

DIGITALIZATION OF HR PROCESSES IN SMEs BASED ON THE EMPLOYEE LIFECYCLE MODEL

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Ilie GAGAUZ

Academy of Economic Studies of Moldova

Chisinau, the Republic of Moldova

gagauzil95@ase.md

<https://orcid.org/0009-0009-6085-2962>

Abstract: *The study explores the digitalization of human resource (HR) processes in small and medium-sized enterprises (SMEs) through the lens of the Employee Lifecycle model. The aim of the research is to assess the potential for integrating digital tools across different stages of employee management and to identify practical mechanisms that enhance organizational efficiency under resource constraints. The methodological framework combines a theoretical review of the Employee Lifecycle concept and digital HR transformation with a qualitative case study of a small enterprise operating in the Republic of Moldova.*

The analysis demonstrates that digital tools, such as online recruitment platforms, cloud-based documentation, task management systems, and ERP solutions, can significantly improve the efficiency, transparency, and coordination of HR processes in SMEs. At the same time, the findings reveal an uneven level of digitalization across lifecycle stages: while performance management and operational coordination are relatively well digitalized, earlier stages such as recruitment, onboarding, and employee development remain less formalized.

The study highlights the dual nature of digitalization, emphasizing both its benefits such as reduced transaction costs, improved data-driven decision-making, and increased flexibility, and associated risks, including data security concerns, over-reliance on digital tools, and potential decline in interpersonal interaction. The results suggest that the effectiveness of digital HR in SMEs depends not on the number of technologies adopted, but on their integration into a coherent management system aligned with the Employee Lifecycle model.

Key words: digitalization, HR management, SMEs, employee lifecycle, ERP systems

JEL: M12, O33, L26

Introduction

The Employee Lifecycle Model is a modern conceptual framework for human resource (HR) management that describes the sequential stages of interaction between an employee and an organization from attraction and onboarding to development, retention, and separation. Unlike the traditional approach focused on individual HR functions, this model views an employee's professional journey as an integrated system of interrelated processes, where the quality of management at each stage affects overall engagement, productivity, and organizational sustainability (Cohen, 2010). Contemporary research emphasizes that the Employee Lifecycle reflects not only the administrative sequence of HR procedures but also the dynamic interaction between employee and employer, based on the alignment of expectations, motivation, and organizational goals (Gürler et al, 2022). In this context, the importance of employee experience increases, as it reflects the cumulative experience of individuals across all stages of their interactions with the company and directly influences employee loyalty, turnover, and work performance. Digital transformation has significantly reshaped HR processes. The use of digital platforms, HR analytics, cloud services, and artificial intelligence tools enables the automation of routine operations, accelerates decision-making, and enhances the accuracy of workforce management (Sharma, 2022; Xiang et al., 2023). Digital transformation in HR management represents not merely the adoption of new technologies, but a fundamental shift toward data-driven, integrated, and strategically oriented workforce management systems (Sani et al. 2024; Sakib et al. 2025; Srivastava (2026). The future of human resource

management is increasingly shaped by the integration of digital technologies, which enhance efficiency while requiring new competencies and adaptive organizational practices (Muzanenhamo and Rankhumise, 2025).

As a result, digitalization is becoming a key factor in enhancing organizational efficiency and competitiveness. For small and medium-sized enterprises (SMEs), the importance of these processes is particularly significant. Under conditions of limited financial and human resources, human capital becomes one of the main drivers of business sustainability and growth.

At the same time, the implementation of digital HR tools in the SME sector is constrained by limited investment capacity, a lack of specialised competencies, and the absence of formalised HR structures. This necessitates adapting modern solutions to the scale of small businesses and identifying accessible models for the digitalization of workforce management. Unlike large corporations, the issue of systematic digitalization of HR processes in SMEs remains insufficiently explored.

The aim of this study is to analyze the potential for digitalizing HR processes in small and medium-sized enterprises based on the Employee Lifecycle model, as well as to identify practical mechanisms for integrating digital tools into human resource management.

