49*(3), 222–232. DOI: https://doi.org/10.1177/03063070221116510
- Radziukiewicz, M. (2021). Remote work in Poland and other countries. Przedsiębiorczość i Zarządzanie, 22(3), 45–60. DOI: https://doi.org/10.2478/ers-2021-0029
- Satria, T. Hadiguna, R. Henmaidi, H. &Arief, I. (2025). Performance measurement in local government: A systematic review towards efficient public sector management. International Journal of Innovative Research and Scientific Studies 8(4):1417-1428 DOI: https://doi.org/10.53894/ijirss.v8i4.8093
- Skrzypek-Ahmed, S., Ivashko, O., Sak-Skowron, M., Dziwulski, J., & Wojciechowski, Ł. (2023). Public management as a concept for improving the efficiency and cost-effectiveness of public administration. Journal of Modern Science, 5(54), 11–26. DOI: https://doi.org/10.13166/jms/176487
- Smyk, M., Tyrowicz, J., & van der Velde, L. (2022). Post-pandemic work arrangements and employee turnover intentions. Labour Economics, 78, GRAPE Working Papers 77, GRAPE Group for Research in Applied Economics. http://grape.org.pl/WP/77_SmykVanderVeldeTyrowicz_website.pdf
- Souppaya, M., & Scarfone, K. (2016). Guide to Enterprise Telework, Remote Access, and Bring Your Own Device (BYOD) Security (NIST Special Publication 800-46, Rev. 2). National Institute of Standards and Technology. DOI: https://doi.org/10.6028/NIST.SP.800-46r2
- Trusz, S. (2017). The Meaning of Mixed Quantitative and Qualitative Research in Education. An Attempt to Combine Fire and Water. Studia Edukacyjne. 2017, nr 44. DOI: https://doi.org/10.14746/se.2017.44.6
- Tukiran, M., Ghufron, N., Sunaryo, W., Rusli, Z. I., & Dalilah, E. (2022). Public Sector Management: Indispensable facilitating factors in sculpting organisational ambidexterity. Polish Journal of Management Studies, 25(1), 425–440. DOI: https://doi.org/10.17512/pjms.2022.25.1.26

- Valaskova, K., Nagy, M., Figura, M., & Rousek, P. (2025). Res publica digitalis: The uneven digital transformation of the European public sector and the impact of policy disparities on governance, service efficiency, and socioeconomic inclusion. Oeconomia Copernicana, 16(3), 1177–1260. DOI: https://doi.org/10.24136/oc.3866
- Wakuła, M. (2021). Public management – the essence and selected concepts. Scientific Journal of the Military University of Land Forces 199(1):155-163 DOI: https://doi.org /10.5604/01.3001.0014.8117
- Wells, J., Scheibein, F., Pais, L., dos Santos, N. R., Dalluege, C.-A., Czakert, J. P., & Berger, R. (2023). A systematic review of the impact of remote working referenced to the concept of work–life flow on physical and psychological health. Workplace Health & Safety, 71(8), 380–394. DOI: https://doi.org/10.1177/21650799231176397
- Wiśniewska, M. (2020) Nowoczesne metody zarządzania sprawami publicznymi w mieście, Interdyscyplinarne Studia Miejskie, Wydawnictwo Uniwersytetu Łódzkiego, DOI: https://doi.org/10.18778/8220-215-1
- Yin, R. K. (2003). Case study research: Design and methods (3rd ed.). SAGE Publications.

Legislation

- European Commission. (2025). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: State of the Digital Decade 2025: Keep building the EU's sovereignty and digital future (COM/2025/290 final). Brussels.
- Ustawa z dnia 26 czerwca 1974 r. – Kodeks pracy (Dz.U. 1974 nr 24 poz. 141 z późn. zm.) [Act of June 26, 1974 – Labour Code (Journal of Laws 1974 No. 24 item 141, as amended)].
- Ustawa z dnia 21 listopada 2008 r. o pracownikach samorządowych (tekst jedn. Dz.U. 2024 poz. 1135) [Act of November 21, 2008 on Local Government Employees (Consolidated text: Journal of Laws 2024 item 1135)].
- Ustawa z dnia 10 maja 2018 r. o ochronie danych osobowych (tekst jedn. Dz.U. 2019 poz. 1781 z późn. zm.) [Act of May 10, 2018 on the Protection of Personal Data (Consolidated text: Journal of Laws 2019 item 1781, as amended)].
- Ustawa z dnia 5 lipca 2018 r. o krajowym systemie cyberbezpieczeństwa (tekst jedn. Dz.U. 2026 poz. 20) [Act of July 5, 2018 on the National Cybersecurity System (Consolidated text: Journal of Laws 2026 item 20)].

