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# **ENABLING ROBOTIC PROCESS AUTOMATION (RPA) IN TALENT ACQUISITION PROCESS - A CASE STUDY**

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**ABSTRACT:**

Digitalization and automation are transforming HR operations; however, many Talent Acquisition (TA) activities continue to be discontinuous and manually managed. At company B, TA utilizes various methods and extensive administrative efforts while encountering pressure to achieve accelerated and consistent hiring results. This study examines the potential of Robotic Process Automation (RPA) to enhance the TA process at case company B, focusing on increasing efficiency while preserving human judgment.

The research builds on existing literature about information systems design, criteria for RPA task compatibility, and human-centered digital human resources. It emphasizes initial-stage talent acquisition processes that are high-volume, repetitive, rule-based, and dependent on structured digital inputs, including the information exchanges across the applicant tracking system (ATS), human resources information systems (HRIS), and office applications. A qualitative embedded single-case research approach was employed. Empirical data were gathered through semi-structured interviews with recruiters, hiring managers, and HR support employees, an open-ended qualitative survey of 20 participants engaged in talent acquisition and associated roles, and internal process documentation. The data were thematically categorized and analyzed to define current TA process, identify significant bottlenecks, and evaluate which tasks fulfill the stated RPA applicability criteria. Company B had not used RPA in Talent Acquisition throughout the study period. The empirical research therefore guides a conceptual, consultancy-oriented process redesign instead of assessing an existing automation solution.

The results indicate that inefficiencies arise from disjointed technologies, redundant data input, and considerable manual coordination, particularly in three subprocesses: CV screening and eligibility assessment, interview scheduling, and the preparation and transfer of onboarding and requisition data. These domains demonstrate strong suitability for automation, however final applicant evaluation, interviews, assessment of compatibility and motivation, wage negotiation, and unusual instances should continue to be conducted by humans. The thesis proposes RPA-enabled workflows across three sub-processes and proposes them as suggested future designs for Company B, contending that these structures might enhance TA efficiency when executed with appropriate governance.

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**KEYWORDS:** Robotic Process Automation, Talent Acquisition, digital HR, recruitment process, case study

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# 1 INTRODUCTION

## 1.1 Background of study

The explosive pace of digital transformation has reshaped businesses, industries, and the nature of work over recent decades. While Industry 4.0 brought enhanced automation, data analytics, and interconnected systems, the emerging Industry 5.0 lens stresses human-centred and sustainable integration of technology with organisational processes (Xu et al., 2021). Together, these shifts underscore that a firm's ability to deploy technology to improve internal efficiency and generate strategic value is now as critical to competitiveness as product quality or market reach.

Within this context, Human Resource Management (HRM) has moved from a primarily administrative function to a strategic partner that shapes workforce capabilities, promotes employee engagement, and sustains organisational performance (Boxall & Purcell, 2016). Employees' talents, inventiveness, and adaptability have become central to competitive advantage. Consequently, Talent Acquisition (TA) is pivotal to ensuring that organisations attract and retain people who align with long-term strategic objectives.

At the same time, HR departments face pressure to deliver more value with fewer resources. Recruiters and HR specialists routinely manage high application volumes, maintain sensitive employee data, and meet regulatory requirements while hitting strict performance targets. Many of these activities are administrative, rule-based, and repetitive. Heavy reliance on manual execution is time-consuming and exposes processes to human error and inefficiency. Delays in CV screening, candidate shortlisting, interview scheduling, and the preparation of onboarding/requisition forms degrade the candidate experience and lengthen time-to-hire—particularly problematic in tight labour markets (Papageorgiou, 2018).

Digital technologies offer a path forward. Cloud-based Human Resource Information Systems (HRIS), data-driven people analytics, and AI-enabled platforms are already reshaping HR service delivery (Bondarouk & Brewster, 2016; Tambe et al., 2019). However, digital HR technologies present substantial challenges, especially with data governance, position redefinition, and alterations in work design (Bondarouk & Brewster, 2016). Consequently, companies are progressively investigating automation methods for repetitive and clearly specified operations that can be executed reliably and at scale (Syed et al., 2020).

One such approach is Robotic Process Automation (RPA), increasingly used across industries. In HR, RPA can reduce time-consuming administrative work, accelerate hiring steps, and improve process consistency (Hindel et al., 2020; Costa et al., 2022). While not the only digital solution, RPA is especially well-suited as a starting point for improving HR functionality because it reliably handles regulated, rule-based operations and integrates with existing systems.

## **1.2 Defining Robotic Process Automation**

Robotic Process Automation is defined as “a software solution that enables the automation of rule-based business processes and tasks by using software bots (Kregel et al., 2021; Lacity et al., 2015; Kokina & Blanchette, 2019). Moreover, van der Aalst et al. define RPA as an umbrella term for tools that operate on user interfaces in the same way as humans. In contrast to traditional IT automation that frequently necessitates comprehensive system integration, RPA engages with existing applications via the user interface layer, emulating human actions such as logging in, copying and pasting data, completing forms, or generating reports (Hindel et al., 2020; Costa et al., 2022).

Moreover, the definition of Robotic Process Automation (RPA) is various which a developing technology for automating processes that works best for tasks that are high-volume, repetitive, and based on rules. RPA uses software robots, or "bots," to mimic

how people interact with digital systems and applications. Hindel et al. (2020) assert that the main objective of RPA is to capture and understand existing programs, usually at the graphical user interface (GUI) level, so that it can carry out multi-step procedures. The method is non-invasive and works as an add-on to existing systems without needing to modify the fundamental program logic. Plus, Marciniak and Stanisławski (2021) argue that this is what makes it different from regular back-end integration approaches.

Robotic Process Automation is particularly suitable for tasks that are repetitive, rule-based, digitally conducted, and sufficiently organized to be carried out through predefined principles. Robotic Process Automation (RPA) is particularly advantageous for administrative tasks characterized by high numbers of transactions and standardized procedures, as software robots function at the user-interface level and can replicate actions including logging in, data copying, form completion, and record updating across existing platforms (van der Aalst et al., 2018; Aguirre & Rodriguez, 2017; Hindel et al., 2020). The straightforward integration, scalability, and auditability of RPA elucidate why organizations are progressively adopting it for operational tasks that necessitate consistency, speed, and traceability, as opposed to human interpretation or intricate judgment (Lacity & Willcocks, 2018; Anagnoste, 2018; Papageorgiou, 2018).

These attributes enable RPA particularly applicable to Human Resource Management, as several processes integrate confidential data management with repetitive administrative tasks. The initial phases of Talent Acquisition often encompass rule-based screening, the repetitive movement of applicant data across CVs, spreadsheets, portals, and HR systems, along with the regular coordination of interviews and onboarding documents. While critical hiring decisions necessitate human judgment, a significant portion of this workflow is organized, process-oriented, and administratively demanding, which lends Talent Acquisition a suitable context for exploring the practical implementation of RPA in HR operations (Bondarouk & Brewster, 2016; Tambe et al., 2019; van der Aalst et al., 2018).

### 1.3 Research Gap

Considering that RPA is optimally designed for repetitive, rule-based, and well-structured activities, the first stages of the Talent Acquisition process present a particularly relevant setting for study. In practice, tasks including CV screening, interview scheduling, and onboarding data preparation necessitate the manual review of applicant information, the validation of credentials against prescribed job criteria, and the recurrent movement of data between various digital platforms. The previously mentioned stages are frequently facilitated by various applications, including email, spreadsheets, portals, and internal HR systems, which increase administrative burdens and introduce risks of delays, inconsistencies, and human error (Papageorgiou, 2018; Bondarouk & Brewster, 2016; Tambe et al., 2019).

Simultaneously, HR departments encounter increasing demand to provide greater value with reduced resources. Recruiters and HR professionals must handle substantial application volumes, ensure data precision, assist hiring managers, and adhere to tight timeline for hiring standards, while an important part of the initial talent acquisition process is still manually handled. This is particularly evident in tasks including candidate shortlisting, interview scheduling, follow-up correspondence, and the preparation of onboarding or requisition data, where process efficiency may fluctuate based on workload, tool fragmentation, and the expertise of the personnel involved (Papageorgiou, 2018; Bondarouk & Brewster, 2016).

However, despite the clear compatibility between RPA and these administrative Talent Acquisition functions, the current literature remains incomplete. Existing researches addresses digital recruiting, HR analytics, artificial intelligence, or the overall digital HR revolution, while providing limited insight into the application of RPA to specific talent acquisition sub-processes within an organizational context. Specifically, there remains an absence of process-level research regarding the most appropriate early TA activities for RPA, the required redesign of those activities, and the organizational and

human-centric conditions essential for successful implementation (Bondarouk & Brewster, 2016; Tambe et al., 2019; van der Aalst et al., 2018).

This study addresses the gap by concentrating on the first phases of the Talent Acquisition process, where administrative and highly coordinated tasks are particularly visible. In organizational contexts, these phases entail the iterative verification of applicant information, the constant transfer of data across various digital platforms, and the regular collaboration among HR employees, hiring managers, and candidates. These attributes provide early-stage Talent Acquisition a significant framework for evaluating the practical capabilities and constraints of RPA in HR operations (Aguirre & Rodriguez, 2017; Bondarouk & Brewster, 2016; Papageorgiou, 2018).

#### **1.4 Research Question and Objectives**

This study addresses the research gap indicated in the previous part by exploring the application of Robotic Process Automation to enhance efficiency in the first stages of the Talent Acquisition process. The study specifically examines administrative and highly coordinated tasks characterized by repetitious work, data management, and inter-system interactions.

Accordingly, the primary research question of this research is:

How can Robotic Process Automation be applied in the Talent Acquisition process to enhance efficiency in Human Resources operations?

This study aims to achieve the following objectives to address the question:

1. To identify the primary administrative and coordination-related constraints in the Talent Acquisition process.

2. To assess which Talent Acquisition tasks are most appropriate for RPA, considering their process attributes and the necessity of maintaining human judgment.
3. To propose a conceptual process framework for applying RPA to improve efficiency in selected Talent Acquisition sub-processes.

The research employs an empirical case-based approach to investigate the objectives within an actual organizational context. This enables a transition from broad discussion on HR automation to an analysis of RPA applicability, process impediments, and deployment requirements within the context of Talent Acquisition operations. The study is focused on contributing the literature on digital HR and automation, in addition to clarify the specific Talent Acquisition process where Robotic Process Automation (RPA) can effectively enhance efficiency, identify areas necessitating human judgment, and propose a future-state process that integrates an automation capabilities with human resource practices (Aguirre & Rodriguez, 2017; Bondarouk & Brewster, 2016; van der Aalst et al., 2018)..

## **1.5 Structure of the thesis**

There are six chapters in the dissertation. The introduction describes the research's origins and why it was done. This part covers the research problem, goals, questions, and the study's scope. Chapter 2 provides a review of the literature. The article gathers the latest studies on HR technologies including HRIS, e-HRM, and Digital HRM, as well as robotic process automation (RPA), which is the main focus of this study. Chapter 3, Methodology, explains the research design, the qualitative methodology, how data was collected, and methods by which data is analyzed that is used in the study. Chapter 4 provides the empirical data, detailing the present condition of the Talent Acquisition process, the recognized problems, and the prospects for the integration of RPA. Chapter 5 investigates the findings in connection to the research objectives and current literature, delineates management implications, acknowledges the study's limits, and

suggests avenues for further research that concludes in comprehensive conclusions. Chapter 6 serves as what core findings of the research.

## **2 LITERATURE REVIEW**

### **2.1 Overview of Technology use for enabling HR**

#### **2.1.1 Definition of HRIS, E-HRM and Digital HRM**

Human Resource Management (HRM) encompasses the comprehensive management of activities related to people throughout the employee lifecycle, which includes recruitment, selection, development, compensation, retention, evaluation, and promotion. This approach aims to align employee capabilities with organizational objectives and performance. Contemporary HRM practice is categorized into three areas: transactional tasks focused on routine keeping of records and administrative updates; traditional programmatic activities that implement essential HR policies including selection, compensation, and performance appraisal; and transformational initiatives that enhance value by developing talent and reshaping organizational capabilities to align with strategy. Since information technologies and HR information systems have advanced, HRM has transitioned from a paper-based role centered on compliance and administration to a strategic contributor. This evolution leverages timely and accurate data, reporting, and analytics to enhance managerial decision-making and foster the development of Strategic HRM aimed at achieving competitive advantage. This evolution transformed the function of HR from primarily processing transactions to facilitating strategic alignment and value creation through people (Thite, Kavanagh, & Johnson, 2012).

A Human Resource Information System (HRIS) is an integrated technological and social system that includes hardware, software, people, policies, procedures, and data. It has been developed to acquire, store, manipulate, analyze, retrieve, and distribute information regarding an organization's human resources, facilitating the use of accurate and timely information for automating administration and supporting managerial decision-making across strategic, tactical, and operational levels (Kavanagh et al., 1990; Mohan Thite et al., 2012). An HRIS centralizes and digitizes essential HR workflows, including payroll, time and attendance, and benefits administration. It

typically facilitates employee and manager self-service, thereby reducing transactional burdens and enhancing data accuracy and accessibility (Kumar Vikas, 2012; Nishad Nawaz, 2014). Contemporary HRIS implementations are often web-based and integrated with intranet/extranet sites and larger enterprise platforms, for instance, ERP. This integration enhances cross-unit connectivity and reporting, connecting workforce information to organizational processes and performance (Kumar Vikas, 2012). HRIS, which handles sensitive employee data, necessitates the incorporation of effective security and privacy controls, including role-based access, audit trails, disciplined backups, and malware protection, as essential components of its design and governance (Nishad Nawaz, 2014).

Electronic Human Resource Management (E-HRM) denotes the technologically enabled provision of HR, utilizing information technology, particularly web-based and integrated platforms, to connect and facilitate various stakeholders (HR professionals, line managers, employees, and candidates) in the collaborative execution of HR functions. E-HRM transforms technology from a back-office function to a central component of HR service delivery, reorganizing information flows, interaction patterns, and communication channels to enable self-service, efficient workflows, and data-driven decisions throughout the employee lifecycle. E-HRM encompasses three domains: operational systems that digitize and automate administrative tasks, including payroll, personal data maintenance, and self-service; relational applications that facilitate fundamental procedures including recruitment, training, performance management, and career development; and transformational applications that facilitate strategic reorientation and knowledge management through integrated, web-based tools aligned with company goals. This structure identifies E-HRM as an implementation approach and a strategic philosophy for HR delivery, facilitating more agile, data-driven, and employee-centric HR practices (Thite, Kavanagh, & Johnson, 2012; Ma & Ye, 2015).

Digital Human Resource Management (Digital HRM) involves the thorough evolution of HR functions and processes via the integration of digital technologies, including electronic media, mobile applications, cloud platforms, artificial intelligence, analytics,

and automation. This transition aims to replace traditional workflows, enhance efficiency and compliance, and provide a more user-centric employee experience (Hafinas Halid et al., 2019; Saini, 2018; Varadaraj Aravamudhan et al., 2022; Mohammad Yusuf, 2023). In practice, this involves utilizing software and internet-based tools to manage HR functions throughout the employee lifecycle, including recruitment and onboarding, training and development, performance management, payroll, and self-service. This approach facilitates real-time access to information and decision support while minimizing administrative burdens and errors (Iwu, 2016; Betchoo, 2016; Tripathi & Kushwaha, 2017; Fedorova et al., 2019).

Digital HRM represents a specialized application of organizational digital transformation within the human resources function. While the digital transformation of the company reevaluates structures and business models across the organization, Digital HRM utilizes HR technologies, including cloud HR suites, AI recruitment tools, and HR analytics, to automate procedures, integrate data, and align HR with strategic objectives (Baiyere et al., 2020; Garg S et al., 2022; Plekhanov D et al., 2023; Zhao X et al., 2024; Mo'men Hani Mahmoud et al., 2025). This distinction elucidates that digital HRM systems represent the operational representation of digital transformation in HR, including AI-enabled screening, predictive analytics, and self-service portals, aimed at improving HR efficiency and strategic impact (Mo'men Hani Mahmoud et al., 2025).

### **2.1.2 Evolution from HRIS and E-HRM to Digital HRM**

The evolution of HR systems started with the development of early Human Resource Information Systems (HRIS), designed to manage increasing administrative record-keeping and compliance requirements. Over time, these systems developed into comprehensive, computer-based management information systems for Human Resource Management (HRM), driven by decreasing technology costs and enhanced strategic awareness (Thite, Kavanagh, & Johnson, 2012). The historical development of HRIS established essential hardware, software, and data architectures for the efficient

storage, retrieval, and reporting of employee information, facilitating a transition from transactional processing to more value-adding HR activities (Thite, Kavanagh, & Johnson, 2012). With the acceleration of globalization, intense rivalry, and Internet-enabled services, human resource management increasingly utilized information technology to enhance strategic planning and decision-making regarding human capital, thereby establishing HR information as essential to organizational competitiveness (Thite, Kavanagh, & Johnson, 2012).

Electronic Human Resource Management (E-HRM) evolved from the foundation of Human Resource Information Systems (HRIS) and is characterized as the technology-driven implementation of HR strategies, policies, and practices through Internet and web-based platforms, facilitating collaboration among various stakeholders in the execution of HR functions (Baykal, 2022; Bondarouk & Ruël, 2009). Conceptually, e-HRM embodies a comprehensive approach to HR delivery, in which web technologies transform information flows and patterns of interaction. It positions sites and self-service as the main service channel, with HRIS serving as the foundational system for these applications (Thite, Kavanagh, & Johnson, 2012). The distinction focuses on HRIS as the integrated system infrastructure and e-HRM as the web-mediated application of HR processes and roles, thereby extending HR's reach and potential for strategic growth beyond simple administrative support (Thite, Kavanagh, & Johnson, 2012).