Methodological framework

The study is based on a combination of theoretical analysis and a case study approach, which made it possible to examine the digitalization of HR processes in small and medium-sized enterprises from both conceptual and practical perspectives. In the first stage, an analysis of the academic literature on the Employee Lifecycle model, the digital transformation of HRM, and the specifics of personnel management in SMEs was conducted. This made it possible to systematize the stages of the employee lifecycle and the tools for their digitalization, as well as to identify key advantages and risks.

In the second stage, a case study of Bravomotors SRL (Republic of Moldova) was used: a small enterprise in the automotive service sector with more than 10 years of experience and a staff of 12. The case was selected as representative of SMEs operating under resource constraints and without a dedicated HR department. The study is qualitative in nature. The author's involvement in the company's activities provided access to internal documentation and ERP data, as well as direct observation of management.

The Employee Lifecycle Approach

Life cycle management represents a systemic approach that considers processes and impacts across all stages of a system's development, ensuring coherence, efficiency, and long-term sustainability (Massari et al., 2023). Various versions of the employee lifecycle model are identified; however, most researchers agree on key phases, including attraction, onboarding and development, performance management, and employee retention (Gladka et al., 2022; Nosratabadi et al., 2022; Wandhe, 2025).

Despite differences in the level of detail and naming of stages, these approaches demonstrate conceptual unity in understanding the core processes of interaction between the employee and the organization. This allows the employee lifecycle to be considered a universal model applicable across different organizational contexts. For SMEs, implementing these stages is particularly important, as limited resources require more precise and efficient management at each stage of employee interaction.

The Attraction stage involves building an appealing employer brand and sourcing potential candidates. At this stage, the organization seeks to attract specialists through brand reputation, digital communication channels, and transparency of company values. For SMEs, this stage is especially critical, as the entrepreneur often acts as the main "employer brand," while digital tools enable competition with large companies without significant costs.

The use of online recruitment platforms (Rabota.md, LinkedIn) provides entrepreneurs with quick access to a broad labor market without the need to establish a full HR function, which is especially important for small businesses (*Table 1*). However, this is accompanied by the risk of online screening errors due to limited information and the absence of in-depth candidate evaluation. At the same time,

this format may lead to superficial candidate assessment due to the lack of in-person interaction and limited opportunities for comprehensive competency evaluation.

Table 1. Attraction & Recruitment Management

Process	Practical Digitalization in SMEs	Entrepreneurial Value	Risks
Candidate Search	Rabota.md, LinkedIn, online job postings	Fast access to the labor market without an HR department	Online screening errors
Online Interviews	Zoom, Google Meet	Time savings for the entrepreneur	Superficial candidate assessment

Source: developed by the author

After hiring, the employee development stage begins, including onboarding, training, and professional skill development. Studies show that effective onboarding significantly reduces the likelihood of early turnover and accelerates productivity gains. Employee development is considered a key element of human capital theory, as investments in training increase productivity and the long-term value of employees for the organization.

In the context of digitalization, this stage involves online learning, digital knowledge bases, and continuous feedback. *Table 2* presents selected aspects of the digitalization of onboarding and employee development stages in SMEs, allowing for an assessment of the balance between the benefits gained and the risks involved. For example, during onboarding, the use of digital tools (such as instructions in Google Docs and checklists) ensures rapid integration of employees into work processes and standardization of adaptation. However, there is a risk of insufficient socialization, as digital formats do not always facilitate the development of informal relationships within the team.

In terms of training, the use of online courses and recorded meetings enables skill development with minimal costs, which is especially relevant for SMEs. At the same time, this format may reduce employee engagement due to limited interaction and reliance on self-discipline. Knowledge sharing through shared folders and templates helps preserve organizational knowledge and simplifies access to information. However, it also increases the risk of knowledge leakage, particularly when access controls are insufficient or employee turnover is high.

