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The Impact of Employees' Perspectives on Managing RPA - Technological Changes at Just Eat Takeaway

by

Van Bao Nguyen – student no. 467377

Examination Committee:

M. Janse - m.janse@saxion.nl

Dr. L. Collou - l.d.collou@saxion.nl

Enschede, the Netherlands

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Acknowledgement

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I hope you find this topic as interesting as I do.

Enjoy your reading!

Van Bao Nguyen

Executive Summary

Just Eat Takeaway is a fast-growing company in the food delivery industry, based in Amsterdam, the Netherlands. The company is introducing in the HR Operational Department a new robotic base technology that automates HR processes, which is called Robotic Process Automation (RPA) technology. RPA is a software technology that can perform rule-based tasks on-screen faster and more accurate.

There are many myths and concerns surrounding this system which stem from automation fears. If not carefully handled, apprehension could turn to resistance to change, thus leading to implementation failure. Thus, the research aims to investigate the employee viewpoints on change and robotic process automation from the very beginning of the implementation pilot to identify potential threats and measure the technology acceptance rate.

Implementing RPA is a technochange management project. The technology presents an improvement opportunity in organisational performance but will make changes to the way of work. Understanding if employees perceive this change positively or negatively would help Just Eat Takeaway develop an intervention plan to ensure a successful technological change.

This research is a qualitative study, using a semi-structured interview protocol to gather data. Ten HR Operations employees were interviewed for this research. They were asked questions related to experience, attitudes, alignment and organisational factors in which include variables correlated with adoption to change and technology acceptance.

Overall, there is a high level of openness to change and readiness to change, but the commitment to change is relatively low. HR employees are excited and looking forward to the project, as the technology can alleviate some mundane responsibilities. However, they are not actively informed about the change and very little participation in the project.

Three recommendations were formulated to enhance employees' commitment to change

- Advice about the implementation of a community to communicate and update technological change plans of JET to the employees in order to enhance effective two-way communications and commitment to change.
- Establish and develop a method that standardises the way of working with RPA that encourages employees' participation to increase commitment as well as ownership/autonomy.
- Evaluation of system usages – easiness to completely determine system acceptance (resulting in the advice with points for improvement for further research) and evaluate on the effectiveness of above-mentioned recommendations.

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List of Abbreviations

JET	Just Eat Takeaway
RPA	Robotic Process Automation
B2B	Business to Business
VR	Virtual Reality
AI	Artificial Intelligence
CEO	Chief Executive Officer
CFO	Chief Financial Officer
HR Ops	HR Operations
E2E	End to End
HRIS	Human Resources Information System
ATS	Applicant Tracking System
SMEs	Subject Matter Experts
IS	Information System
IT	Information Technology
TAM	Technology Acceptance Model
TRA	Theory of Reasoned Action
ICT	Information and Communication Technology
SOX	Sarbanes-Oxley Act
GDPR	General Data Protection Regulation
KPIs	Key Performance Indicators

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Chapter 1: Introduction

The first chapter gives an overview of the company Just Eat Takeaway (JET). JET is a fast-growing food delivery platform and currently implementing a pilot on a technology that is robot base in the HR Operations department. The nature of this new technology sets the foundation of the problem analysis, which is employees' anxiety and even resistance. Thus, the study aims to investigate the perspectives of HR department's staff members on this technology, based on the theory of Technochange Management, Resistance and Technology Acceptance.

1.1. Company Description

Just Eat Takeaway (JET) is a group company in the food delivery service in Europe, the Americans, and the Australian market. The organisation is in a business-to-business (B2B) market with over 580 thousand local restaurants, linking 98 million customers in 25 countries via websites and applications (Just Eat Takeaway, 2022). Just Eat Takeaway gives consumers the convenience of a wide range of local takeaway restaurants at their disposal, user-friendly interfaces that allow a meal to be selected in just a few clicks and multiple options of payment methods (Cash, Credit/Debit Card network, Paypal).