In the field of e-HRM, three primary domains are recognized: operational applications that digitize administrative functions that include personal data management and payroll; relational applications that facilitate processes including recruitment, training, and performance management; and transformational applications that support strategic reorientation and knowledge management in alignment with organizational strategy (Ma & Ye, 2015, p.72). The drivers for adopting e-HRM typically encompass cost reduction, enhancement of service quality, and cultural transformation. It is anticipated that technology will relieve HR from intermediary functions, facilitating strategic partnerships and the uniform implementation of policies across various units and geographical locations (Ma & Ye, 2015). Empirical studies indicate that the swift

advancement of the Internet has facilitated the implementation of e-HRM, leading to the emergence of virtual HR structures designed to manage and enhance intellectual capital across networks (Ma & Ye, 2015). e-HRM has evolved from independent applications to integrated structures within enterprise resource planning systems, connecting HR modules with finance and other functions to facilitate portals, streamline processes, and enhance user-friendly self-service (Bondarouk & Ruël, 2009; Baykal, 2022). Common applications encompass e-recruitment through web-based job postings and applicant databases, e-training facilitated via internet or intranet sites utilizing multimedia, and web-enabled portals for career management, mentoring, and compensation administration. These applications are designed to improve efficiency, accuracy, and support for decisions (Baykal, 2022). Contemporary e-HRM platforms frequently incorporate ERP-linked portals, mobile accessibility, and social networking interfaces, while HRIS facilitates remote data access and analytics for distributed workforces (Thite, Kavanagh, & Johnson, 2012; Baykal, 2022).

Digital HRM has expanded to include analytics-based decision-making and new technology. HR Analytics, People Analytics, and Workforce Analytics utilize descriptive, visual, and statistical analyses to assess business impact and enhance decision quality (Melo & Machado, 2021). Research demonstrates that digital HRM practices and digital transformation enhance HRM system strength, with perceived value and simplicity of use serving as mediators in adoption and effectiveness, highlighting the socio-technical aspects of successful implementation (Nematollahi et al., 2023). The ongoing phase of digital transformation utilizes AI, big data, and cloud computing to reform HR practices into agile, data-driven systems that improve employee experience and strategic alignment. This evolution surpasses mere digitization and digitalization, aiming for a comprehensive reconfiguration of HR functions and services (Bahari, 2025).

The prior sections have outlined the technological progression from HRIS to e-HRM and digital HRM; however, the implementation of these tools is influenced by managerial decisions and change-management strategies. This subsection summarizes human-

centered and organizational perspectives on digital HR technologies, including HR analytics and RPA.

### **2.1.3 Human-centred and managerial perspectives on digital HR**

The literature on management and organisation in human resources highlights that online efforts, including robotic process automation (RPA), HR analytics, and integrated e-HRM platforms, achieve their full potential only when HR functions as an up-to-date change agent, grounding technology in a human-centred approach (Finnholm et al., 2024). In this perspective, the role of HR is redefined from primarily an administrative function to that of a "transformational partner," which influences the alignment of skills, motivation, and opportunities with organizational objectives. Empirical studies indicate that HR professionals must communicate effectively, demonstrate preparedness to participate in change initiatives, and operate within organizational conditions that facilitate their involvement in the design and management of digital projects. In the absence of these conditions, digital HR systems may devolve into standardized, transactional tools instead of serving as facilitators of strategic HRM (Finnholm et al., 2024; Colakoglu et al., 2016).

Research on change management indicates that there is no universal approach to achieving acceptance of new technologies. Effective implementation relies on the integration of strategies, including early stakeholder engagement, alignment with organizational culture and vision, and visible managerial support (Phillips et al., 2023). In human resources contexts, employees may express concerns regarding the equity or justification of technologies such as robotic process automation (RPA) and analytics, especially when the objectives are inadequately articulated or when there is apprehension about job displacement and increased monitoring. Research indicates that insufficient explanation, minimal engagement of line managers, and inadequate follow-up on employee concerns can result in skepticism and emotional resistance (Phillips et al., 2023; Anagnoste, 2018). The findings emphasize that HR should position

digital tools within a broader, human-centered approach to work enhancement, rather than viewing them solely as technical solutions.

A substantial body of research on HR analytics and IT-enabled HRM underscores comparable managerial situations for success. Analytics enhances consistency, transparency, and strategic value in HR processes, such as recruitment, performance management, and workforce planning, only when HR professionals have adequate analytical skills, can articulate data usage to employees, and implement suitable safeguards (Yusof et al., 2024; Humairah et al., 2023). Empirical studies identify three persistent barriers: inadequate analytical capability within HR, employee apprehensions regarding privacy and data protection, and "translation gaps" where dashboards fail to result in observable improvements for staff or line managers (Firoz, 2024). Simultaneously, analyses of digital skills and employability indicate that rapid technological change results in temporary inconsistencies between required and existing capabilities. Human Resources is expected to address these gaps through re-skilling, continuous learning, and career support interventions that sustain trust and engagement (Ben-Gal, 2023).

Collectively, these findings indicate that digital HR tools, including RPA, should be regarded as decision support for human actors instead of substitutes for HR judgment (Yusof et al., 2024; Humairah et al., 2023). Several researchers contend that implementation need to be participatory and characterized by rich communication, as opposed to a top-down approach in the rollout of new systems (Tissen et al., 2010; Colakoglu et al., 2016). From this perspective, an effective approach to automation involves: (i) designing and aligning HR practices to promote desired behaviors associated with the change, including training for new digital tasks, recognition for participation, and clear performance criteria; (ii) facilitating change through ongoing two-way communication and stakeholder involvement; and (iii) ensuring technology remains human-centered by providing role clarity, privacy-conscious data usage, and

opportunities for employees to enhance the digital skills emphasized by automation (Ritu, 2024; Humairah et al., 2023; Yusof et al., 2024).

This human-centered and managerial perspective serves as a significant reinforcement to the process-focused view of RPA established in the preceding subsections.

## **2.2 Robotic Automation Process**

This section expands on the previously defined concept by situating RPA within the broader automation context, summarizing the existing tool ecosystem, consolidating identified benefits, and highlighting significant limitations.

### **2.2.1 The evolution of RPA**

Robotic Process Automation emerged as a progression from prior versions of office and desktop automation. Initial implementations integrated screen-capturing tools, macros, and basic workflow scripts to eliminate redundant data entry and routine navigation across applications (van der Aalst et al., 2018; Aguirre & Rodriguez, 2017). The primary objective of these initial use cases was to replicate human actions at the user interface to enhance the efficiency of structured back-office tasks, including data transfer between spreadsheets and legacy systems (Santos et al., 2020; Syed et al., 2020).

Since the 2010s, these tools have developed into enterprise-grade RPA platforms. Vendors including UiPath, Automation Anywhere, and Blue Prism have developed integrated suites that include development studios, central management, and monitoring capabilities. These advancements enable organizations to scale software robots across various processes and departments while ensuring governance and security (van der Aalst et al., 2018; UiPath, 2025). During the task automation phase, RPA was commonly implemented in sectors that included finance, insurance, telecommunications, and shared-service centers to manage high-volume, rule-based

tasks, including invoice processing, claims registration, and basic HR administration (Santos et al., 2020; Siderska, 2020).

Recently, RPA has transitioned into a second phase characterized as intelligent or AI-enabled automation. Deterministic UI robots are integrated with machine learning and artificial intelligence components to analyze semi-structured data and facilitate more intricate decision-making rules. Examples include the integration of robotic process automation (RPA) with recognition of optical characters and document-understanding models to extract information from unstructured documents, in addition to the application of learning-based models for case routing and work prioritization (Hyun et al., 2021; Bhardwaj et al., 2024; UiPath, 2025). During this phase, RPA is progressively integrated into wider digital transformation and analytics efforts, rather than being deployed as standalone scripts (Sobczak, 2022).

Recent advancements indicate a third phase, termed agentic automation by UiPath (2025). This configuration enables RPA to serve as a dependable execution layer for AI agents tasked with planning and determining appropriate actions within intricate workflows. Agents perform functions including email comprehension, request classification, and selection of suitable process pathways, whereas robots access enterprise systems, update records, and execute transactions on a large scale. The conceptual exploration of RPA bots and terminologies aims to standardize components and enhance accessibility, indicating a continuous professionalization of RPA engineering practices (Völker & Weske, 2021).

The evolution of RPA is characterized by a progression from basic desktop scripts to enterprise-level task automation, culminating in AI-enabled and agentic automation that integrates RPA with advanced analytics and learning systems. This path is highly relevant to the current thesis. RPA has reached a level of maturity sufficient to facilitate knowledge-intensive support functions, including Human Resources, characterized by repetitive, rules-based activities distributed across various systems. The features that

rendered RPA appealing in finance and shared services, operating alongside legacy applications, facilitating rapid deployment, and centrally organizing digital workers, present an opportunity to improve the efficiency and quality of the Talent Acquisition process at the case company, all while preserving the current HRIS and applicant-management systems.

### **2.2.2 RPA in Talent Acquisition**

Robotic Process Automation (RPA) is a key element in the digital transformation of Human Resources, especially in large-scale, transaction-intensive areas including talent acquisition. RPA denotes software "robots" that replicate human actions at the user interface of current applications, including logging in, navigating screens, copying and pasting information, and implementing predefined regulations on structured digital data ( van der Aalst et al., 2018; Aguirre and Rodriguez, 2017). RPA distinguishes itself from conventional "inside-out" automation by employing a "outside-in" methodology, enabling the automation of "swivel-chair" tasks across various systems, including ATS, HRIS, email, without necessitating significant IT modifications. This characteristic renders it particularly desirable for Talent Acquisition, where tasks predominantly involve repetitive data management and rule-based decision-making (Syed et al., 2020; Harmoko & Axmann, 2020).

Recruitment and onboarding are frequently recognized as key areas within the HR function suitable for RPA implementation. A scoping review of HR processes conducted by Deloitte, as referenced in Bhujabal et al. (2025), classifies "recruitment and onboarding" within talent management as possessing significant applicability for RPA, in addition to other transactional HR functions such as payroll and time booking. empirical data from a qualitative-quantitative review of 35 scholarly articles and 10 industry case studies indicate that among organizations adopting RPA in HR, 69% implemented it for recruitment screening, 78% for employee onboarding, and 91% for payroll processing (Razak et al., 2025). In these contexts, bots are programmed to evaluate resumes in relation to job descriptions, issue interview invitations, arrange interviews, and establish

new-hire accounts, significantly decreasing the manual workload for talent acquisition teams (Razak et al., 2025; Rathore et al., 2023).

A standard RPA architecture in TA separates design, orchestration, and execution phases. Process steps including vacancy creation, CV pre-screening, candidate status updates, and onboarding document preparation are modeled within a design environment known as "Studio." In contrast, scheduling, monitoring, exception handling, and access control are handled systematically by an orchestrator ( Syed et al., 2020; Hyun et al., 2021). Software robots perform rule-based steps by interacting with ATS, HRIS, email clients, and databases through the user interface or APIs, without modifying those systems (Hyun et al., 2021; van der Aalst et al., 2018). The division of design, governance, and execution enables TA analysts to manage an important part of the configuration, ensuring strong control and auditability, rather than relying solely on core IT (Syed et al., 2020; Bhujabal et al., 2025).

Concrete applications encompass the entire talent acquisition lifecycle. RPA can extract candidate data from job boards and internal talent pools, populate ATS records, standardize formats, and deduplicate profiles (Aguirre & Rodriguez, 2017; Harmoko & Axmann, 2020). During the screening process, automated systems analyze resumes, assessing them against eligibility criteria such as years of experience, qualifications, and location. This process results in the automatic shortlisting or rejection of candidates, frequently leading to the issuance of assessment links or interview invitations (Razak et al., 2025; Rathore et al., 2023). In subsequent phases, RPA organizes interviews by reviewing calendars, dispatching reminders, and modifying ATS statuses. It also produces offer letters and onboarding materials, initiates background checks, and establishes user accounts, thereby creating a comprehensive automated hire-to-onboard process (Razak et al., 2025; Hyun et al., 2021).

Several studies demonstrate that RPA can enhance the efficiency of TA-related processes significantly. Razak et al. (2025) found that organizations implementing RPA experienced

time reductions of 62–71% for routine HR tasks. Detailed data indicate that the time spent on resume screening per vacancy decreased from 120 minutes to 35 minutes, reflecting a 70.8% reduction. Additionally, the onboarding time for new employees reduced from 180 minutes to 60 minutes, representing a 66.6% decrease, following the implementation of bots for credential setup and documentation. Cross-functional automation experiments indicated that RPA bots performed repetitive data-processing tasks at a speed six to thirteen times greater than humans, while maintaining perfect accuracy (Bhardwaj et al., 2024). Productivity gains correspond with broader estimates indicating that RPA can decrease transaction processing costs by 30–60% and reduce FTE effort by 20–50% for well-defined activities (Bhujabal et al., 2025; Syed et al., 2020).

Accuracy and compliance hold equal significance in Talent Acquisition, especially in the management of personal and contractual data. Robots operate under deterministic rules and do not experience exhaustion, thereby significantly reducing typical data-entry errors and inconsistencies across systems (Syed et al., 2020; Hyun et al., 2021). Research on document-intensive processes indicates nearly flawless transfer accuracy when structured data is extracted via RPA, leading to enhancements in data quality and subsequent reporting (Bhardwaj et al., 2024; Hyun et al., 2021). In human resources contexts, more than 48% of organizations implementing robotic process automation (RPA) have reported improvements in accuracy and compliance, alongside a reduction of 30–50% in human errors within transactional processes (Accenture, 2023, cited in Razak et al., 2025). These findings indicate that the automation of data-intensive TA tasks, including eligibility checks, contract generation, and regulatory documentation, can enhance the efficiency of hiring processes while mitigating compliance risks.

In addition to operational metrics, RPA transforms the strategic function of recruiters. RPA alleviates TA professionals from repetitive tasks including screening and scheduling, enabling them to concentrate on relationship-building with candidates and hiring managers, enhancing employer branding, and evaluating complex attributes like cultural fit and potential (Razak et al., 2025; Lacity & Willcocks, 2021). Walford-Wright and Scott-

Jackson (2018) contend that an effectively designed talent technology system, which incorporates RPA, has the potential to convert talent acquisition into an internal strategic partner. This transformation can lead to reductions in time-to-hire and cost-per-hire, while simultaneously enhancing quality-of-hire. This transition corresponds with wider digital talent-management frameworks that regard RPA and AI as instruments for automating less important tasks, thereby allowing HR to focus on high-value, human-centric activities (Gričnik et al., 2024).

RPA influences the candidate experience. In the long run, unclear procedures and insufficient communication are recognized challenges in talent acquisition (Walford-Wright & Scott-Jackson, 2018). Automation of acknowledgements, status updates, interview scheduling, and onboarding communications through RPA enhances the speed and consistency of interactions. The integration of AI chatbots facilitates continuous responses to candidate inquiries and assists applicants during the initial stages of the recruitment process (Swapna & Arpana, 2021). Generation Z and other "digital-by-default" cohorts anticipate seamless digital experiences; thus, intelligent automation can improve employer attractiveness, contingent upon the inclusion of personal contact opportunities in later stages (Gričnik et al., 2024).

Nonetheless, the literature emphasizes that not all TA activities are appropriate for RPA. RPA is most effective for high-volume, stable, rule-based tasks that have minimal exceptions. Conversely, processes characterized by low volume, numerous exceptions, or frequent changes generally present weak business cases, as alterations in rules or user interfaces necessitate redesign and testing expenditures (Santos et al., 2020; Anagnoste, 2018). In recruitment, this generally involves automating initial screening, data entry, background-check initiation, and routine communications, while reserving complicated activities such as competency-based interviewing, complex offer negotiation, or holistic potential assessment for human involvement (Razak et al., 2025; Harmoko & Axmann, 2020). Technical fragility presents a significant issue; bots functioning at the UI layer exhibit sensitivity to minor alterations in layout or format. Additionally, RPA encounters

challenges with highly unorganized inputs, such as free-text resumes or emails, unless integrated with AI techniques (Flechsig et al., 2021; Syed et al., 2020).

Ultimately, RPA-enabled TA presents socio-technical and fairness concerns. Studies on web-based and automated screening indicate that applicants frequently perceive human decision-makers as more equitable than automated agents. However, perceptions of equality enhance when systems demonstrate consistency and permit candidates to submit supplementary information or appeal decisions (Dineen et al., 2004). As organizations increasingly incorporate RPA and AI into selection procedures, issues related to transparency, data privacy, and the diminishing “human touch” become more prominent, necessitating diligent governance and human oversight (Prasad et al., 2024; Selamat et al., 2024). The literature indicates that RPA serves not as a substitute for recruiters but as a complementary technology that, when properly designed and governed, can improve the efficiency, accuracy, and strategic impact of talent acquisition.

### **2.2.3 RPA tools in Talent Acquisition**

Robotic Process Automation serves as a numerous back-office technology, with several suites commonly acknowledged as the most effective options for automating administrative tasks, such as HR and employee management (Hyun et al., 2021; Syed et al., 2020; van der Aalst, Bichler, & Heinzl, 2018). However, the majority of RPA research predominantly emphasizes fundamental concepts, general advantages, and comprehensive case studies, offering inadequate process-level examination of whether technologies facilitate certain Talent Acquisition (TA) operations (Aguirre & Rodriguez, 2017; Santos et al., 2019; Syed et al., 2020). Simultaneously, the focus on digital HR and e-recruitment underscores talent acquisition as a viable domain for automation; however, it often addresses robotic process automation merely within the context of broader digitalization or analytics efforts, rather than scrutinizing its specific functionalities during the initial stages of talent acquisition (Bondarouk & Brewster, 2016; Walford-Wright & Scott-Jackson, 2018; Tambe, Cappelli, & Yakubovich, 2019).

This thesis focuses on early-stage talent acquisition tasks that are high-volume, repetitive, rule-based, and dependent on structured digital inputs, including data transfer between applicant tracking systems (ATS) and HRIS, management of standardized documents within the talent acquisition team, and the application of rule-based regulations, in accordance with established RPA suitability criteria and the demand for more comprehensive, process-oriented evidence regarding RPA in HR (Lacity et al., 2016; van der Aalst et al., 2018; Syed et al., 2020; Turcu & Turcu, 2021; Voronova, 2025).

In Talent Acquisition, RPA services mainly automate high-volume, rule-based processes that entail transferring data among HR systems, email, and office software, rather than taking over the judgmental tasks of recruiters (Syed et al., 2020; Turcu & Turcu, 2021). Common automated tasks encompass the creation and approval of job vacancies, the updating of job postings across various platforms, the extraction of applicant data from emails or forms into an ATS, the scheduling of interviews, the generation of offer letters, and the transfer of data into HRIS and payroll systems for onboarding (Aguirre & Rodriguez, 2017; Santos et al., 2019; Turcu & Turcu, 2021). The duties are transactional, repetitive, and reliant on structured data, frequently including "swivel-chair" tasks where employees manually move information between apps (Lacity et al., 2016; van der Aalst et al., 2018; Marciniak & Stanisławski, 2021).