Table 2. Onboarding & Development

Process	Practical Digitalization in SMEs	Entrepreneurial Value	Risks
Onboarding	Google Docs instructions, checklists	Fast employee integration	Lack of socialization
Training	Online courses, Zoom recordings	Skill development at low cost	Low engagement
Knowledge Transfer	Shared folders, templates	Preservation of team knowledge	Knowledge leakage

Source: developed by the author

The Performance stage involves evaluating work results, developing competencies, and maintaining employee engagement (*Table 3*). Employee engagement should be understood as a dynamic, lifecycle-based process that evolves across different stages of the employee–organization relationship, rather than as a static organizational outcome Kwon and Park (2019). It includes goal setting, regular feedback, and productivity analysis. From a strategic HR perspective, this stage performs several functions: aligning employee and business goals, sustaining motivation, and identifying development needs.

In a digital environment, performance management increasingly relies on data analytics and agile approaches, enabling faster decision-making with reduced risks. Digital task management tools (such as Trello, Notion, and spreadsheets) enhance transparency and control, which is especially important for SMEs; however, their excessive use may lead to employee overload. Messaging platforms (Telegram, Slack) provide flexibility and speed of communication, but may weaken personal interaction and workplace relationships. Feedback tools (online surveys, instant feedback) increase engagement, yet excessive formalization can reduce the authenticity and depth of communication.

Table 3. Performance & Engagement Management

Process	Practical Digitalization in SMEs	Entrepreneurial Value	Risks
Task Management	Trello, Notion, spreadsheets	Team transparency	Digital overload
Communication	Telegram, Slack	Flexibility of distributed teams	Loss of personal contact
Feedback and Motivation	Online surveys, instant feedback	Employee retention	Formalization of communication

Source: developed by the author

Feedback and motivation tools (such as online surveys and instant feedback) contribute to employee retention, but may also lead to the formalization of communication (*Table 4*). The next stage of the model focuses on building long-term relationships with employees through motivation, development, and a positive work experience. Systematic management of the employee lifecycle reduces turnover and increases engagement (Amarakoon and Colley, 2023), a pattern that is particularly important for SMEs. Basic HR analytics tools (such as Excel and Google Sheets) support more informed decision-making; however, a lack of expertise may lead to analysis errors. Digital forecasting tools simplify team growth planning and cost control, but inaccurate forecasts can negatively affect HR and financial policies. The digitalization of document management reduces bureaucracy and streamlines processes, although it is accompanied by risks related to cybersecurity and data protection.

Table 4. Retention & Administration

Process	Practical Digitalization in SMEs	Entrepreneurial Value	Risks
Basic HR Analytics	Excel, Google Sheets	Data-driven decision-making by the entrepreneur	Analysis errors
Team Growth Planning	Forecasting in spreadsheets	Cost control	Inaccurate forecasts
Document Management	Electronic contracts, cloud documents	Reduced bureaucracy	Cybersecurity risks

Source: developed by the author

The development of competencies through online courses, webinars, and LMS platforms enables small enterprises to significantly enhance employees' qualifications without substantial financial costs, which is an important advantage (*Table 5*). At the same time, there is a risk of a formal approach to training, where development does not always lead to a real improvement in competencies.

Table 5. Professional Development Management

Process	Practical Digitalization in SMEs	Entrepreneurial Value	Risks
Career Planning	Online development platforms, individual plans	Increased employee loyalty	Limited career opportunities
Competency Development	Online courses, webinars, LMS platforms	Skill growth at low cost	Formal approach to training
Internal Promotion	Internal job databases, digital employee profiles	Talent retention	Limited positions in SMEs

Source: developed by the author

The separation stage is an important part of the employee lifecycle, as it allows the organization to systematize the offboarding process, retain accumulated knowledge, and maintain a positive employer image. A well-structured separation stage helps not only to minimize the loss of human capital but also to build long-term relationships with former employees, which can be important for reputation and future talent attraction.