Thuisbezorgd.nl (original name) has become the leading online food supply market in the Netherlands, despite facing heavy competition from Deliveroo and Uber Eats. Takeaway.com (name changed in 2011) took over the German distribution service Delivery Hero in 2018, making it the industry leader in eastern neighbours and Israel (Talk Finance, 2019).

In February 2020, Takeaway.com spent £6.2 billion to finalise the merger with Just Eat (founded in Denmark in 2001) and expanded its market to Western Europe (Butler, 2020). The company also took over US company GrubHub for \$7.3 billion in the same year, making Just Eat Takeaway the largest food delivery group company in the world outside China (Browne, 2020). The company is based in Amsterdam, Netherlands and operates in offices in 25 locations.

Table 1 provides overall information about the organisation.

Table 1. *JET's Organisation Details*

Legal Residence	Amsterdam, the Netherlands.
Organisation type	Publicly Traded Limited Company.
Industry	Online food ordering.
Number of employees	Over 15,000 employees (not counting US employees and couriers)
Mission	To be the best food delivery company on the planet.
Vision	"To empower every food moment for our restaurant partners and consumers – from the family takeaway on Friday night to the daily morning coffee, and from lunch at your desk to a special 30 occasion at your local Italian."
Strategy	<ul style="list-style-type: none"> ❖ Being a world-class online food ordering and payment solution ❖ Providing the best product, restaurant choice and customer care ❖ Being a brand people absolutely love

Core values	<ul style="list-style-type: none"> ❖ Lead: global leader in the online food delivery market. ❖ Deliver: work together to ensure success and grow business. ❖ Care: care for customers and restaurant partners, ethical choices, and environmental initiatives.
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Due to a young and dynamic workforce, JET could rapidly develop internationally. In just nine years, the company has taken over competitors, expanded operations to 25 countries and consolidate the European market (value and opportunity, 2011) by prioritising growth over profit (Butler, 2021). With rivals being big and well-known organisations in the regions and the world, JET needs to differentiate itself to become customers' first choice. Thus, the company focuses on adhocracy, market differentiation and innovation.

However, young personnel are not the only factor influencing the expansion and industrial success at JET. Technology has a revolutionized impact on the food delivery industry (Skulocal, 2017) as it can increase convenience, thus attracting more customers. As a result, investment in new technologies has allowed the company to lead the wave of innovation in food tech (Bizclik Editor, 2020). Understand the strategy as well as being aware of the competition, JET has researched, adopted virtual reality (VR), artificial intelligence (AI) and robotics to ensure it stays ahead of the curve (Roderick, 2016) and will continue to find new technology services to enhance business quality (Airdorid, 2021).

1.1.1. HR Department

Globally, JET's HR Department has more than 700 employees (not counting personnel from the merger with US GrubHub). JET is a large multinational organisation, and the company is continuing to grow, thus require a substantial number of support workers to assist employees and business decision. Internally, the department's strategy is to be transformed into a scalable, high quality, increasingly digital and (cost) efficient global organisation that empowers the company by the end of 2022. JET's HR department reports to the Chief Financial Officer (CFO) instead of the Chief Executive Officer (CEO). The structure of the HR Department is illustrated in figure 1.