Several RPA manufacturers include attended, unattended, and hybrid modes that align with TA use cases (Axmann & Harmoko, 2020; Syed et al., 2020). In attended mode, desktop robots aid recruiters by pre-filling ATS forms or initiating checks during candidate contacts, while unattended bots manage back-office tasks involving nightly data imports and bulk status updates (Axmann & Harmoko, 2020; Tripathi, 2018). Central administration components coordinate several bots, control queues and credentials, and offer monitoring dashboards, allowing TA teams to enhance capacity during peak campaigns without the need for recruiting and training more personnel (Syed et al., 2020; Axmann & Harmoko, 2020).

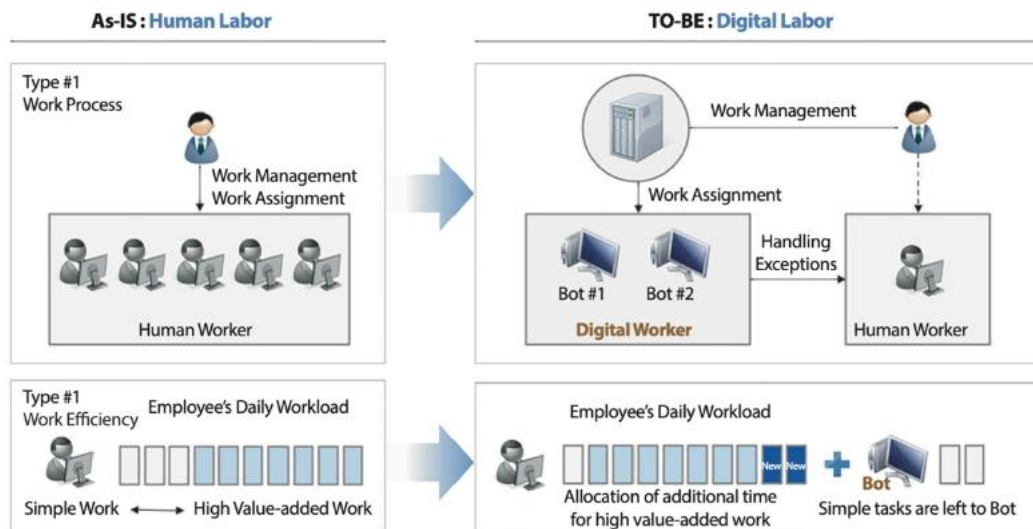
Numerous prevalent RPA functionalities are especially relevant to TA activities. Screen automation and form-filling facilitate integration with legacy HRIS or ATS systems lacking modern application programming interfaces (APIs), enabling bots to log in, navigate recruiter interfaces, and input data similarly to human users (van der Aalst et al., 2018; Santos et al., 2019). Email and file-handling functionalities enable robots to organize information from attachments and emails, including standardized application forms or compliance paperwork, and archive it in specified systems or folders (Axmann & Harmoko, 2020; Ogunrinde et al., 2023). Logging and audit trails produce comprehensive execution records, which are crucial in TA environments where the management of candidate data must be verifiable for compliance and auditing purposes (Syed et al., 2020; Ogunrinde et al., 2023).

Simultaneously, limitations recognized in the extensive RPA literature are equally significant to TA. Processes characterized by low volume, elevated exception rates, or often altering regulations typically show fragile business cases and substantial maintenance demands (Anagnoste, 2018; Santos et al., 2019). Robotic Process Automation (RPA) has difficulties with unstructured and highly variable inputs, such free-text curricula vitae or casual email communications, unless integrated with cognitive technologies including optical character recognition or machine learning-based categorization (Syed et al., 2020; Bhardwaj et al., 2024). The variety of CV formats, emails, and comments in HR and recruiting hinders the dependable automation of some subtasks (Marciniak & Stanisławski, 2021; Syed et al., 2020).

Due to the involvement of sensitive personal data and cross-system access rights in TA procedures, governance concerns are particularly critical (Syed et al., 2020; Sobczak, 2022). Research on RPA emphasizes the necessity for defined ownership, centralized standards, and lifecycle management to mitigate risks such bot sprawl, security vulnerabilities, and undocumented dependencies (Syed et al., 2020; Flechsig, Stelzl, & Gillies, 2022; Sobczak, 2022). Accordingly, RPA solutions for Talent Acquisition must

concentrate on stable, well-standardized sub-processes, including data entry, scheduling, and onboarding data transfer, and should be integrated into HR-IT governance frameworks with suitable controls to safeguard candidate and employee data (Syed et al., 2020; Sobczak, 2022).

#### 2.2.4 Benefit of RPA



**Figure 1.** The expected effects of RPA implementation RPA, robotic process automation (Bu et al., 2022)

Several research studies highlight that the primary advantage of RPA is enhanced efficiency and process performance (Syed et al., 2020; Aguirre & Rodriguez, 2017; Santos et al., 2019; Bhardwaj et al., 2024; Bu et al., 2022). Automation of well-defined, rule-based tasks minimizes employee effort and time, enhances throughput, and facilitates continuous operation, resulting in increased output per full-time equivalent (FTE) and reduced cycle times (Syed et al., 2020; Hyun et al., 2021; Santos et al., 2019; Axmann & Harmoko, 2020; Bu et al., 2022). In company operations that handle significant transaction volumes, RPA can facilitate both incremental optimization and considerable performance improvements, especially when integrated with process standardization initiatives (Aguirre & Rodriguez, 2017; van der Aalst et al., 2018; Santos et al., 2019).

Empirical case studies indicate that productivity in service processes can increase by approximately 20% following the deployment of RPA (Aguirre & Rodriguez, 2017).

A second commonly noted advantage is enhanced accuracy and reduced errors. Software robots adhere to established protocols and are not subject to exhaustion, thereby significantly minimizing routine data-entry errors, omissions, or inconsistencies in updates across systems (Syed et al., 2020; Santos et al., 2019; Bu et al., 2022). Research on document-intensive processes indicates nearly complete transfer accuracy when structured data is extracted and validated via RPA pipelines, leading to significant enhancements in data quality (Bhardwaj et al., 2024; Hyun et al., 2021). In controlled tests on invoice processing, RPA bots demonstrated 100% accuracy, whereas manual processing achieved an accuracy range of 80-98% (Bhardwaj et al., 2024). Comparable results are observed in data management contexts, where RPA facilitates data migration, validation, and cleansing, thus diminishing inconsistencies and enhancing data reliability (Ogunrinde et al., 2023; Syed et al., 2020). This enhances operational reliability and ensures adherence to both internal and external reporting standards (Syed et al., 2020; Bu et al., 2022).

RPA is closely linked to cost efficiency and scalability. Literature reviews and case evidence indicate that transaction costs can be reduced by approximately 30-60 percent, while full-time equivalent (FTE) savings range from 20-50 percent for defined tasks, especially when robots are utilized for high-volume, standardized activities (Syed et al., 2020; Santos et al., 2019; Bhardwaj et al., 2024). Some implementations indicate that organizations achieve labor savings of tens of thousands of hours annually and significant cost reductions once RPA is scaled across various processes (Bu et al., 2022; Bhardwaj et al., 2024). Management platforms enable organizations to rapidly scale capacity by integrating additional robots to manage peak workloads, circumventing the delays linked to recruiting and training fresh employees (Syed et al., 2020; Santos et al., 2019; Axmann & Harmoko, 2020; Bhardwaj et al., 2024). This flexibility is especially

beneficial in contexts characterized by seasonal fluctuations, such as recruitment initiatives or onboarding phases in human resources.

A notable advantage pertains to compliance, auditability, and risk management. Central orchestration and comprehensive execution logs allow organizations to track actions taken, their timing, and the individuals responsible, thus enhancing transparency and facilitating audit compliance (Syed et al., 2020; Bu et al., 2022; Ogunrinde et al., 2023). Standardised execution of processes by robots allows organisations to diminish variability linked to manual tasks and to apply business rules more uniformly, thereby reducing the risk of non-compliance (Syed et al., 2020; Bhardwaj et al., 2024).

RPA offers a rapid time-to-value due to its implementation at the user-interface layer, necessitating minimal alterations to back-end systems. This characteristic significantly reduces project timelines in comparison to conventional IT integration projects (van der Aalst et al., 2018; Syed et al., 2020; Santos et al., 2019; Carvalho et al., 2025). Numerous case studies indicate that robots designed for simple processes can be configured and deployed into production within weeks, contrasting with the months or years typically required for large-scale system implementations (Syed et al., 2020; Santos et al., 2019).

Several studies emphasize the advantages of data quality and integrity, especially in processes related to data migration, validation, or synchronization between legacy systems (Ogunrinde et al., 2023; Bhardwaj et al., 2024). RPA enhances the reliability of downstream reporting and analytics by ensuring consistent data capture, validation, and transfer across applications (Syed et al., 2020; Ogunrinde et al., 2023; Bhardwaj et al., 2024). Furthermore, recent research indicates that RPA can be integrated with AI-based extraction methods to manage structured, semi-structured, and unstructured inputs while maintaining high accuracy levels (Bhardwaj et al., 2024).

Automation is often noted to improve employee experience by allowing staff to allocate less time to repetitive, low-value tasks and more time to exception handling, analysis,

and engagement with customers or internal stakeholders (Syed et al., 2020; Santos et al., 2019; Bu et al., 2022). In customer-facing or service processes, this frequently results in faster response times and enhanced perceived service quality (Syed et al., 2020; Bu et al., 2022; Axmann & Harmoko, 2020).

The literature indicates additional strategic advantages, including organizational resilience and the facilitation of digital transformation. When integrated into a comprehensive transformation programme, RPA enhances an organisation's capacity to sustain operations throughout disruptions and facilitates continuous improvement by rendering processes more visible and measurable (Sobczak, 2022; Bu et al., 2022). Survey evidence from Polish enterprises indicates that RPA serves as a digital transformation tool that enhances organizational resilience in challenging circumstances (Sobczak, 2022). The technology's capacity to interface with legacy systems through the user interface, along with its compatibility with other digital tools including workflow, analytics, or AI services, enhances its function as a connector between current infrastructure and advanced automation methods (van der Aalst et al., 2018; Syed et al., 2020; Bu et al., 2022; Carvalho et al., 2025; Bhardwaj et al., 2024). This thesis utilizes these benefit categories as a framework to evaluate the potential of RPA in improving the efficiency and quality of the Talent Acquisition process at the case company.

#### **2.2.5 Challenges of RPA**

The literature highlights technical, organizational, and human factor risks that may outweigh the benefits of RPA (van der Aalst et al., 2018; Syed et al., 2020). In alignment with the benefits section's structure, these challenges can be categorized into constraints on efficiency, threats to data quality and control, and governance and human-factor issues that influence employee experience and strategic value (Anagnoste, 2018; Costa et al., 2022; Flechsig et al., 2022; Moreira et al., 2023; Santos et al., 2019; Siderska, 2020).

First and foremost, there is the issue of the suitability and consistency of the process. Automating tasks characterized by low volume, numerous exceptions, or frequent changes typically diminishes the return on investment, as any alteration in user interface, business rule, or data requirement demands further design and testing efforts (Anagnoste, 2018; Costa et al., 2022; Moreira et al., 2023; Santos et al., 2019). In the content's instances, maintenance expenses escalate, rendering the business case ambiguous, particularly when automation objectives are chosen based on perceived immediate benefits rather than systematic appropriateness criteria (Flechsig et al., 2022; Siderska, 2020). In TA, ad-hoc recruiting surges or changing approval frameworks could cause recruitment of sub-processes that may otherwise seem conducive to RPA.

An additional concern relates to technological vulnerability and reliance on data. Bots function at the user-interface layer, making exceptionally responsive to minor alterations in screen layout, field labels, or file structures, leading to silent failures or erroneous outputs (Flechsig et al., 2022; Marciniak & Stanisławski, 2021; Syed et al., 2020; van der Aalst et al., 2018). RPA encounters difficulties with unstructured or highly variable inputs, including free-text CVs, informal email communications, or non-standard forms, unless integrated with cognitive technologies such as optical character recognition or machine-learning-based classification (Costa et al., 2022; Marciniak & Stanisławski, 2021; Syed et al., 2020). In HR or TA specifically, the variability of documentation and communication patterns restricts the reliable automation of end-to-end operations.

Even when procedures are proper, RPA incurs continuous maintenance and lifetime expenses. Bots call for ongoing updates, regression testing, and compliance assessments due to alterations in underlying systems, regulations, or business rules, thereby increasing the total cost of ownership and possibly harming previous efficiency

improvements if not thoroughly addressed in governance and budgeting (Flehsig et al., 2022; Moreira et al., 2023; Santos et al., 2019). In the absence of clear lifecycle management, initial "quick wins" shift into enduring liabilities that deplete limited IT and business resources.

Pararely, governance and risk management provide further issues. According to Syed et al. (2020) and van der Aalst et al. (2018), decentralized development across business units can result in "bot sprawl," which is formed by undocumented automations, inconsistent standards, and ambiguous ownership. Leading to audit gaps and hides the real operational risk profile of RPA. Due to extensive access privileges, misconfigured or improperly managed software robots elevate the risk of fraud, security breaches, and non-compliance, especially when managing sensitive HR or payroll information (van der Aalst et al., 2018; Santos et al., 2019). Thus, strong access control, centralized standards, and clear ownership is necessary preconditions for RPA in TA and other HR procedures.

The literature also emphasizes difficulties related to knowledge management and human factors. The departure of key developers or process owners may result in the loss of process expertise and comprehension of bot logic, hence complicating maintenance and troubleshooting, unless documentation and cross-training are consistently maintained (Völker & Weske, 2021). Employees may experience anxiety job displacement, diminishing roles, or a reduction in autonomy, resulting in resistance, skepticism towards automated results, and hesitance to engage in implementation initiatives (Asatiani & Penttinen, 2016; Anagnoste, 2018; Costa et al., 2022; Sobczak, 2021). Limited coordination between business and IT stakeholders exacerbates problems by creating unclear duties, fluctuating needs, and project fatigue (Anagnoste, 2018; Flehsig et al., 2022; Moreira et al., 2023; Sobczak, 2021). Successful RPA programs need the early engagement of impacted personnel, concise explanation of objectives and effects, and collaborative governance frameworks that include both business and IT viewpoints.

Moreover, several scholars highlight ethical and impersonation problems. Bots perform operations using human user IDs, which might obscure responsibility for decisions and transactions, complicating the investigation of mistakes or abuse (van der Aalst et al., 2018). In HR and TA, where equity, openness, and traceability are paramount, it prompts inquiries about the representation of automated actions in logs and the clarity of audit trails in differentiating between human and robotic activities.

Despite this comprehensive list of dangers, significant gaps persist in the literature. A significant portion of the current evidence originates from single-organization case studies or preliminary implementations, which constrains comprehension of long-term sustainability, aggregate maintenance expenses, and the ramifications of extensive bot portfolios (Anagnoste, 2018; Flechsig et al., 2022; Moreira et al., 2023; Syed et al., 2020). Empirical studies examining the impact of RPA on employee roles, competencies, and perceptions over time remain limited, especially within HR activities where trust, equity, and professional identity are important (Asatiani & Penttinen, 2016; Costa et al., 2022; Sobczak, 2021). Furthermore, most of the risks are technology-generic and examine how particular difficulties arise in specific sub-processes such as CV screening, interview scheduling, or onboarding within Talent Acquisition (Syed et al., 2020; Siderska, 2020). As a result, the thesis addresses these deficiencies by analyzing RPA problems inside specific TA sub-processes in a practical organizational setting and by correlating technical, governance, and human-factor risks with the activities anticipated to provide efficiency advantages.

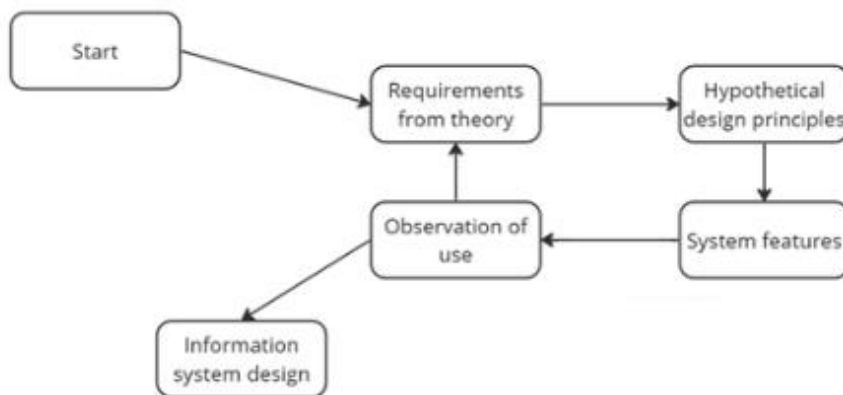
#### **2.2.6 Information System Design: Process redesign logic for RPA-enabled Talent Acquisition**

In the literature on information-system design, it is emphasized that any redesign should start with a clear representation of the current state of operations and technology. The socio-technical model perceives technology, individuals, processes, and organizational structures as interrelated components that must be considered together when changing

systems (Wagner, Piccoli, & Louthen, 2005). In order to create a factual foundation to evaluate efficiency and creating improvements, state reconstruction entails describing current inputs (such as candidate resumes and doing requisition forms), processing steps (such as manual screening, interview coordination, and offer preparation), and outputs (for examples: shortlists, interview invitations, and onboarding records) (Haramis, Brebbia, & Wessels, 2004; Batini, 2019). In TA, this entails outlining the complete process prior to identifying where RPA can be implemented.

Batini (2019) explores a life cycle of information-system design that progresses from state reconstruction and evaluation of efficiency and effectiveness to logical (external) and physical (internal) design. The appraisal phase assesses the current process based on criteria including cycle time, error rate, and resource utilization to pinpoint bottlenecks prompting redesign (Haramis et al., 2004; Batini, 2019). This thesis employs a life-cycle framework to describe current TA workflows, evaluate the sources of delays and errors, and outline a future process enhanced by RPA that addresses these deficiencies instead of merely digitizing existing practices.

A key design decision refers to the orientation of the solution. Batini (2019) differentiates between "technology-driven" design, in which a selected tool dictates alterations in the process, and "service-driven" design, which originates from user and service needs and identifies technologies that effectively fulfill them. Service-driven design aligns with socio-technical and participatory design paradigms, demonstrating that engaging end-users in problem identification and desired enhancements generally enhances system quality, acceptance, and organizational advantages (Lagunas & Hellman, 2007). In the context of TA and RPA, this means giving priority to the requirements of recruiters and hiring managers such as minimizing manual data entry and alleviating coordination bottlenecks over the standard functionalities of a RPA platform.