Case study

A practical analysis of the Bravomotors SRL, which operates without a dedicated HR department, enables a comparison between the theoretical employee lifecycle model and real HR management practices in SMEs. In this case, HR functions are integrated into a unified ERP system that also serves as a CRM and employee database. This enables the centralized accumulation and analysis of information on both clients and staff, implementing the principles of data-driven management. Within the ERP system, a digital profile is created for each employee, where key performance indicators (KPIs) are recorded. For technical staff (auto mechanics), metrics such as worked labor hours, volume of completed tasks, number and nature of complaints, as well as errors and rework with specified causes and circumstances are tracked. For administrative and commercial staff (service advisors, managers, parts specialists), the system currently primarily captures quantitative indicators, such as sales volume and order participation (*Table 6*).

Table 6. Digital Management Tools of Bravomotors SRL

Process	Tool	Practical Application	Entrepreneurial Value
Work Planning	Calendars	Client booking, workload scheduling	Work transparency
Coordination	Schedules	Alignment of shifts and employee tasks	Reduced downtime
Task Management	Task managers (Trello-like)	Assigning tasks within the team	Control of execution and accountability
Training and Professional Development	Electronic catalogues, GPT chat	Consultation and learning approaches for complex repair cases	Employee development, problem-solving
Motivation	ERP – cost of work/number of hours	Transparency of wage calculation	Employee motivation and control

Source: developed by the author

Additionally, the ERP system integrates operational management tools, including calendars, schedules, and task managers. Task managers operate based on project management principles (similar to Trello), enabling the assignment of client-related tasks, documentation of agreements, tracking of task completion, and minimizing information loss within the team.

Bravomotors SRL successfully implements certain elements of digitalization at key stages of the Employee Lifecycle; however, the level of their integration and systematic application remains uneven. At the same time, traditional approaches are still used to manage some stages of the employee lifecycle. For example, in recruitment, particular emphasis is placed on interviews, during which candidates' professional competencies are assessed. The implementation of digital tools has enabled Bravomotors SRL to achieve a number of significant organizational effects. The use of calendars, schedules, and task management systems has helped reduce employee downtime and ensure a more balanced workload distribution. Recording employee performance indicators in the ERP system has improved KPI transparency and objectivity in performance evaluation, thereby enhancing overall business manageability. Digital monitoring of tasks and operations has strengthened execution discipline and improved control over internal processes. Transparent mechanisms for calculating service costs and employee compensation have helped reduce conflicts between management and staff related to income distribution and performance assessment. A unified information environment has accelerated data exchange between departments and enabled efficient coordination of employee

activities, which is particularly important for a small enterprise with limited resources. Thus, the digitalization of HR and operational processes has contributed to improving overall workforce management efficiency and organizational sustainability.

The analysis of Bravomotors SRL shows that the highest level of digitalization is observed in the stages of performance management and operational coordination, which aligns with modern approaches to productivity management and indicates a relatively high level of digital maturity in the operational domain. At the same time, the stages of attraction, onboarding, and career development are implemented in a less formalized manner and largely depend on the managerial decisions of the entrepreneur.

Conclusions

The presented systematization demonstrates that the digitalization of HR processes in SMEs has a dual nature. On the one hand, it helps reduce transaction costs, enhances organizational flexibility, and enables entrepreneurs to manage human capital more effectively, even with limited resources. On the other hand, digital tools introduce new institutional and organizational risks related to data security, the algorithmization of managerial decision-making, and the transformation of corporate culture. At the same time, HR practices in SMEs are shaped by organizational scale and local context, resulting in more flexible and relationship-based approaches to employee attraction and retention (Amarakoon and Colley, 2023).

In this context, digital HR in the SME sector should be viewed as a balance between improving business efficiency and managing digital risks. However, as practice shows, the effectiveness of digitalization is determined not by the number of implemented technologies, but by the degree of their integration into a unified enterprise management system and their ability to support key business processes.

The practical case of Bravomotors SRL demonstrates that even in a small enterprise, it is possible to implement comprehensive elements of digital HR management without a dedicated HR department. The integration of an ERP system, data analytics, and operational control tools enables the development of an effective human resource management system. At the same time, further efficiency improvements require a shift from fragmented automation of individual functions to an integrated employee lifecycle management model, ensuring consistency across all stages of employee interaction and reducing managerial risks.

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