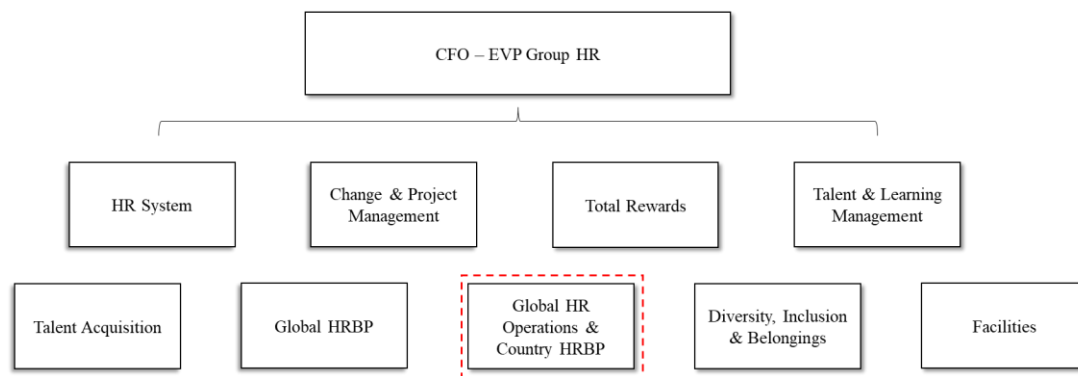


Figure 1. HR Department Structure

This study focuses on the HR Operations team. Figure 2 demonstrates the structure of the Global HR Operations division. HR Ops maintains employees' documents, the employment cycle, and acts as the first contact line with workers in the organisation. With a large number of employees, HR Ops filed hundreds of thousands of employees' legal documentations, answer HR queries that applicable to local regulations, as well as update all changes in employees' information to ensure data quality. As a result, it is necessary for HR Ops to utilise automations to increase efficiency and effectiveness.

One of the key priorities of Global HR Ops is to build digital processes solutions, and this is achieved through the help of the HR Operational Excellence team. Operational Excellence

supports HR Ops on a global scale in matters like data privacy, retention policy, end-to-end (E2E) process improvement and works coordinated with the HR System team. Operational Excellence's mission is to ensure global alignment on processes, operations and guarantee data quality & integrity allowing space for maximum efficiency through robotics and automation, delivering top quality to match high standards and market best practices.

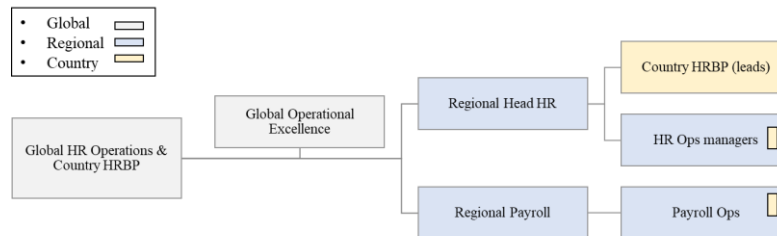


Figure 2. Global HR Operations Structure

1.1.2. HR Operations Technologies at JET

To ensure operation follows the fast development pace, the company's internal activities need to function smoothly and promptly without errors. Therefore, JET invests a great deal in Human Resources Information System (HRIS). HRIS is software for gathering, storing, preserving, accessing, and validating data regarding an organisation's human resources, personnel activities, and organisational unit characteristics in a systematic way (Walker, 1982). HRIS provides data or information that is requested by HR stakeholders and supports better HR decisions (Kovach & Cathcart, 1999). Deploying HRIS can help increase efficiency and profitability in the long run for both HR function and the organisations (Johnson & Gueutal, 2011).

Some of the HR software for HR Ops in JET include Workday (as ATS and employee management), ADP (as a payroll system), Jira (as a ticket raising system to support employees) and LinkedIn Learning, Know4Be (as a learning and development platform). JET is continuing to grow its HR landscape by implementing two new HR systems: a document management system called PeopleDoc and a Robotic Process Automation (RPA) system.

PeopleDoc is a cloud-based HR service delivery and document management platform designed exclusively for HR to simplify complex operations and improve compliance (PeopleDoc, 2022). The document Management system helps store, maintain, and remove employees' documents automatically based on the retention policy (instead of storing per employee's file on Google Drive as of now).

Robotic Process Automation (RPA) is a software robot that is built and configured by humans to perform administrative tasks. It can be understood as a virtual colleague that can learn, mimic, and then execute rules-based business processes, and automates manual, monotonous tasks online (UiPath, 2022). RPA helps tackle mundane and repetitive tasks that are required from HR Ops (such as transferring data from one system to the other, adding employees' details to a system, etc.), giving employees more time to focus on more value-added projects.