**Figure 2.** The process framework for the design of information systems (Jones & Gregor, 2004, p.29, adapted)

Jones and Gregor (2004) present a framework for information systems design, where requirements are derived from two complementary sources: theoretical knowledge and empirical observations of existing system use (figure 2). The theory-based requirements for research on RPA in TA stem from literature on digital HR, TA, RPA, and Information Systems (IS) design, whereas empirical requirements are determined by an analysis of current practices in TA. Collectively, the above inputs are converted into design concepts, proposed by identifying CV screening, interview scheduling, and onboarding data consolidation as viable candidates for RPA, which subsequently guide the specification of future system functionalities. The framework elucidates the manner in which established theory and empirical process analysis collaboratively support the conceptual RPA-enabled TA process formulated in this thesis.

Given that RPA is not ubiquitously applicable, the redesign logic must integrate explicit task-suitability criteria. Pelkonen (2024) indicates a checklist for RPA suitability: tasks must be high-volume, rule-based, dependent on structured digital data, distinguished by stable business rules and interfaces, and possess low exception rates. In contrast,

tasks requiring sophisticated professional judgment, extensive interpersonal engagement, or regular exception management such as final hiring decisions, salary negotiations, or cultural fit evaluations are not desirable for applying RPA and should remain under human control (Lacity & Willcocks, 2021; Pelkonen, 2024). These criteria implement insights from the extensive RPA literature, which associates productivity and accuracy improvements with repetitive, well-defined transactions (Syed, Maheshwari, & Alajmi, 2023). This thesis directs the selection of TA sub-processes for modeling and redesign, ensuring that the proposed RPA use cases are theoretically substantiated rather than irregularly selected.

Nguyen et al. (2023) specify critical steps for creating a process supported by RPA, encompassing objectives analysis, goal formulation, data acquisition, development, testing, monitoring, training, optimization, and evaluation. This thesis does not execute a complete technical deployment; however, this sequence offers a practical transition from conceptual task selection to considerations regarding the construction and iterative refinement of RPA solutions. This is especially pertinent for delineating how selected TA tasks, such as CV data extraction, interview scheduling, and onboarding data progress from requirements phase to testing and monitoring phases within an actual organization.

Subsequent to task selection, logical (external) design delineates the requisite functionalities of the future system without binding to a specific vendor or technical execution (Haramis et al., 2004; Pelkonen, 2024). To apply RPA in TA, define inputs (for instance, CV files and calendar feeds), business rules (minimum qualification thresholds, scheduling constraints), outputs (structured candidate records, calendar invitations, and onboarding records), and exception-handling rules (routing non-qualified candidates to a manual review queue or escalating unfilled interview slots). The service-driven perspective requires the separation of decision points that require human judgement from rule-based transaction steps, ensuring that automation supports, rather than replaces, core recruitment decisions (Batini, 2019).

The physical (internal) design thereafter converts these conceptual specifications into tangible technological components. RPA-oriented architectures mandate a platform that allows bot development, orchestration, monitoring, and integration with ATS and HRIS systems, in addition to business rules, secure credential management, and audit logging for governance and compliance (Lacity & Willcocks, 2021). This thesis, while remaining at the conceptual level, employs a layered design logic that substantiates the selection of specific RPA use cases as suitable for nascent TA processes, rather than pursuing comprehensive end-to-end automation.

This section establishes a design-oriented perspective for the research question by integrating information-systems design theory, task-suitability criteria, and RPA development processes. The study indicates the progression from analyzing current TA processes, through the theory-informed identification of automatable tasks, to the specification of a future RPA-enabled process that can be implemented and assessed in empirical research.

### **2.3 Synthesis**

The reviewed literature identifies three interrelated domains critical to this thesis: the digitalization of human resources and digital HRM, the application of technology in Talent Acquisition, and the implementation of robotic process automation in HR operations. Research demonstrates that HRM has transitioned from administrative HRIS and e-HRM systems to more cohesive digital HR frameworks that integrate self-service, analytics, and sophisticated digital tools to enhance both operational efficiency and strategic HR contributions (Sakib et al., 2025; Zhang & Chen, 2023; Nachit & Okar, 2020). The efficiency of these technologies relies not solely on technical capabilities but also on their congruence with HR strategy, leadership endorsement, user acceptance, and

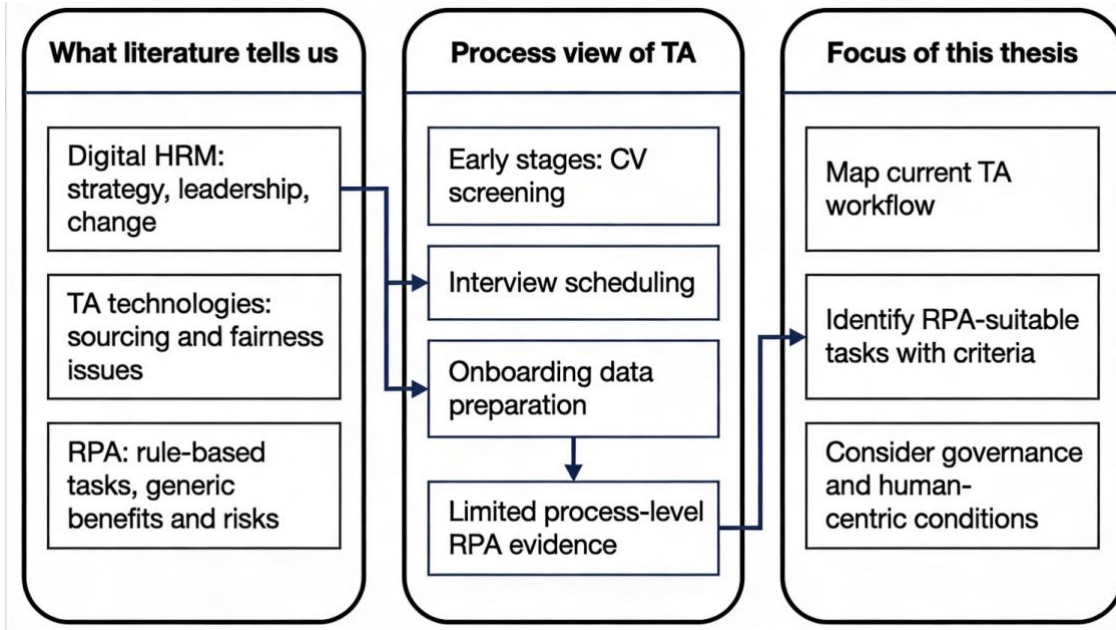
change management (Kehoe & Wright, 2013; Nematollahi et al., 2024; Khuzaini et al., 2024; Hamraaia et al., 2024).

In the expansive digital HR landscape, Talent Acquisition has become one of the most technology-driven HR sectors. Research conducted on e-recruitment, online screening, and AI-driven recruitment tools indicates that technology can improve sourcing reach, communication, and administrative efficiency, while simultaneously raising issues regarding fairness, transparency, bias, and the maintenance of meaningful human interaction (Chapman & Webster, 2003; Dineen et al., 2004; Walford-Wright & Scott-Jackson, 2018; Swapna & Arpana, 2021; Gričnik et al., 2024; Banerjee & Sharma, 2025; Selamat et al., 2024; Faqih et al., 2024). This stream delves into why Talent Acquisition is often regarded as a potential candidate for increased automation; yet, it emphasizes “digital recruiting” in widely terms and categorizes RPA from other technologies like AI, chatbots, or analytics platforms.

The growing body of literature on Robotic Process Automation (RPA) in Human Resources indicates that software robots can automate repetitive, rule-based tasks, including payroll, onboarding, time and attendance, and recruitment activities. This automation reduces processing times, minimizes error rates, and enables HR professionals to focus on valuable work (Razak et al., 2025; Zhang & Chen, 2023). RPA is utilized by organizations aiming to integrate legacy HRIS with modern digital tools without mandating substantial system replacement (The Integration of RPA in HRIS, 2023). Present research on RPA emphasizes theoretical discourse, general assertions of benefits, and illustrative case studies. There exists minimal process-level evidence regarding the alignment of RPA with specific TA workflows, the criteria for task selection, and the management of governance, fairness, and user acceptance in routine practice, within emerging economy contexts (Razak et al., 2025; Hamraaia et al., 2024).

With the objective to bridge these gaps, this thesis blends three complementary perspectives. Initially, an information-systems design perspective elucidates the transition from an as-is process to a to-be process via current-state reconstruction, bottleneck analysis, and future-state process design. Secondly, RPA task-suitability criteria determine which Talent Acquisition activities are repetitive, rule-based, digitally executed, and sufficiently stable to be viable candidates for automation, while excluding tasks that rely on human judgment or extensive interpersonal interaction. Third, a human-centered and managerial perspective on digital HR underscores equity, transparency, user engagement, governance, and change management as prerequisites for sustainable automation. As a whole, these elements constitute the analytical framework employed in this thesis to analyze current TA processes, identify suitable RPA targets, and envision a future RPA-enabled TA process.

Accordingly, the existing literature clarifies what types of TA tasks are theoretically appropriate for RPA, which design principles and governance requirements should direct their automation, and why human-centered considerations are still important in order to meet the research question. The review inevitably suggests a necessity for empirical research that investigates RPA concerning specific TA sub-processes, identifies particular bottlenecks and automation prospects, and examines the interplay of technical, organizational, and equity-related issues in practice. The empirical chapters of this thesis address this requirement by examining a genuine TA process through the synthesized framework and by proposing a process-level RPA design that can be assessed based on both efficiency and human-centered criteria.



**Figure 3.** Synthesised framework linking digital HR, TA technologies, and RPA to the research focus on RPA-enabled Talent Acquisition

### **3 METHODOLOGY**

#### **3.1 Case study rationale and design**

This research employs a single-company case study to examine the potential adoption of robotic process automation (RPA) in Talent Acquisition (TA) at Company B and expected impacts on process efficiency. A case study is methodologically suitable as it addresses 'how' questions, the phenomenon is connected with its organizational context, and the analysis necessitates diverse sources of evidence to elucidate process mechanisms and governance conditions (Yin, 2018; Stake, 1995; Eisenhardt, 1989). The deployment of RPA is not solely a technical intervention; it occurs within defined workflows, roles, controls, and regulatory expectations in TA. Recognizing these interdependencies necessitates a design that maintains contextual complexity instead of simplifying it (van der Aalst, Bichler, & Heinzl, 2018; Eisenhardt, 1989).

At the time of data collection, Company B had not implemented RPA in its Talent Acquisition operations. The research is investigative and design-focused: it reconstructs the current 'as-is' process and utilizes stakeholder accounts to define a 'to-be' process for the potential implementation of RPA. The researcher functioned more as an internal consultant, understanding the perspectives of the participants and together developing feasible automation scenarios than of assessing an active technological implementation. This study employs an interpretative perspective, considering TA processes as socially constructed and context-dependent. It aims to comprehend stakeholders' perceptions and interpretations through qualitative interviews and an open-ended survey, resulting in analytical insights instead of statistical generalizations. Reasoning occurs through an abductive process: the analysis cycles between sensitizing concepts from the digital HR/RPA literature and new empirical insights, refining explanations as additional evidence is gathered (Bamberger, 2019; Eisenhardt, 1989). This logic is appropriate for an organizational context where the feasibility and value of automation are contingent upon specific features of the processes, systems, and governance (Bamberger, 2019).

The unit of analysis encompasses the complete TA process at company B, ranging from requisition to onboarding. This process involves a detailed examination of three embedded sub-processes due to their repetitive and rule-based nature: (1) CV screening against objective criteria, (2) interview scheduling and re-scheduling, and (3) preparation of requisition and onboarding forms. Considering these as sub-units within the overall case aligns with an embedded single-case design (Yin, 2018) and facilitates a thorough within-case analysis for theory development (Eisenhardt, 1989). Analyzing these sub-processes enables the formulation of explicit rules, common exceptions, data requirements, and audit criteria relevant to RPA design.

The design employs two main data sources. Initially, semi-structured interviews with key stakeholders who are involved in hiring interview rounds, for example technical or final interview before moving to TA experts, including recruiters, HR specialists, TA leads, hiring managers, and, when applicable, HRIS/IT support, are conducted to map the existing process, identify bottlenecks and errors, and evaluate the feasibility and risks associated with automation. Secondly, a qualitative open-ended survey of recruiters and recent hiring managers collects brief written accounts from multiple cases, facilitating the examination of whether similar issues arise across different teams. This integration of interviews and textual accounts exemplifies the recommended case study methodology of employing multiple sources of evidence (Yin, 2018; Stake, 1995; Eisenhardt, 1989).

TA work at company B encompasses substantial volumes, cross-system transitions, and numerous rule-based tasks executed within compliance and service-level parameters. These conditions are precisely where RPA is anticipated to assist by minimizing cycle time, errors, and manual workload (van der Aalst, Bichler, & Heinzl, 2018; Syed et al., 2020). The primary research question is: How can RPA be implemented in HR operations to improve efficiency in the TA process at company B? Key areas of focus encompass the identification of automatable tasks, the analysis of existing delays and errors, the establishment of necessary governance and safeguards, and the anticipated

enhancements in time-to-hire, workload, error rates, and the experiences of both candidates and hiring managers.

The researcher served as both facilitator and analyst, collecting participant accounts, creating an as-is process map, and developing a shortlist of RPA use cases. The study is confined to the three previously mentioned sub-processes within the specified period. Topics including strategic workforce planning, compensation design, and final hiring decisions fall outside the scope unless they have a direct impact on the relevant sub-processes.

To enhance research quality, the study employed triangulation of sources, invites participant feedback on key outputs like the process map and use-case table, and maintains an audit trail of instruments, coding decisions, and analysis notes. A clear description of the organizational setting and the TA workflow is presented, enabling readers to assess the applicability of the findings to similar contexts.

### **3.2 Sample Selection: Company B**

This thesis examines Company B as a single case study, offering a comprehensive context for analyzing the evolution of rRPA in TA and its prospective influence on process efficiency. Consistent with case-study methodology, the objective is analytical rather than statistical generalization; the case is chosen for the profound insights it provides into the phenomenon within its context (Eisenhardt, 1989; Stake, 1995; Yin, 2018). This study investigates the Talent Acquisition function of Company B, a significant subsidiary of a multinational corporation. Company B in Vietnam subsidiary, part of a global group of over 400,000 associates, recruits for numerous of professional and specialist roles annually, with peaks in recruitment activity occurring in engineering and shared-services roles.

The TA team at Company B manages a consistent influx of professional and specialized recruitment annually, adhering to a standardized multi-stage process (vacancy initiation,

CV screening, interviews, offer, onboarding) facilitated by an internal portal ATS (Applicant Tracking System), HRIS, email, and spreadsheets, with interns and specialists collaborating on administrative duties such as scheduling and document preparation. These tasks are labor-intensive, heavily governed by rules, and involve frequent data transfer between systems, consistent with the characteristics recognized in the RPA literature as conducive to automation where high volume, structured, rule-based processes, and inter-application data movement (van der Aalst, Bichler, & Heinzl, 2018; Syed et al., 2020).

The focus of this thesis is the full cycle of TA process at Company B, covering request initiation through to onboarding. This study investigates three integrated, rules-based sub-processes as primary sub-units: CV screening, interview scheduling and rescheduling, and requisition preparation for the onboarding process. The sub-processes offer sufficient details to formulate automation logic and governance requirements, making them appropriate for an embedded single-case design (Yin, 2018).

The units of observation comprise process stakeholders and artefacts, including recruiters, HR specialists, TA leads, hiring managers, HRIS/IT support personnel, and non-confidential process documents like templates and standard operating procedures. Organizational authorization facilitated semi-structured interviews with key personnel and an anonymous open-ended survey distributed to 20 employees engaged in recent hiring and onboarding, including Talent Acquisition staff, hiring managers, HR operations and administration personnel, and HRIS/IT support, thereby capturing diverse perspectives on the same Talent Acquisition sub-processes and enabling triangulation across data sources while preserving confidentiality (Stake, 1995; Yin, 2018).

The case holds theoretical importance as Company B functions within established governance frameworks and standardized HR protocols characteristic of multinational subsidiaries, which are often prime candidates for shared services and automation

efforts (Eisenhardt, 1989). Concentrating on a singular site facilitates an in-depth examination of the interplay among process characteristics, stakeholder roles, and safeguards during RPA planning, producing context-specific insights that are challenging to acquire through multi-firm surveys (Eisenhardt, 1989; Stake, 1995; Yin, 2018). In addition, the TA process at Company B was still fully manual regarding RPA at the time of the study. This meant that the case could be used to identify pain points in the current process and to develop consultancy-style recommendations for how RPA could be applied in the future, rather than to evaluate an existing automation project.

### **3.3 Data collection**

Data were obtained from two primary sources: semi-structured interviews and a qualitative (open-ended) survey. Interviews constituted the principal source of information, enabling participants to discuss the Talent Acquisition (TA) process, pinpoint inefficiencies, and indicate procedures subject to explicit regulations that may be accessible to automation. The qualitative survey supplemented the interviews by obtaining succinct written accounts from a wider array of stakeholders engaged in recent hiring and onboarding, assisting in verifying the emergence of identical patterns across roles and units.

#### **3.3.1 Semi-structured interviews**

In the following, interviews were conducted through Microsoft Teams utilizing audio only (no video), ranging approximately 20 to 35 minutes during participants' regular working hours in their typical work environments, adhering to established guidelines for qualitative interviewing in organizational contexts (Pope & Mays, 2020; Adeoye-Olatunde & Olenik, 2021). Table 1 illustrates the interviewees by role, date, language, and duration of each interviewee; participants were intentionally chosen owing to their direct engagement in the analyzed TA sub-processes, encompassing the TA lead/HR

business partner, recruiters/HR specialists, hiring managers across various functions, and an HRIS/IT stakeholder (Ugwu & Eze, 2023; Adeoye-Olatunde & Olenik, 2021). Therefore, all interviews were audio-recorded with consent, transcribed verbatim, anonymized by substituting names with participant codes, and stored on a secure drive accessible solely to the researcher and supervisor, adhering to ethical principles regarding confidentiality and data protection (Chasokela, 2024; Adeoye-Olatunde & Olenik, 2021). Therefore, section 3.4 explores the methodologies implemented for coding and interpreting interview data.