- Ustawa z dnia 1 grudnia 2022 r. o zmianie ustawy – Kodeks pracy oraz niektórych innych ustaw (Dz.U. 2023 poz. 240) [Act of December 1, 2022 amending the Labour Code and Certain Other Acts (Journal of Laws 2023 item 240)].
- Rozporządzenie Rady Ministrów z dnia 21 maja 2024 r. w sprawie Krajowych Ram Interoperacyjności, minimalnych wymagań dla rejestrów publicznych i wymiany informacji w postaci elektronicznej oraz minimalnych wymagań dla systemów teleinformatycznych (Dz.U. 2024 poz. 773) [Regulation of the Council of Ministers of May 21, 2024 on the National Interoperability Framework, Minimum Requirements for Public Registers and Electronic Exchange of Information, and Minimum Requirements for ICT Systems (Journal of Laws 2024 item 773)].

Appendixes

Appx. 1: Employee survey questions required to calculate indices

Section	Number	Question	Weight	Reverse Question
Task Autonomy	Q1	I can decide on my own which methods and tools to use to carry out my tasks	0.4	NO
	Q2	I have a say in how many tasks are assigned to me (workload)	0.4	NO
	Q3	I have a say in what specific tasks I perform as part of my job.	0.2	NO
Criteria Autonomy	Q4	I have influence over how the results of my work are evaluated.	0.25	NO
	Q5	I have influence over setting the goals of my work.	0.5	NO
	Q6	I consciously and independently plan how to achieve the goals set for me.	0.25	NO
Schedule Autonomy	Q7	I can independently decide the order in which I perform the tasks assigned to me.	0.35	NO
	Q8	I have influence over when during the day I carry out specific tasks.	0.25	NO
	Q9	I decide independently on breaks during the workday	0.25	NO
	Q10	I usually handle disruptions and unforeseen situations at work on my own.	0.15	NO

Job Suitability Index	Q11	What percentage of the tasks in my position do I perform using a computer?	0.075	NO
	Q12	What percentage of my tasks are manual in nature?	0.075	YES
	Q13	The tasks I perform are routine and repetitive.	0.075	NO
	Q14	What percentage of my tasks can be performed entirely remotely (without physical presence at the office)?	0.2	NO
	Q15	What percentage of my tasks involve working with clients in person	0.2	YES
	Q16	What percentage of my tasks involve working with clients over the phone?	0.1	NO
	Q17	What percentage of my tasks involve working with clients via email?	0.1	NO
	Q18	I often work with other departments.	0.075	YES
	Q19	In my job, it is easy to use new technologies (software, online tools) that support remote working.	0.1	NO
Computer Proficiency Index	Q20	I rate my computer skills as high.	-	NO
	Q21	I am proficient in using the specialized software required for my work.	-	NO
	Q22	I feel confident using remote work tools (e.g., instant messengers, document management systems).	-	NO
	Q23	I find it easy to learn how to use new programs.	-	NO
	Q24	When I have a choice between a traditional or digital way of solving a problem, I choose the digital one.	-	NO
	Q25	I use AI tools at work.	-	NO
	Q26	I can maintain emotional composure in stressful work situations.	-	NO
Personal Coefficient	Q27	I can control my behavior and emotions at work (self-control).	0.07	NO
	Q28	I am eager to expand my knowledge and learn new tools or procedures.	0.07	NO
	Q29	I consider myself resourceful when it comes to solving work-related problems.	0.12	NO

	Q30	I like working on my own and value independence at work.	0.096	NO
	Q31	I am motivated to work effectively, regardless of where I am working.	0.097	NO
	Q32	I can clearly define my professional goals and task priorities.	0.12	NO
	Q33	I consider myself a conciliatory person who is willing to cooperate with others.	0.12	NO
	Q34	I consider myself a conscientious person who meets deadlines and fulfills responsibilities.	0.07	NO
	Q35	I am open to new professional experiences, including new forms of work organization.	0.097	NO
	Q36	I enjoy frequent contact with people and feel comfortable in work that requires intensive interaction.	0.07	NO

Appx. 2: Information on the use of artificial intelligence (AI) tools

Artificial intelligence tools were used in the preparation of this work. These tools served solely as editorial support and did not replace the author's substantive contribution. ChatGPT and Gemini models were employed after the substantive content had been written to refine the language, style, grammar, and flow of the text.