**Table 1.** Summary of interviewee

No	Title/role	Age	Years in the industry	Company	Date of interview	Language	Length of interview
1	TA Lead / HR Business Partner	34	9+ years	B	20-March-26	English	21 minutes 55 seconds
2	Recruiter / HR Specialist (TA)	29	5+ years	B	18-March-26	English	28 minutes 15 seconds
3	Hiring Manager (Engineering)	38	12+ years	B	20-March-26	English	26 minutes 23 second
4	HRIS / IT Analyst (HR systems)	31	7+ years	B	15-March-26	English	25 minutes

							54 seconds
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### 3.3.2 Qualitative Survey

An open-ended qualitative survey took place in conjunction with the interviews to expand the scope of recent hiring and onboarding experiences while maintaining alignment with interpretative orientation of the study (Cyr & Goodman, 2024; Williams & Ingleby, 2025). Qualitative surveys acquire written free-text responses that can be thematically analyzed to obtain explanations and contextual details frequently overlooked by closed questions (Fielding, Fielding, & Hughes, 2012; Williams & Ingleby, 2025).

The online questionnaire (Appendix 2) commenced with an introduction consent statement followed by a limited number of background inquiries regarding role, department or unit, experience in HR/TA, and frequency of participation in hiring process. The coming part asked respondents to describe in their own words a recent recruitment-to-onboarding case, identify steps they repeated frequently, indicate where delays, errors or rework occurred, and suggest which activities might be considered as appropriate or inappropriate for RPA, including perceived risks and necessary organizational conditions. To encourage thoroughly, process-oriented explanations, the questions were phrased straightforwardly and centered around specific tasks, tools, and examples.

The survey was conducted using Google Forms, ensured anonymity for the researcher during analysis, and was intended to require approximately five to ten minutes for completion. The distribution was made to 20 employees engaged in recent hiring and onboarding, embracing Talent Acquisition personnel, hiring managers, HR operations and administration staff, and HRIS/IT support, to obtain diverse perspectives on the

identical TA sub-processes. Responses were exported with distinct respondent identifiers and limited background variables, anonymized, and readied for qualitative analysis in conjunction with the interview material, as detailed in section 3.4.

### **3.4 Data Analysis**

The research invests an abductive qualitative methodology, whereas analysis oscillates between empirical data and established theories regarding digital HR, Talent Acquisition, and RPA (Collins & Stockton, 2018; Cyr & Goodman, 2024). The analysis initiates with the literature-based framework established in Chapter 2, which addresses the stages of the TA process, criteria for RPA task suitability, and considerations of governance and human focused, rather than employing a predetermined coding scheme or deriving themes from the data. Empirical findings are utilized to refine, expand, or challenge these initial assumptions.

The interview transcripts and survey responses were initially reviewed in their entirety to acquire a comprehensive understanding of each case and to document preliminary observations concerning the three primary TA sub-processes (CV screening, interview scheduling, onboarding data preparation) and the prerequisites for RPA in TA. Therefore, a provisional set of codes was manually created, integrating concepts from the framework (such as “repetitive task,” “structured data,” “exception handling,” “governance,” “fairness/transparency”) with prominent issues identified in the material (including “duplicated data entry,” “lost emails,” “role of interns”) (Fielding et al., 2012; Cyr & Goodman, 2024). This initial code list functioned as a robust analytical framework and was revised as new patterns emerged.

Furthermore, all interview transcripts and survey responses were handwritten utilizing this evolving codebook. Relevant text segments were highlighted and assigned one or more codes, subsequently organized into clear tables to facilitate the retrieval of data from various participants and sources under a unified theme. This procedure facilitated

both intra-case consistency (the functioning of the TA process for individual participants) and inter-case pattern recognition (recurring obstacles, appropriate tasks, and risk issues across various roles). The identical coding framework was utilized for both the interviews and the survey, facilitating the comparison of excerpts from each source under themes including “AS-IS bottlenecks,” “RPA-suitable tasks,” “exception patterns,” “governance and safeguards,” and “anticipated effects of RPA.” The alignment between interviews and survey responses reinforced the interpretation of a theme, whereas discrepancies such as divergent opinions on which tasks should remain human-led were explicitly acknowledged and utilized to refine the developing explanation. Appendix 3 contains a summary of the final coding framework, which includes key themes, code labels, concise definitions, and illustrative excerpts from interviews and survey responses to document the analytical process.

During the analysis, short analytical memos were composed to document ideas regarding the positioning of RPA within the TA process, the implementation of governance and human-centered considerations, and the structural organization of the proposed RPA-enabled process. These memos connected empirical observations to the design-oriented framework from section 2.2.6 and facilitated a gradual development of the "to-be" TA process, which was anchored in participants' accounts of the "as-is" workflow.

Abductive reasoning seeks to derive the most plausible explanation of a case by continually reconciling theoretical expectations with empirical evidence, rather than proving or disproving a predetermined model (Collins & Stockton, 2018). This study provides a process-level account of how RPA can facilitate specific TA sub-processes, the conditions under which this occurs, and the implications for governance and human-centered digital HRM. Chapter 5 exploits this analytical framework to provide a comprehensive account of the existing TA process and its impediments, which subsequently serves as the foundation for the RPA-enabled reconfiguration discussed in Chapter 6.



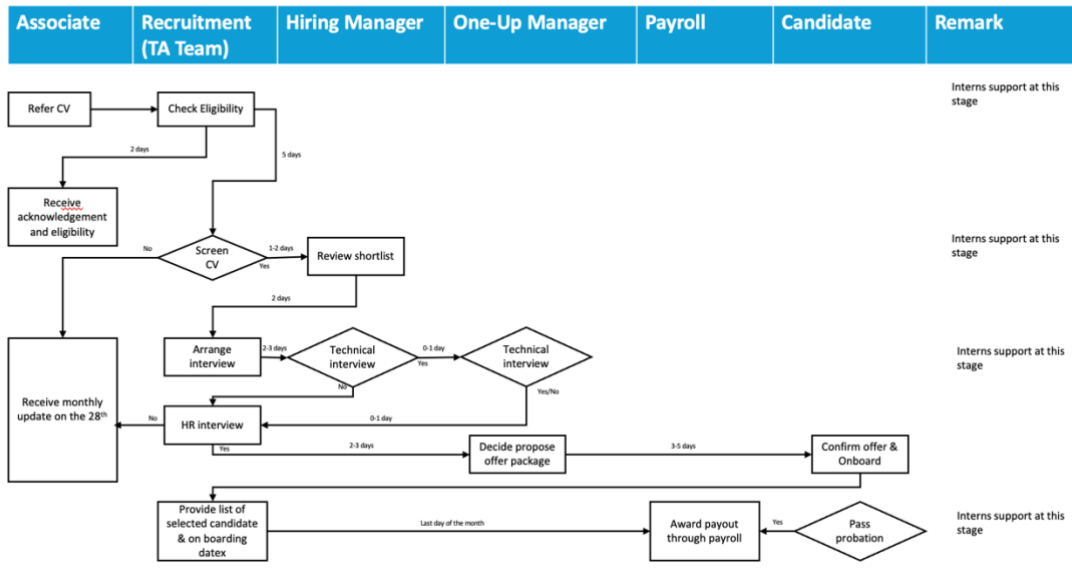
## **4 RESULTS**

### **4.1 CASE CONTEXT : current Talent Acquisition process at company B**

This section summarizes the existing Talent Acquisition (TA) process at Company B and identifies the primary bottlenecks encountered in practice before presenting the interview and survey findings. The text highlights the progression of candidates from application through CV screening, interview scheduling, and onboarding, utilizing internal process documentation and company flowcharts, while also illustrating the shared responsibilities of interns and specialists. This case context establishes the baseline "as-is" process for interpreting the qualitative results in sections 4.2 - 4.4, which interpret the proposed RPA-enabled redesign in Chapter 6.

#### **4.1.1 Organization Context**

The process flowchart is depicted in figure 12 based on internal secondary data from the case company. The diagram specifies the functions of the current system structure. A process diagram facilitates comprehension of the system, its operations, and the relationships among different roles. The internship will be terminated in May 2026 to reduce expenses, with specialists handling all responsibilities.



**Figure 4.** Current Workflow of Talent Acquisition Process at Company B (Company Secondary Data)

The recruitment process, illustrated in figure 4, initiates when candidates submit their CVs via the internal site. A Recruitment Specialist reviews each application within three to five days to ensure that the necessary requirements are satisfied. CVs that fulfill the criteria are submitted to the Hiring Manager for further evaluation; qualified individuals are shortlisted for interviews, whereas those who do not reach the standards are promptly informed.

Candidates that successfully complete the initial screening advance to the interview round, which may encompass several rounds, including technical or professional evaluations, discussions with the Hiring Manager, and, when applicable, a supplementary interview to check cultural compatibility and overall appropriateness. Upon completion of the interview process, the Hiring Manager identifies the successful candidate and presents a wage package. HR subsequently verifies the official start date, writes an offer letter, secures acceptance, and finalizes onboarding processes, following which the new employee is integrated into the payroll system.

Moreover, interns offer crucial assistance during the entire procedure. They support professionals in CV evaluation, coordinate interviews, manage candidate

communications, and follow up to ensure an uninterrupted advancement for selected applications. In high-volume internship recruitment, interns may perform initial screenings and interviews independently, providing input to specialists to ascertain which prospects progress to the final interview stage. For senior-level positions, interns facilitate meetings between candidates and recruiting teams and produce requisition forms that document essential new hire information, including personal details, departmental assignment, employee ID.

#### **4.1.2 Bottle-neck of current process at company B**

The planned elimination of internship jobs in 2026 will impose significant operational constraints on the recruitment process. The department is currently working without a specialized platform to manage the repetitive aspects of the hiring procedure. In this particular case, scheduling, status updates, and document preparation are executed manually, utilizing ad hoc tools that include email threads, spreadsheets, and Excel. This dependence on manual labor causes the workflow inefficient, increase the probability of errors, and requires a significant amount of specialized time.

With the elimination of the intern team, the duties previously assigned to these entry-level assistance staff must be assumed by senior recruitment specialists. The most pronounced impact will occur in high-volume hiring situations, where the inflow of candidates increases the burden. Specialists must take complete responsibility for coordinating interviews, which entails establishing suitable time periods for several interviewers, sending invitations, and verifying candidate presence. Furthermore, they has to supervise the advancement of each applicant through the selection phases, gather input from interviewers, and convey results to potential applicants.

Moreover, the administrative overhead will extend to encompass ongoing communication between candidates and the different hiring teams. During the recruiting process, specialists are required to act as the primary channel for information, ensuring that hiring managers obtain current candidate profiles, candidates are notified

of further steps, and any alterations to the schedule or requirements are communicated without delay. Furthermore, the preparation, verification, and management of requisition forms, which initiate the formal employment process, will be their responsibility. These forms require a significant level of accuracy, as errors can hinder approvals, impact budgets, and consequently delay onboarding.

Each activity is related to one another, a delay in interview scheduling might hinder feedback collecting, thus delaying requisition completion and extending the total hiring process. The aggregate impact of these interconnected operations results in an expanded burden that creates greater demands on recruitment specialists. The primary function of attracting and selecting talent remains. However, the increased administrative burden is anticipated to undermine productivity, negatively impact operational efficiency, and constrain ability of specialists to focus on strategic activities including talent sourcing, employer branding, and workforce planning.

## **4.2 Interview Findings**

The themes presented in sections 4.1.1 - 4.1.4 were generated from the manual coding procedure as detailed in section 3.4. Upon coding all interview transcripts and survey responses, codes regarding analogous issues were aggregated and examined iteratively. The codes pertaining to the simultaneous utilization of email, Excel, and HRIS, along with manual copy-pasting and restricted visibility, were categorized under Theme A (fragmented tools and manual data management). Codes related to delays in CV screening, scheduling, and onboarding data corresponded to Theme B (bottlenecks and error-prone areas); codes that designated rule-based tasks amenable to automation were deemed as Theme C (RPA-suitable tasks and human boundaries). Lastly, codes addressing fairness, data protection, governance, and change management were merged into Theme D (perceived risks and enabling conditions). This categorization aligns with the literature-based framework presented in Chapter 2, which differentiates

among contemporary digital HR processes, conditions for RPA applicability, and governance along with human-centered considerations.

#### **4.2.1 Theme A: Fragmented tools and manual data management**

All four interviewees characterized TA workflow as significantly reliant on a combination of heterogeneous tools rather than a unified end-to-end system. Even though, requisition forms are documented in the HRIS; in contrast, daily operations predominantly occur in Outlook, Excel, job portals, shared folders, and Teams. The senior recruiter (I1) stated, "Requisitions are in our HR system, but most day-to-day work is still in Outlook, Excel and job portals. We don't have a fully integrated ATS, so I update a master Excel file for each vacancy." The TA coordinator (I4) similarly noted that "scheduling is almost entirely done with Outlook and Teams calendars" while she keeps "an Excel tracker with candidate names, status and dates. In contrast, hiring managers receive CVs and feedback as email attachments or text within Teams messages, while the HR generalist (I2) employs "Excel checklists for tracking, and email to collect documents,". Additionally, some managers communicate scanned forms via messaging applications of the company, demanding manual saving.

This scattered tool ecosystem necessitates considerable manual data management across all positions. Three of the four interviewees explicitly indicated that they entered identical information repeatedly across various systems. The senior recruiter remarked, "For some jobs we get hundreds of CVs and I have to open each file, check basic criteria, and copy information into the sheet," and later added, "For every candidate I touch the data at least three times: first in the CV, then in my Excel tracker, and again in the HR system. If I miss one update, nobody sees the real status.". Moreover, HR generalist indicated a recurring issue with onboarding: "I often have to send reminder emails, chase missing documents and re-type the same data into several systems," highlighting that the same personal information is present in email attachments, Excel checklists, and HRIS fields. The TA coordinator characterized her responsibilities as "copy-paste

work," updating data, invitations, and shared folders as candidates progress through the process.

In addition, transitions between stakeholders exacerbate fragmentation and also restrict visibility. All interviewees indicated several instances where information is delivered via email or informal messages instead of through system workflows. The recruiter (I1) identified the most significant phases as "when the requisition is approved and comes to TA, then between me and the hiring manager when I send the shortlist and get feedback, and after offer acceptance when I hand over to HR admin and payroll for onboarding." Similarly, HR generalist (I2) indicated that she receives the hand-off from recruitment, which includes the "selected candidate and offer details," and subsequently transfers this information manually to payroll, IT, and managers. Consequently, hiring manager (I3) stated that following the confirmation of the hire, he is "less involved; I just get copied on some onboarding emails," and observed that he lacks a real-time overview of candidate status. Continually, TA coordinator (I4) articulated their experience of being "in the middle of several hand-offs... from recruiter to hiring manager for interview invitations, then back with feedback, and finally from recruiter to HR admin when the candidate is hired," with the majority of this coordination occurring via email threads and Excel updates instead of integrated processes.

Indeed, these accounts reveal the same trend across all four interviews: simultaneous utilization of email, Excel, HRIS, and collaboration tools, recurrent manual input of identical information, and dependence on individuals to recall sending updates and modifying trackers. This theme exhibits RPA literature regarding "swivel-chair" tasks and fragmented HRIS environments (Lacity et al., 2016; Syed et al., 2020) and offers specific instances from Talent Acquisition demonstrating how such fragmentation leads to inefficiency and susceptibility to errors in the contextual framework.

#### **4.2.2 Theme B: Bottlenecks and error-prone areas in three TA sub-processes**

Throughout the interviews, participants consistently identified the primary delays and quality issues in three subprocesses: CV screening, interview scheduling, and the preparation of onboarding and requisition data. All four interviewees cited at least one of these as a frequent source of inefficiency, with the recruiter (I1) and TA coordinator (I4) concentrating on screening and scheduling, while HR generalist (I2) raised issues related to onboarding data.

The senior recruiter and the hiring manager characterized the initial phases of CV screening as time-consuming. The recruiter (I1) stated, “for some jobs we get hundreds of CVs and I have to open each file, check basic criteria, and copy information into the sheet,” and noticed this task is concentrated in the initial days following a vacancy announcement, resulting in workload surges. She noted that delays increase when requirements lack clarity: “We lose time in initial screening when there is a large volume and unclear criteria.” Also, the hiring manager (I3) remarked that if the shortlist is not established promptly, “we sometimes have to go back to the pool because the first candidates already accepted offers elsewhere,” delaying in initial screening with the likelihood of losing qualified candidates.

Although all four interviewees described in different words, they agreed that interview scheduling and rescheduling as a second significant bottleneck. The hiring manager (I3) indicated that “interview rounds sometimes take weeks because my agenda is full and we need to coordinate with other panel members,” while TA coordinator (I4) mentioned that “rescheduling is a big source of delay. If someone cancels late, I have to find a new slot, inform everyone, and update all records manually.” The recruiter (I1) affirmed that “interviews get delayed when it’s hard to match the availability of managers and candidates,” while the HR generalist (I2) remarked observing “a long email chain” whenever interview schedules are altered. These accounts emphasize that work scheduling is both repetitive and administrative, yet it consumes time and results in further delays in the process.

A third step that was prone to errors, according to HR generalist (I2) and recruiter (I1), was onboarding and requisition data. HR generalist stated that “delays often happen between offer acceptance and onboarding because candidates are slow to send documents or managers forget to confirm details like cost centre or equipment needs.” She indicated that absent or erroneous information has immediate repercussions: “If one field is missing or wrong , for example bank account, tax code or start date then payroll or IT may not set things up correctly.” Adding to this, the recruiter stated that she must to “go back to candidates to correct spelling or ID numbers,” and that updates must be made “in the Excel checklist and in the HR system,” , thereby heightening the risk of inconsistency.

Additionally, participants explained how various stakeholders are impacted by these errors and bottlenecks. The recruiter (I1) observed that “it creates overtime and stress because we spend more time on admin than on engaging candidates. It can also damage our image if candidates wait too long for feedback.” HR generalist (I2) remarked “frustrate new hires and managers” and “when contracts or systems are not ready on day one, people question our professionalism.” The hiring manager (I3) acknowledged that he perceives recruitment as slow, but noted, “I know part of it is because HR is doing manual work.” TA coordinator (I4) noted that these challenges render her role “very reactive... I spend my day fixing small issues instead of improving the process,” and mentioned that candidates “occasionally send complaints about late responses or confusing invitations.”

Overall, Theme B indicates that all four interviewees consistently identified three sub-processes: CV screening, interview scheduling, and onboarding/requisition data preparation as the focal points for delays and errors, albeit each role perceives them from a different perspective. This pattern endorses the subsequent RPA design decision to prioritize these sub-processes for automation, consistent with literature advocating for RPA implementation on high-volume, rule-based tasks where bottlenecks and error risks are prominent.

### 4.2.3 Theme C: RPA-suitable tasks and human boundaries

Each respondents differentiated between jobs deemed appropriate for automation and jobs need to remain by human Three attendees (I1, I2, I4) underscored that rule-based, repetitive tasks represent the primary potential for RPA, while all four said that the evaluation of applicant suitability and ultimate hiring decisions should remain with humans.

The senior recruiter (I1) proposed that “initial CV screening against basic criteria like education, years of experience or language level could be pre-filtered by a robot, so I only review the most relevant profiles.” HR generalist (I2) emphasized onboarding data, stating, “A robot could extract data from the candidate’s form and CV and populate the HRIS and onboarding checklist automatically, reducing manual typing and checks.” In the following, TA coordinator (I4) saw the potential for automating regular communication and record-keeping: “Standard emails, calendar bookings, updating status in the tracker, and reminding candidates to send documents are all tasks that could be automated.” The hiring manager (I3) underscored the importance of scheduling, suggesting that “automatically sending interview invitations and reminders based on predefined time slots would be helpful. My judgment is really needed in interviews, not in coordinating calendars.”

Simultaneously, human limits were defined remarkable consistency. All four interviewers indicated that gauging general compatibility, conducting interviews, and making final determinations should remain non-automated processes. The recruiter (I1) said that “evaluating the overall fit of the candidate motivation, communication style, cultural fit requires human contact.” Plus, hiring manager (I3) confronted “conducting interviews, giving feedback and making the final hiring decision must stay with people. These decisions have long-term impact on the team.” HR generalist (I2) emphasized “often need reassurance and context that a robot cannot provide” when addressing contracts and personal inquiries. And TA coordinator (I4) remarked “handling sensitive

or exceptional cases, like candidates with special circumstances or senior roles, should be done by recruiters, not automation.”

In summary, Theme C demonstrates a shared division of labor: all four interviewees insisted that interpretive, relational, and high-stakes decisions must continue to be performed by humans, while three of them placed RPA primarily on high-volume, rule-based tasks like CV pre-screening, data transfer, scheduling, and standard communication. This pattern corresponds with literature on human-in-the-loop RPA and human-centered HR automation, thus informing the design of the RPA framework in the subsequent chapter, where robots are suggested to assist but not substitute recruiter and management judgment.

#### **4.2.4 Theme D: Perceived risks, governance needs and enabling conditions**

The concluding topic reflects respondents' apprehensions about the adoption of RPA in TA and the organizational prerequisites they consider essential for its proper deployment. All four participants indicated interest in the prospective efficiency improvements from automation; nevertheless, each expressed concerns on fairness, data security, role transformations, and governance.

Regarding risks and justice, two respondents (I1, I3) voiced significant concern about the potential for excessive dependence on inflexible regulations or automated decision-making. The recruiter (I1) cautioned that “if bots screen CVs using very rigid rules, we might miss non-traditional but promising candidates. Transparency about criteria is essential.” Hiring manager (I3) claimed that “wouldn’t want automation to make final decisions or reject candidates without human review,” pointing to potential “fairness and liability issues.” HR generalist (I2) expressed the most significant concerns over data privacy, asserting that “robots would handle sensitive personal information, so access rights and logging must be very strict.” TA coordinator (I4) emphasized the dangers associated with roles and change management, noting that “some colleagues are afraid

automation will reduce the need for coordinators,” and adding that there needs to be “clear communication about expectations and reskilling.”

In conversations on enabling circumstances, all four respondents identified at least one organizational prerequisite, with three special highlighting the necessity of process standardization and governance. The recruiter (I1) contended that “we need clear process standards first. If everyone works differently, it’s hard to automate,” the variability in individual work methods complicates automation, hence associating standardization with the practicality of RPA. HR generalist (I2) underscored “strong data governance and collaboration between HR, IT and legal. There should be clear ownership of each automated step and regular audits.” Hiring manager (I3) stressed the change management, stating that ““managers must understand what the robots do and trust the outputs; otherwise they will bypass the system.” Lastly, TA coordinator (I4) proposed “we would need a small central team to manage RPA, monitor incidents, and continuously improve the scripts,” alongside “guidelines for what must always be checked by a human.”

Theme D indicates that, although each participant focused different features, there is a general consensus that the implementation of RPA in TA requires explicit process standards, established ownership and control, stringent data security measures, and intentional change management. These parameters reflect the governance and human-centered criteria outlined in the RPA and digital HR literature, establishing definitive standards that are integrated into the proposed RPA-enabled TA process in Chapter 6.

### 4.3 Survey Results

The qualitative survey enhances the empirical viewpoint by collecting insights from a wider range of persons engaged in the TA process at company B, beyond the four interviews. A total of 20 respondents completed the poll, including jobs like recruiters, TA experts, HR administration and payroll personnel, HRBP, hiring managers, HR IT support, or associated HR services. This research used manual coding facilitated by Excel, where the matrix structure allowed for capabilities such as filters, tables, and basic charts to summarize the frequency of each code and topic among respondents and process steps. The replies were manually coded using the coding methodology outlined in section 3.4 and input into an Excel matrix with columns for case ID, role, question, raw extract, code, and theme, facilitating direct comparison with the interview data. This expanded information enables the identification of whether the bottlenecks, automation prospects, and circumstances recognized in the interviews are also evident across the larger TA process environment.

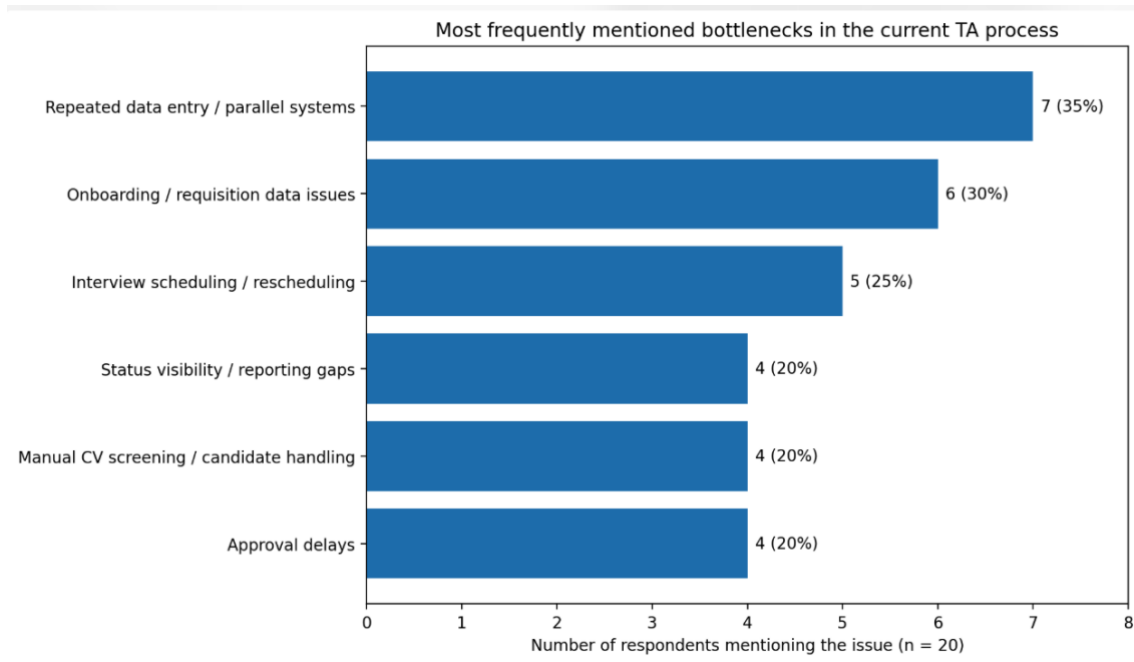
A prominent theme in the survey responses is the disjointed structure of the existing Talent Acquisition procedure. Participants consistently mentioned the simultaneous utilization of email, Excel, SAP or HRIS, Teams, shared directories, templates, approval mechanisms, and, in certain instances, paper forms. Recruiters and talent acquisition professionals reported frequent updates of applicant information across spreadsheets, email communications, and internal HR systems, whereas HR administration respondents mentioned distinct templates, forms, and manual data entry for contract preparation and onboarding. Hiring managers and support personnel also indicated restricted real-time insight on candidate status and process advancement. The survey responses collectively suggest that the existing TA process relies on various unconnected tools instead of a unified workflow, and this fragmentation directly leads to redundant tasks and coordination delays.

The survey further indicates that the primary bottlenecks are located in three process areas: CV screening, interview scheduling, and the generation or transfer of new-hire

information. During the screening phase, participants reported engaging in repetitious CV verification, downloading, organizing, renaming, and the manual input of applicant data into trackers or SAP. During the scheduling phase, the predominant concern was the iterative coordination of interview schedules among recruiters, candidates, and hiring managers, particularly when managers are occupied or when rescheduling becomes necessary. During the onboarding and administrative transition, respondents noted incomplete requisition forms, absent personal information, redundant data entry across many systems, and inaccuracies in dates, addresses, tax details, salary fields, or cost-centre information. The observed patterns indicate that the principal inefficiencies in the existing TA process derive not from a singular activity, but from the recurrent exchange of information among several actors and systems.

The coded survey results were compiled in Excel to determine the percentage of each bottleneck reported by the 20 respondents; these descriptive counts are shown in Figure 5 and are derived from manual coding.

Figure 5 illustrates the most commonly cited bottlenecks observed in the coded survey results. The data indicates that the most commonly reported concerns were repetitive data entry across concurrent systems, onboarding or requisition data inconsistencies and challenges related to interview scheduling or rescheduling. The findings align with the interview results and affirm that the existing process is predominantly affected by coordination and information transmission activities rather than by judgment-intensive HR responsibilities. The survey results corroborate Theme B from the interviews, affirming that redundant data input, onboarding data complications, and interview scheduling are seen as the primary impediments across a broader range of occupations.



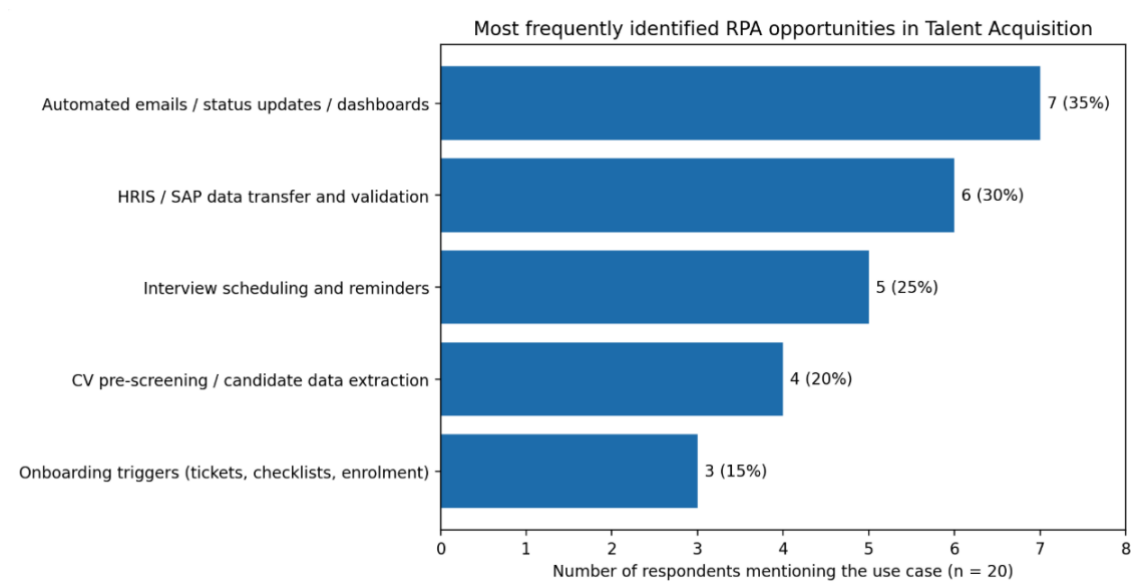
**Figure 5.** Most frequently mentioned bottlenecks in the current Talent Acquisition process

The survey shows the effects of these limits on various roles. Recruiters and TA experts encounter them as monotonous administrative duties, less opportunities for applicant engagement, and difficulties in ensuring accurate progress monitoring. Hiring managers recognize prolonged feedback cycles, scheduling challenges, and insufficient visibility into applicant advancement. While HR administration, payroll, and support personnel have issues with missing, delayed, or erroneous onboarding information, impacting contract preparation, account establishment, payroll readiness, and initial-day onboarding. The findings demonstrate that inefficiencies in TA have cascading consequences across the HR support framework, extending beyond recruitment itself.

The survey responses indicate robust support for the notion that numerous TA operations are suitable for robotic process automation (RPA) in the context of digitalization and automation. The majority of proposed use cases are characterized by repetition, adherence to rules, and digital execution. During the screening phase,

participants mentioned the automation of fundamental CV pre-screening based on established criteria, the extraction of candidate data, and the integration of authorized information into internal systems. In interview coordination, participants emphasized verifying calendar availability, creating time-slot suggestions, dispatching interview invitations and reminders, and updating status data. Throughout the onboarding and requisition process, respondents identified the possibility for robots to examine authorized forms, transfer validated data into SAP or HRIS, produce standard papers and emails, and initiate onboarding checklists, IT requests, and payroll changes. These data validate the principal assertion of this thesis that the most significant automation prospects are focused on three subprocesses: CV screening, interview scheduling, and the preparation and transfer of new employee information.

Figure 6 illustrates this tendency, summarizing the most commonly cited RPA possibilities in the coded survey results. Participants predominantly connected RPA with automated emails and status updates, data transfer and validation in HRIS or SAP, and assistance with interview scheduling. This indicates that the practical benefits of RPA are recognized not only in time efficiency but also in enhancing consistency, visibility, and inter-system cooperation within the TA process. This trend reflects Theme C in the interview data, where individuals also highlighted rule-based screening, data transfer, and standardized communication as the principal activities suited for RPA.



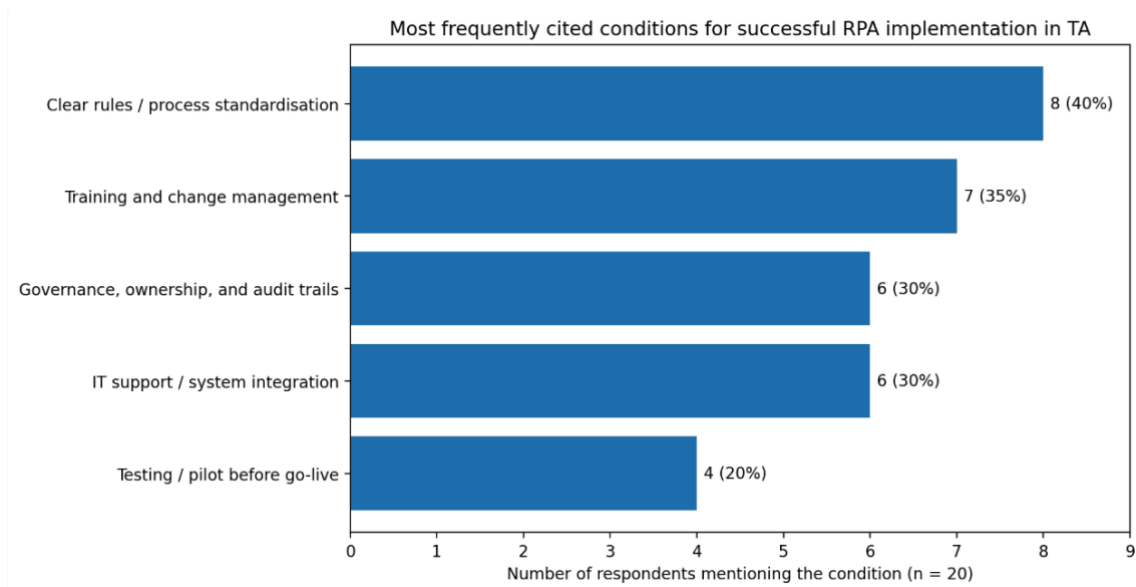
**Figure 6.** Most frequently identified RPA opportunities in Talent Acquisition

The results of survey indicate that respondents establish distinct boundaries about automation. Final recruiting decisions, interviews, evaluations of technical and cultural compatibility, clarification of contract particulars, compensation negotiations, strategic workforce planning, and the management of unique or sensitive cases were uniformly identified as responsibilities that need to be retained by humans. This indicates that respondents do not perceive RPA as a substitute for recruiters or managers, but rather as a support tool for systematic, repetitive, and administrative tasks. The survey thus validates the human-centered perspective established in the literature study, which contends that technology should augment professional judgment rather than replace it.

The survey additionally provides a comprehensive overview of anticipated advantages, apprehensions, and requirements for implementation. Many respondents anticipated that RPA would relieve recruiters and administrators of monotonous activities so they could concentrate on more valuable responsibilities. Participants consistently connected automation to accelerated processing times, reduced human mistakes, gained consistent data, and unambiguous status monitoring. Simultaneously, respondents highlighted issues over data privacy, the potential application of outdated

or too stringent regulations, inaccurate mapping of data categories, excessive filtering of potentially qualified individuals, and the risk that automated communication may become excessively impersonal. Moreover, numerous responders underscored the significance of governance, standardization, and supportive conditions for implementation.

Figure 7 summarizes these enabling factors, indicating that respondents predominantly emphasized clear business rules and process standardization, succeeded by training and change management, governance and auditability, and IT assistance or system integration. The figure illustrates that effective RPA adoption in TA is regarded not only as a technological obstacle, but also as an organizational and managerial issue necessitating cooperation, ownership, and user preparedness. In line with Theme D, which emphasized process standardization, ownership, and change management as essential enabling factors for RPA in TA, the focus placed on specific requirements, training, governance, and IT support remains constant.



**Figure 7.** Most frequently cited conditions for successful RPA implementation in Talent Acquisition

The survey results corroborate and enhance the interview findings in three significant aspects. Initially, they identify that the existing Talent Acquisition process at B is fragmented across many tools and significantly reliant on manual coordination. Secondly, they emphasize that the most appropriate automation potential are focused on CV screening, interview scheduling, and the management of onboarding or requisition data. Third, they demonstrate that respondents in various jobs prefer a model where automation assists in ordinary process management, while human participants maintain authority over judgment-intensive decisions, applicant assessment, and personal communication.