Gemini and ChatGPT tools were used to generate the graphic visualizations (Chart 1, Chart 2, Chart 3, and Chart 4). The charts were created based on primary data collected independently by the author during the research process. All input data used to generate the charts were verified directly and personally by the researcher through independent, raw analysis in Excel. The author conducted a comprehensive review of the logical, numerical, and methodological accuracy of the generated graphs and the refined text, assuming full responsibility for the content, accuracy, and interpretation of the presented results.

Appx. 3: Declaration of Authenticity

FACULDADE
DE ECONOMIA
UNIVERSIDADE
DO PORTO

Clarification of the meaning and regulatory implications of the Declaration of Authenticity

The declaration of authenticity binds its signatory to the content of the statements for all legal, regulatory, and disciplinary purposes in light of the legal regulations in force at the University of Porto (U.Porto) and its organisational unit, the School of Economics and Management (FEP.UP).

U.Porto considers academic integrity to be one of the most noble precepts of university life and regards academic fraud and other forms of academic misconduct as severe offences.

The growing dissemination and ease of reading data, texts and graphics, accessible thanks to communication technologies and the possibility of generating new content in various forms, such as text, images, etc., using Generative Artificial Intelligence (AI) tools, contribute to greater recourse to plagiarism and falsification, in clear violation of intellectual property and ethical standards.

It should be noted that the author of a research paper is responsible for its entire content, even if Generative AI tools are used in its production. If a generative AI tool is used and results in the replication of existing literature without proper citation, this constitutes an abusive and illegitimate use, corresponding to a situation of academic fraud, and is in violation of the provisions of Article 20 of the General Regulations for the Assessment of First and Second Cycle Students at FEP.UP shall apply.

Strict compliance with ethical principles relating to authorship, academic integrity, citation of previous works, and other ethical conduct required in the pursuit of scientific research is mandatory.

By issuing this declaration of authenticity, the undersigned acknowledges the acceptance of the principles of academic integrity outlined in the Declaration of Principles on Academic Integrity of the University of Porto (ORDER No. 08/09/2011), available at https://sigarra.up.pt/up/pt/legislacao geral.ver legislacao? nr=4939, of which the Charter of Rights and Duties of the Academic Community is an integral part, which includes the duty not to resort to academic fraud, under penalty of appropriate sanctions.

The Disciplinary Regulations for Students of the University of Porto (Regulation No. 442/2011), accessible at

https://sigarra.up.pt/up/pt/LEGISLACAO GERAL.ver legislacao? nr=1 3853, defines the disciplinary sanctions to be applied to those who commit academic fraud.

FACULDADE
DE ECONOMIA
UNIVERSIDADE
DO PORTO

All detected cases of academic fraud will be treated rigorously and subject to disciplinary and, where appropriate, criminal proceedings, with a view to exemplary punishment of the perpetrators.

Please tick the following box to confirm that you have read and understood the above text, which forms an integral part of the declaration of authenticity signed by the author of the work, report or dissertation submitted for assessment. [X]

Declaration of Authenticity

I, Jan Ślifirczyk, declare that this academic work, entitled "*Implementing Hybrid and Alternative Work Models in Local Government: A Case Study of Lubartów Municipal Office*", is original and was carried out by me in accordance with the following academic and ethical standards:

Originality: The ideas, analyses and conclusions presented are the result of my own work and have not been copied from other sources without proper citation.

References: All sources of information used have been correctly referenced in accordance with current citation standards.

Generative Artificial Intelligence: The use of Generative Artificial Intelligence tools, where applicable, was done in a responsible, ethical, critical, and non-abusive manner.

Signature: _____ **Date**: 14.09.2026