The survey findings support the four themes drawn from the interviews and provide quantitative support for prioritizing RPA design in CV pre-screening, interview scheduling, and onboarding data preparation, all under disciplinary governance and human supervision.

## **4.4 Comparative analysis of interview and survey results**

This section synthesizes the thematic interview findings with the qualitative survey results to compare the two data sources and highlight areas of convergence, supplementary insights, and qualifications. The interview data offer an in-depth process-level examination of the execution of TA process at Company B, whereas the survey expands the analysis by incorporating a spectrum of organizational roles engaged in recruitment, onboarding, payroll, HR administration, and associated support functions. The comparison employs the established thematic framework from sections 4.1 and 4.2, concentrating on fragmented tools and manual approaches, bottlenecks in screening, scheduling, and onboarding data, duties suited for RPA, in addition to human limitations, risks, and facilitating conditions. The comparison analysis regards the interview and survey data not as distinct findings, but as two complementing empirical sources that enhance the same interpretation of the case.

### **4.4.1 The convergence between interview and survey**

The interview and survey results indicate a notably unbalanced Talent Acquisition process that depends on many parallel tools instead of a single system. In all datasets, respondents often mentioned using email, Excel, SAP or HRIS, Teams, shared files, templates, and approval tools in tandem. The interviewed material details this fragmentation in further detail, shown by reports of periodic manual updates, limited access of process status, and the need to handle duplicate information across systems. According to the poll findings, these circumstances arise in a number of positions, including payroll, recruiting managers, HR administration, and HR IT support. This indicates that the TA process is inefficient not due to a single malfunctioning job, but because information continuously circulates across disparate systems and stakeholders.

A second significant area of convergence is to the detection of bottlenecks within the existing process. Both data sources emphasize the same three areas of concern: CV

screening, interview coordination, and establishing or transfer of new employee information. The interviews elucidate the processes behind these obstacles, including the time requirements of recurrent screenings, the challenges of iterative interview scheduling, and the hazards linked to absent or inadequate onboarding data. The poll demonstrates that across functions, a wider group of respondents find these processes to be exceedingly time-consuming, repetitive and error-prone. This convergence signifies that the three main sub-processes outlined in this thesis are acknowledged not just from a recruitment aspect but are also recognized within the overall Talent Acquisition support network.

When it comes to the tasks that can be automated, the evidence from both sources likewise converges. Respondents uniformly linked RPA to repetitive, systematic, rule-based, and digitally conducted work in both interviews and the survey. The duties include gathering applicant information, doing initial CV screenings based on established criteria, creating interview invites and reminders, verifying calendar availability, updating recruiting statuses, validating forms, and uploading authorized data into SAP or HRIS. Simultaneously, interviewers and survey respondents clearly differentiated these automation candidates from tasks that need to remain human-led, including applicant evaluation, interviews, assessment of fit and motivation, wage negotiation, and the management of unusual or sensitive instances. The relationship of the two datasets supports the incorporation of RPA task-suitability criteria as a fundamental analytical element of the thesis framework.

#### **4.4.2 Supplementary evidence provided by the survey**

The interviews provide detailed insights into process flows, however the survey contributes information about the impact of TA inefficiencies on associated organizational duties. HR administration respondents highlighted issues with missing

forms, inadequate personal information, and manual data input. Respondents associated to payroll said that delays or inaccuracies in onboarding information impact payroll processes, whereas HR IT personnel emphasized the manual connections between recruiting data and the main HR system. Additional support functions indicated downstream effects on onboarding checklists, training enrollment, and the uniformity of HR reporting. By demonstrating that TA inefficiencies have downstream operational consequences throughout the HR support network rather than just inside the recruiting team, these additional insights augment the interview results.

The survey expands the range of key automation concepts. The interviews concentrated on three key redesign areas: CV screening, interview scheduling, and onboarding data management. Conversely, the survey presented supplementary operational recommendations, including automated dashboard updates, version control for approvals, IT ticket generation, automatic onboarding checklists, triggers for training enrollment, data validation prior to payroll, and standardized process-level KPIs. These enhancements do not alter the central emphasis of the proposed solution but enrich comprehension of how a future RPA-enabled TA process may provide advantages beyond the immediate recruiting team. The survey serves as an auxiliary resource that expands the operational perspective of the three main sub-processes outlined in sections 4.1 and 4.2.

#### **4.4.3 Tensions and qualifications**

Although the two datasets are largely aligned, the comparative analysis also reveals some qualifications. First, the interviews concentrate on workflow logic and recruiter workload, whereas the survey, because of its broader task coverage, places more emphasis on downstream integration, governance and cross-functional process consistency. Second, while both data sources support automation in the same three

core process areas, survey responses show more variation in how ready different units feel for implementation. Some participants noted that local or plant-based hiring still relies on paper forms, manual handling or informal communication channels, suggesting that the practical feasibility of RPA may vary by sub-context. Third, several survey respondents warned that automated support could unintentionally exclude candidates with limited digital access, embed outdated rules or encourage over-reliance on system outputs if the underlying process is not standardised. These concerns do not challenge the proposed RPA focus but indicate that the future solution should be implemented as a controlled and context-sensitive redesign rather than a uniform technical rollout.

A further qualification relates to the required level of organisational maturity for implementation. The interviews highlighted the importance of governance, fairness and clear role boundaries. The survey supports this view but places even stronger emphasis on practical enablers such as role-based access control, version control, audit trails, standardised process definitions, user training and close collaboration between HR and IT. Overall, the findings indicate that technical automation alone is insufficient unless corresponding process rules and data standards are also established. This reinforces the human-centred and managerial dimensions of the thesis framework, showing that RPA deployment depends not only on technological feasibility but also on organisational readiness.

#### **4.4.4 Implications for the research question and proposed solution**

It is crucial to take into account that throughout the research period, Company B had not yet utilized RPA in Talent Acquisition. The interview and survey data therefore represent stakeholders' experiences with a completely manual 'as-is' process, together with their expectations, anticipated possibilities, and apprehensions over prospective automation. The solution provided in this part should be interpreted as an analytically constructed design for a potential RPA-enabled Talent Acquisition process, rather than representation of an existing system.

The comparison study has obvious consequences for the research problem. The current-state evaluation shows the primary structural deficiency in TA process is attributed to the aggregation of scattered systems, manual data transfers, and processes necessitating major coordination. Regarding process compatibility, both data sources reveal that the most promising RPA candidates are centered in three areas: CV screening, interview scheduling, and the preparation and transfer of new employee information. Regarding implementation prerequisites, both indicate that these automation prospects would yield enduring benefit only if supported by explicit business rules, data validation, governance frameworks, human supervision, and user preparedness. Collectively, these data endorse the specific redesign suggested in Chapter 5 over a generalized, indiscriminate automation strategy.

The findings suggest that the automation of CV screening should be confined to systematic, objective, and rule-based evaluations, while preserving human accountability for final determinations on applicant appropriateness. The evidence advocates for the automation of interview coordination via calendar reviews, reminders, and progress updates, since both interviews and survey answers indicate scheduling as a significant cause of delay. In the same way that requisition and onboarding data management automation is supported since both data sets demonstrate repetitive data input and incomplete forms produce substantial downstream consequences on HR administration, payroll and onboarding planning. The comparative study across all three domains indicates a consistent border condition: human actors must maintain responsibility for judgment-intensive decisions, candidate evaluations, sensitive communications, and exception handling. The proposed solution should be seen as a focused, human-supervised process re-engineering for Company B, rather than an entirely automated Talent Acquisition system, and it identifies a preferred future state rather than the company's existing practices of the company.

The comparison of survey and interview results reveals a significant level of analytical consistency between the two data sets. The interviews intricate process stages and causal processes, whilst the survey broadens the organizational scope of the results by illustrating that corresponding concerns and possibilities are recognized across various positions. The synthesis provides a more robust empirical basis for the RPA-enabled Talent Acquisition strategy suggested for company B and validates the chosen automation objectives in areas of convergence. The criteria delineate the governance, standardization, and human supervision requirements necessary for the practical implementation of the proposed solution.

The comparison demonstrates that the interview and survey findings are analytically consistent and mutually supportive. Their convergence provides a strong empirical foundation for the suggested RPA-enabled reconfiguration of CV screening, interview scheduling, and onboarding data management at Company B.

## 5 DISCUSSION

This chapter discusses the empirical results about the study topic and the current literature on Talent Acquisition and Robotic Process Automation. It initially summarizes how the existing Talent Acquisition procedure at company B and the interview and survey results collectively address the study question. It further examines the theoretical implications, outlines practical implications through a proposed RPA-enabled process design, and concludes by detailing the primary constraints and potential directions for future study.

### 5.1 Summary of research findings

This primary research topic of this study examines how Robotic Process Automation might enhance the Talent Acquisition process at company B without compromising human judgment and applicant experience. Since Company B had not applied RPA in Talent Acquisition during the research period, the thesis does not evaluate actual automation results. It draws from empirical research of the manual process and the literature a set of recommended RPA-based workflows that might be adopted in the future to solve the observed bottlenecks. Chapter 4 illustrates that the existing process is disjointed across many systems, significantly relies on manual coordination, and depends on interns for numerous repetitive tasks in CV screening, interview scheduling, and onboarding data management. The anticipated discontinuance of internship positions appears to further exacerbate these shortfalls and elevate the administrative load on recruiting experts.

The qualitative interviews provide comprehensive insights into the practical experiences of these issues, especially among recruiters, hiring managers, and HR support departments. They emphasized the recurrent manual input of applicant data, time-consuming email communications for interview coordination, and persistent issues with incomplete or inconsistent onboarding information that impede contract preparation and system accessibility. The survey results broadened this perspective to encompass a

wider array of positions and validated that the same three sub-processes, including CV screening, interview scheduling, and onboarding or requisition data management, are seen as the primary bottlenecks throughout the larger TA support network.

The combined interview and survey data revealed that several problematic operations are repetitive, rule-based, and entirely digital, hence adhering to established criteria for RPA applicability. Simultaneously, both data sources repeatedly underscored distinct boundaries for automation: final hiring choices, applicant assessments, cultural fit evaluations, compensation negotiations, and the management of exceptional or sensitive instances should be retained by human operators. The findings thus support the perspective of RPA as a mechanism for automating structured procedural tasks and information exchanges, rather than serving as a replacement for human judgment.

Consequently, the research question can be addressed as follows. RPA can enhance the Talent Acquisition process at company B by focusing on three specific sub-processes: CV screening, interview scheduling, and onboarding data preparation and transfer. These tasks are repetitive and governed by rules and the automation should reduce administrative burdens while maintaining human oversight in highly critical decisions and candidate interactions. To actualize this potential, the instance illustrates that technological feasibility alone is inadequate, explicit business rules, data standards, governance frameworks, and user preparedness are essential requirements for the effective adoption of RPA.

## **5.2 Theoretical contributions**

This thesis contributes to three areas of existing research: process-oriented perspectives on Talent Acquisition, studies on RPA and digitalization in HR, and human-centered approaches to automation.

Firstly, the process-based TA literature frequently emphasizes the significance of cohesive workflows and integrated systems; meanwhile, empirical research typically concentrate either on recruitment marketing or on applicant tracking systems in isolation. The company B case highlights how inconsistency across email, spreadsheets, HRIS, and ad hoc templates generates inefficiencies not just in recruiting but also in subsequent HR administration, payroll, and IT onboarding. This reinforces the notion that TA should be perceived as a comprehensive process including several tasks and systems, with bottlenecks often occurring at the transition points when information and accountability shift between parties.

Secondly, the study reinforces and refines prior research on RPA in human resources. Previous studies tend to identify general use cases, such automated data input, form validation, and standardized communication, however offer few guidance on how to prioritize and integrate these use cases within a particular organizational environment. This thesis demonstrates how suitability criteria, including rule-based, repetitive, digital tasks, can be practically operationalized by precisely mapping RPA suitability to three specific sub-processes inside a case organization. This demonstrates that RPA opportunities are closely linked to process redesign, for instance, automating interview scheduling is only effective if calendar data and candidate contact information are dependable, and automating onboarding relies on standardized requisition forms and well-defined approval pathways.

Thirdly, the findings connect to human-centered viewpoints on automation. The interview and survey results indicate that employees across various levels are adaptable to RPA when it explicitly addresses everyday activities and is presented as a tool that enhances, rather than replacements, their abilities. Simultaneously, respondents expressed concerns around data privacy, excessive dependence on system outputs, and the potential exclusion of applicants with restricted digital access. This corresponds with extensive discussions on algorithmic decision-making and underscores that human

control, transparency, and the ability to reject automated recommendations are essential design concepts for RPA in HR.

The case indicates that RPA in Talent Acquisition should be viewed not solely as a technological intervention but as a socio-technical transformation that concurrently influences process structure, role boundaries, data integrity, and perceptions of equity. This supports literature advocating for integrated frameworks that incorporate process analysis, technological suitability evaluation, and human-centered design in the assessment of automation within HR.

### **5.3 Practical implications**

The results address the study question and offer practical implications via a proposed RPA-enabled design for the Talent Acquisition process. These concepts have not been executed at Company B, they are offered as consulting-based recommendations that may guide company future decisions about the use of RPA in TA. The study converts empirical findings on the existing 'as-is' process into a future 'to-be' framework that focuses automation on precisely defined, high-volume, rule-based jobs, while maintaining human judgment in complicated and ambiguous situations.

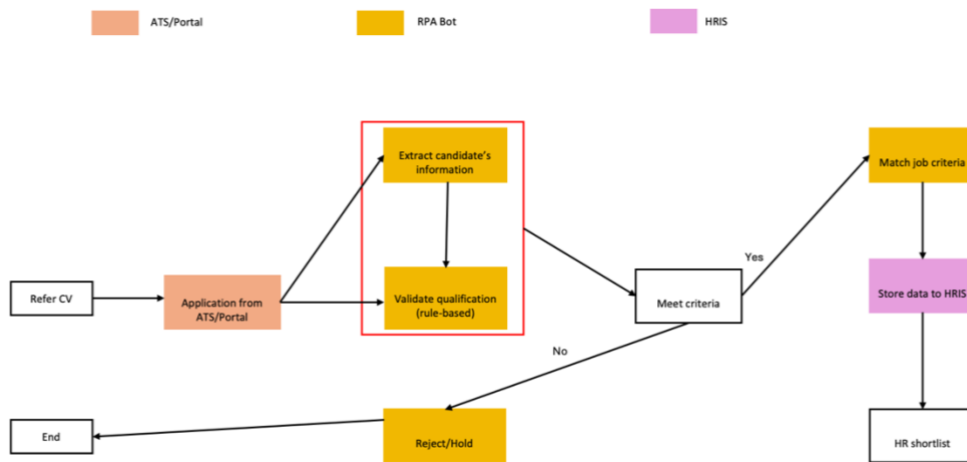
#### **5.3.1 Focus areas for automation**

The empirical investigation highlighted three sub-processes as priority areas for RPA: CV screening and initial eligibility assessments; interview scheduling and associated progress updates; onboarding and requisition data preparation and transfer.

In each of these areas, a significant portion of the workload comprises repetitive, rule-oriented operations, including verifying formal eligibility criteria, transferring data between systems, confirming calendar availability, and verifying standard forms. These duties are appropriate for RPA and take time that could otherwise be allocated to

candidate interaction, stakeholder outreach, and strategic HR duties. The design suggested therefore emphasizes the reassignment of basic tasks to software robots, while ensuring that recruiters, hiring managers, and HR professionals retain authority over content decisions and relationship management.

### 5.3.2 Proposed RPA-enabled CV screening flow



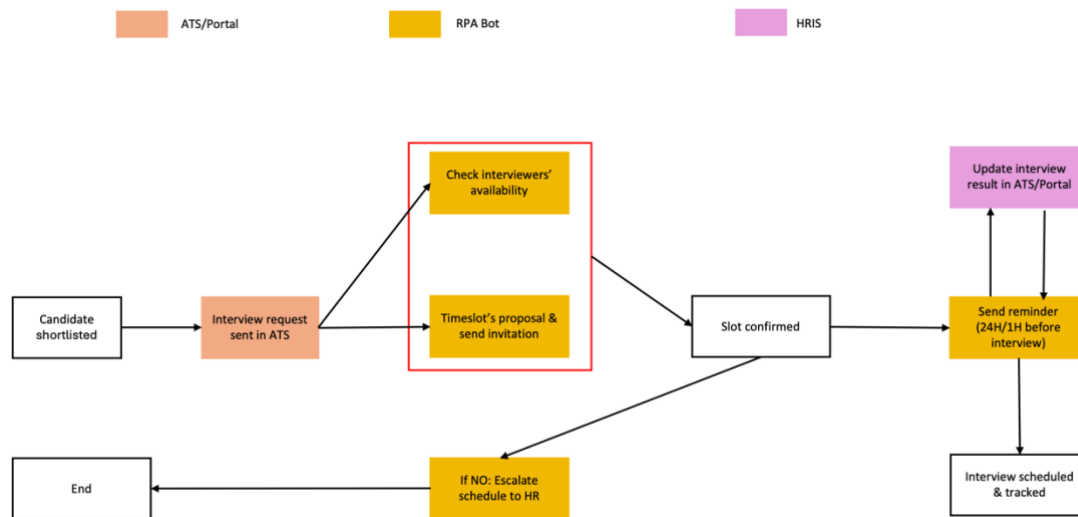
**Figure 8.** Proposed RPA-enabled CV screening workflow (by author)

Figure 8 illustrates a conceptual RPA-enabled CV screening workflow that Company B might implement if it choose to employ RPA in Talent Acquisition. Currently, recruiters and interns manually collect relevant details from each CV, verify eligibility, and shortlist prospects for further evaluation. The proposed RPA-enabled CV screening process would start working upon a submission of an application from candidate through the applicant tracking system or recruiting portal. An RPA bot would autonomously gather essential data, including education, years of experience, and language proficiency, and would evaluate these traits against established qualifying requirements for the position.

Candidates fulfilling the fundamental requirements will be matched with the proper position in the HR system and included in a shortlist for human evaluation. Recruiters

would now concentrate on qualitative evaluations, including motivation, career alignment, and potential, rather than only doing fundamental completeness evaluations. Candidates failing to fulfill the minimal criteria would be sent to a "reject or hold" category, and the bot may initiate standardized communication to inform them of the decision. This design pattern minimizes manual screening duration, enhances consistency in the application of criteria, and enhances transparency throughout the first phases of the process.

### 5.3.3 Proposed RPA-enabled interview scheduling flow

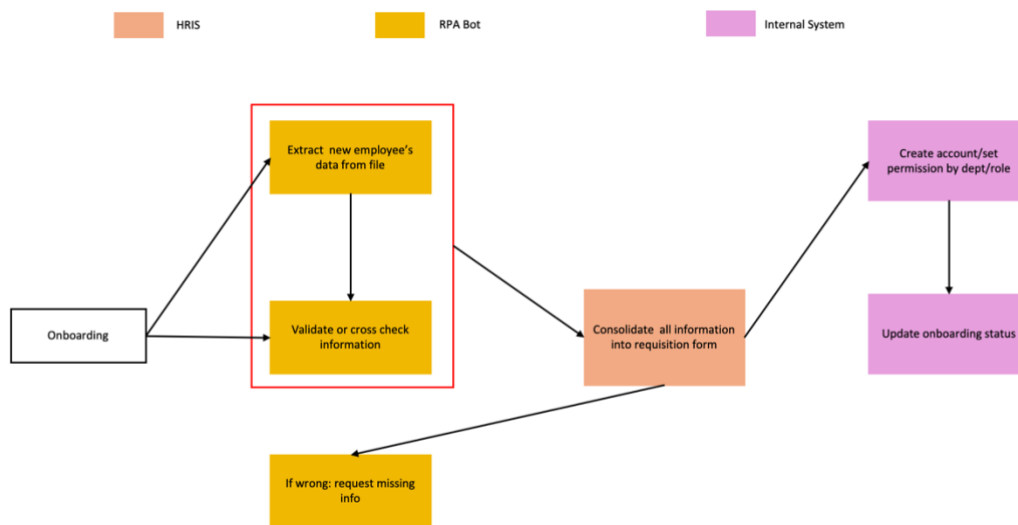


**Figure 9.** Proposed RPA-enabled interview scheduling workflow (by author).

Figure 9 illustrates a notional process for interview scheduling facilitated by RPA, suggested as a prospective solution for Company B, which empirical data has revealed as one of the most time-consuming and error-prone processes. At present, recruiters or interns arrange interview schedules by email and chat, consistently verifying availability with recruiting managers and applicants. In the suggested RPA-enabled workflow, scheduling will commence when a recruiter designates a selected candidate as prepared for an interview in the ATS.

An RPA component linked to the calendar system would ascertain the availability of all necessary interviewers within a certain timeframe and produce a selection of appropriate time slots. The system would thereafter transmit these options to the candidate by email or portal notice. After the candidate's selection of a time slot, the system would instantly send calendar invites to all participants and schedule reminder notifications before to the interview. If the applicant rejects all proposed dates or if complicated rescheduling is required, the request will be forwarded to the recruiter for manual processing. This method automates standard coordination while ensuring human supervision for deviations and retains the opportunity for personalized contact when necessary.

### 5.3.4 Proposed RPA-enabled onboarding and requisition flow



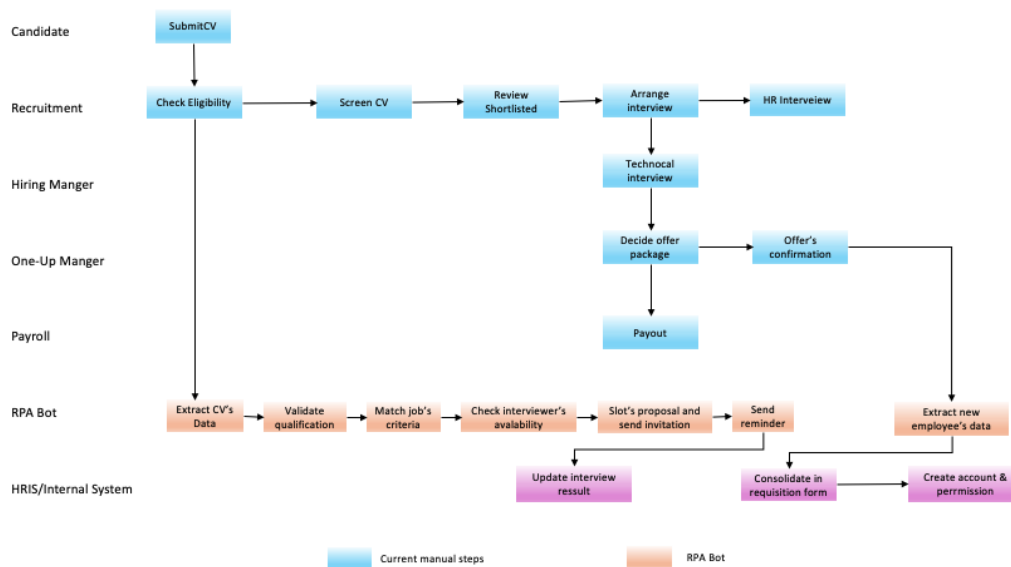
**Figure 10.** Proposed RPA-enabled onboarding workflow (by author)

Figure 10 illustrates a theoretical RPA-enabled onboarding and requisition workflow proposed as a potential design for Company B in future Talent Acquisition process. Currently, HR employees combined information from various sources into requisition forms, establish or request user accounts, and verify that payroll and other systems are updated, frequently involving considerable manual labor and potential for errors. The

suggested RPA-enabled onboarding process starts upon the acceptance of an offer from candidate and the confirmation of the start date from hiring manager.

An RPA bot would extract the information needed from the signed offer, the ATS, and related HR databases, evaluate the completeness and consistency of all essential fields, and build a standardized requisition form. Following successful validation, the bot will submit the form to the internal systems, where user accounts and access privileges will be established based on role and department. Status updates may be recorded in the HR system, enabling recruiters and hiring managers to track progress. In the event of missing or conflicting data, the bot will issue a message to the designated HR contact, who would correct the information prior to the bot resuming processing. This design pattern attempts to minimize redundant data entry, speed onboarding processes, and enhance the accuracy of information utilized by HR administration, payroll, and IT.

### 5.3.5 Summary of suggested automation focus areas



**Figure 11.** Suggested automation focus areas in the Talent Acquisition process (by author)

The suggested designs demonstrate different approaches across CV screening, interview scheduling, and onboarding (figure 11). It restrict automation to repetitive, rule-based, and thoroughly documented tasks; in addition to maintain human oversight over significant judgments and sensitive communications; they additionally depend on clear, standardized data formats and procedure regulations. For company B, executing such designs necessitates not only the technical creation of RPA scripts and system integrations but also efforts in process standardization, documenting of business rules, and human training to monitor and understand automated outputs.

From a comprehensive practitioner perspective, the case indicates that organizations should view RPA in TA not merely as a solely technological initiative, but as a systematic process restructure effort that first begins with the mapping of existing workflows and bottlenecks, subsequently prioritizes appropriate sub-processes, and ultimately implements automation in a logical, human-centric approach. The flows outlined here can function as reference models for other organizations facing similar difficulties, dependent on their adaptation to local procedures, rules, and system environments.

#### **5.4 Limitations and future research**

This thesis findings, as those of any single-case research, are constrained by many restrictions. The empirical data is confined to a single organization and a specific national setting, hence constraining the generalizability of detailed process features and role combinations. The survey sample, though varied in positions, is rather small and represents the viewpoints of employees who were selected to answer, thus introducing self-selection bias. A further constraint is that the proposed RPA-enabled designs have not been implemented or evaluated in reality at Company B, indicating that the thesis offers a theoretically and empirically supported recommendation rather than an assessment of actual RPA performance.

These constraints bring various paths for subsequent study. Initially, comparative case studies across organizations and nations could investigate whether comparable bottlenecks and RPA opportunities emerge in diverse TA environments and how contextual factors, such as labor market conditions, organizational size, or regulatory requirements, affect automation strategies. Secondly, longitudinal research examining the use of RPA in talent acquisition might yield information about real productivity improvements, shifts in role views, applicant experiences, and possible hazards such as algorithmic bias or excessive dependence on automated suggestions. Third, more efforts are required to develop governance and ethical frameworks for RPA in HR, encompassing issues of transparency, accountability, and appeal systems when automated processes impact prospects of applicants.

Despite these constraints, the thesis indicates that thorough, empirically based examination of contemporary processes and human perspectives can facilitate the development of RPA interventions that enhance efficiency while preserving the essential function of human judgment in Talent Acquisition.

## 6 CONCLUSION

This thesis analyzed the application of robotic process automation in HR operations to enhance efficiency in the Talent Acquisition process at company B. This thesis does not assess the outcomes of an actual RPA system, as Company B had not deployed RPA in its Talent Acquisition process during the research period. It employs empirical study of the current manual process and relevant literature to develop and reinforce a future-focused RPA-enabled Talent Acquisition process for the case company. This research employed a qualitative embedded single-case study design, integrating semi-structured interviews, an open-ended qualitative survey, and processes materials to examine the existing workflow, identifying its primary issues, and evaluate which components are most suited to automation. The research was directed by an integrated framework comprising information systems design principles, RPA task-suitability criteria, and a human-centered managerial standpoint on digital HR.

The results indicate that the primary inefficiencies in the existing Talent Acquisition process emerge from disjointed tools, redundant manual coordination, and duplicated data management among many stakeholders and systems. The process pressure is not confined to a singular activity; instead, it is disseminated throughout a workflow that relies significantly on email, Excel, SAP or HRIS, Teams, templates, and ongoing communication among recruiters, hiring managers, HR administration, and support operations. The study reveals that the most significant automation prospects are focused on three sub-processes: CV screening, interview scheduling, and the preparation and transmission of new employee information for onboarding and HRIS entry.

The research indicates that these three domains are highly suited to RPA due to their integration of features closely linked to automation compatibility: repetitiveness, structured data, rule-based reasoning, and digital execution. However, the data clearly indicate that Talent Acquisition cannot and should not be universally automatized. The final evaluation of candidates, interviews, assessment of compatibility and motivation,

compensation negotiations, and the management of sensitive or exceptional circumstances must rely on human judgment and remain under human oversight. The thesis advocates for a controlled human automation approach, in which software robots enhance administrative efficiency, while recruiters and managers maintain authority over decision-making and applicant engagement.

The study concludes that the effectiveness of RPA in Talent Acquisition is reliant on both technological feasibility and organizational preparedness. Standardized business standards, defined ownership, governance, training, auditability, and collaboration between HR and IT have emerged as essential requirements for execution. The case indicates that process discipline and organizational support are equally as crucial as the technology itself. RPA should not be regarded as an isolated technological solution, but rather as an integral component of a comprehensive process reform initiative that harmonizes structured automation with ethical digital HR practices.

The study finds that RPA might improve the efficiency of Talent Acquisition at Company B if implemented purposely and managed effectively. A focused redesign of the three identified sub-processes is thus advised as a prospective possibility, rather than a goal to automate the entire TA function. The thesis offers a practical future-state framework and consultancy-oriented suggestions for the case firm, based on its existing 'as-is' process and stakeholder opinions. The overall conclusion is that RPA possesses significant potential to enhance Talent Acquisition efficiency, provided it is structured according to the actual work framework, defined by explicit human responsibilities, and integrated inside a rigorous process environment.

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## **Appendice**

### **Appendix 1. Interview question**

#### **Section A: Role and context**

Could you briefly describe your role at B and how it relates to Talent Acquisition?

Which steps of the recruitment or hiring process are you personally involved in?

#### **Section B: Current Talent Acquisition process**

How would you describe the typical end-to-end Talent Acquisition process at B?

Which systems or tools (e.g. HRIS, ATS, Excel, email, Teams) are used in each main step?

Where do hand-offs occur between HR, hiring managers and other functions?

#### **Section C: Workload, bottlenecks and efficiency**

Which TA tasks do you find most time-consuming or repetitive in your daily work?

In which parts of the process do delays most often occur, and what usually causes them?

Where do you see the highest risk of errors or missing information (for example, data entry, approvals, communication)?

How do these issues affect recruiter workload, hiring managers, and candidate experience?

### **Section D: Digitalisation and RPA opportunities**

What kinds of digitalisation or automation initiatives already exist in HR or TA at B?

When do you think about your own work, which tasks could be handled by software robots or automation without losing important human judgement?

Which TA tasks do you believe should always remain human-led, and why?

What opportunities do you see for RPA specifically in the TA process (e.g. data transfer, document generation, scheduling)?

What concerns or risks would you have about using RPA in TA (e.g. data protection, fairness, transparency, job roles)?

What organizational conditions would be necessary for RPA in TA to work well here (skills, resources, governance, change management)?

### **Section E: Closing**

Is there anything else about the Talent Acquisition process or automation that you think I should understand for this study?

## **Appendix 2. Qualitative survey instrument**

### **Section A: Background information**

A1. What is your current role at B?

A2. In which department or business unit do you work?

A3. How many years have you worked at B?

A4. How often are you involved in recruitment or hiring activities?

A5. In one or two sentences, how does your work connect to recruitment or Talent Acquisition?

### **Section B: Experience with the current TA process**

B1. From your perspective, how does a typical recruitment process work in your area, from the moment a need for a new employee is identified until the new hire starts work?

B2. Which systems or tools do you personally use during this process (for example HRIS, ATS, Excel, email, Teams, job portals), and what do you mainly use each tool for?

B3 From your perspective, which parts of the current TA process work well, and why?

### **Section C: Bottlenecks, workload and quality**

C1. Which TA tasks do you find most time-consuming or repetitive in your work? Please give examples.

C2. Where do delays or problems most often occur in the TA process (for example, approvals, data entry, scheduling, communication)? How do these issues affect your work and the candidate experience?

C3. Are there steps where errors or missing information happen quite easily? Please describe when this happens and what the consequences are.?

#### **Section D: Digitalisation and RPA opportunities**

D1. What kinds of digital tools or automation are already used in TA or HR in your area (if any)? How helpful are they?

D2. Thinking about your own tasks, which activities could in your opinion be handled by software robots or automation without losing important human judgement? Please give concrete examples.

D3. Which activities in TA should always stay in human hands, and why?

D4. What benefits would you expect if RPA was used in the TA process at B (for example, time, quality, candidate experience)?

D5. What concerns or risks would you have about using RPA in TA (for example, data protection, fairness, transparency, job roles)?

D6. What support or conditions would be necessary for RPA in TA to work well here?

(e.g. training, IT support, clear guidelines, communication, management support)

#### **Section E: Closing**

E1. Is there anything else you would like to add about the Talent Acquisition process or the use of automation/RPA in HR at B?

### Appendix 3. Qualitative Coding Framework and Codebook

#### A3.1 Coding table structure

Both interview and survey data were coded in an Excel-based matrix. Each row represents one meaning unit (sentence or short paragraph) from an interview transcript or survey answer.

Table A3.1 summarises the columns used in the coding sheet.

Column	Description
Case ID	Each respondent is assigned an anonymous identification (e.g., I1-I4 for interviews and S1-S20 for surveys).
Role / unit	General overview of the respondent's role or department (e.g., recruiter, HR administrator, recruiting manager, HRIS support).
Source / question	Identifier of data source and question (e.g. INT_Q6, SURV_C2) to associate each extract with the guide or questionnaire.
Raw extract	A concise statement or brief excerpt describing specific idea about tasks, tools, difficulties, regulation, or automation.
Code	Concise label conveying the key points of the extract (e.g. "redundant data entry", "scheduled delay," or "data security issue").
Theme	Higher category classifications associated with relevant codes (e.g., "AS IS bottlenecks," "RPA suitable tasks," "governance and conditions").

#### A3.2. Thematic codebook for interviews and survey

Table A3.2.1 presents the example thematic codebook. The same themes were used for interviews and the qualitative survey.

Table A3.2.1. Thematic codebook

Theme	Code label	Definition	Extract
AS-IS bottlenecks	High-volume CV screening	Manually reviewing and verifying several CVs against fundamental criteria	“For certain positions, we get hundreds of CVs, and I have to open each one, look it over for basic requirements, and copy details into a sheet.” (I1 - Senior recruiter)
AS-IS bottlenecks	Scheduling and rescheduling effort	Time-consuming arranging of interview schedules and rescheduling among candidates and panel members	“Interview rounds can take weeks because I have a lot of things to do and need to arrange with other people on my panel..” (I3- Hiring manager) “A big cause of delay is rescheduling. I need to find a new time slot, let everyone know about it, and manually change all the records.” (I4 - TA coordinator)
Data & process quality risks	Duplicate/manual data entry	Re-entering same candidate or new hire information into several systems or Excel spreadsheets	“Reviewing repeated CVs and updating the Excel tracker along with the HR system with same information.” (S1- HR recruiter, survey) “A lot of the time, I have to send emails to remember people, look for missing documents,

Theme	Code label	Definition	Extract
			and type the same information into several systems again.” (I2 - HR generalist)
Data & process quality risks	Missing or incorrect onboarding data	Mistakes or missing information in new hire documents. that affects IT, salary, or onboarding day	“Looking for missed onboarding forms and making a number of documents by hand.” (S2 - HR admin/payroll, survey) “If one of the fields is blank or wrong, Payroll or IT may not set things up right..” (I2 - HR generalist)
AS-IS bottlenecks	Fragmented processes reliant on paper	Dependence on paper forms or several disparate systems that result in more processing and increased risk of loss	“Handling paper by hand; carrying forms from one department to another” (S6 - HR generalist, operations, survey)
RPA-suitable tasks	Guideline-based CV pre-screening	Employing clear and straightforward criteria to pre-screen candidates prior to human evaluation	“A robot could do the first screening of CVs based on basic factors like schooling, years of experience, or language level.” (I1 – Senior recruiter)
RPA-suitable tasks	Standard communication and status updates	Delivering standard invitations, reminders, and rejection emails, as well as updating trackers or systems.	“Auto-tasks can be used to send standard emails, make appointments on the calendar, update the tracker with new information, and remind people to send documents.” (I4 - TA coordinator)

Theme	Code label	Definition	Extract
			“Bots may send regular emails, status updates, and attach standard documents..” (S15 - TA support staff, survey)
Human-led activities	Evaluation of fit and final decisions	Evaluation-intensive tasks, such as interviews, feedback, and hiring choices, need to remain with humans.	“Conducting interviews, giving feedback and making the final hiring decision must stay with human.” (I3 - Hiring manager)
Governance & conditions	Governance, data protection and change management	Standardization, access control, transparency, and acceptance by stakeholders for RPA in TA	“Data protection is a major topic. Robots will deal with sensitive personal data therefore access rights and logging must be very tight.” (I2 - HR generalist) “Require good governance, control of access, and auditing of bot runs.” (S18 - IT HR support, survey)