By effectuating two HRISs, a lot of administrative tasks could be removed from HR Ops. JET's management board envision that these two systems will increase data correctness as well as effectiveness, efficiency, and compliance with HR Ops. Furthermore, implementing RPA and document management helps HR Ops to optimise processes and gives more time for HR to focus on employees' service, which ultimately could lead to enhancing HR wellbeing and employees' experiences. If the way of working is not automated, HR Ops would waste time on repetitive duties, thus limiting them from performing valuable tasks.

1.2. Problem Analysis

1.2.1. Project overview

This paper focuses narrowly on RPA since this is a robotic-based technology, which could be surrounded by myths or negativity from employees. Considering that the software bot can alleviate some tasks from the HR department, hence implementing RPA could cause changes to the organisation in terms of job design, HR department, company culture, etc.

Currently, the technology is under the prototyping stage in HR Ops, under the management of the HR Operational Excellence. RPA pilot is in scope for nine countries, which are part of the four regions that the company operate in (North-West Europe, Centre Europe, South-East Europe and the UK). These countries are in scope since the chosen HR Ops processes are merely identical and they use the same system, thus avoiding intricate configuration.

Moreover, multiple locations can start to apply the automation ways of working by just deploying one bot. Three employees of HR Ops are representatives for each region (the same employee represents UK and CE) and act as subject matter experts (SMEs) for the pilot. The SMEs are involved in the project from the start, providing knowledge on HR Ops processes.

1.2.2. Problem analysis

The positive impacts of automation technologies are undeniable, yet implementing them could face many difficulties, one of them being automation fear. The widespread adoption of automated technologies alters the nature of the work that human employees perform (Ernst, Merola & Samaan, 2019), creating expectations and fear among employees that they may lose their jobs and be replaced (McClure, 2018; Spencer, 2018; Nam, 2019). A study has demonstrated that approximately 47% of US employees face the risk of job loss due to automation in the next 10 to 20 years (Frey & Osborne, 2017) and different research conducted in Germany or European countries also revealed similar high results (Bowles, 2014; Dengler & Matthes, 2018). This raises the concern that human labour will become obsolete in a robonomic society (Ivanov, 2017) and poses questions about what individuals, businesses, and social organizations should do if automation worries manifest into severe technological unemployment (Feldmann, 2013; Walsh, 2018).

The fear of automation stems from people's views of losing their employment to automation and, when they do, how easy would it be to find a new work in the same or different industry to avoid financially stressed (Ivanov, Kuyumdzhiyev & Webster, 2020). In addition, future uncertainty, job complexity and the human factor in the workplace also contribute to automation fear. However, scholars have pointed out that automation technologies not only free people from mundane tasks, but also provide new opportunities, creating value, improving life, and well-being of humans in economics, health and social teams (Talwar et al, 2017), and that the reason behind fear is largely due to lack of knowledge and information (Schlögl, Postulka, Bernsteiner & Ploder, 2019).

JET has never used RPA before, and the nature of this technology might raise concerns to HR employees. Hence, the problem is the fact that JET is yet to manage technology as RPA and that the technology can cause uncertainty, anxiety, and perturbation among employees, which could lead to technology refusal.

Although deploying new automation and digitalised information system (IS) align with the overall organisation's strategies, as well as the vision of the HR department, nonetheless, too many systems might confuse end-users. Without proper implementation and announcement, HR employees in many locations can resist or even reject the change, resulting in wasting the company's time and people resources. Resistance to change could cause change abandonment, create an unhealthy work environment and decrease the performance of the

organisation since the time invested in this pilot disturb employees' daily work. In addition, there is the threat of monetary wasteful that could lead to revenue loss, which can negatively affect a company that prioritises growth and financially driven.

1.3. Theoretical Justification

For JET, dealing with technological changes is inevitable. Yet, implementing a new HRIS can be tricky, especially with a robotic-based technology that the company has never worked with before. In order to implement RPA successfully, JET should consider the characteristics of managing technological changes, individuals' resistance and acceptance factors to technochange.

Technical change is almost always the catalyst for organisational change (Doherty & King 2005). Studies found that there are five critical success factors in implementing new computerised automation, which are Change Management, Top Management Support, Business Process re-engineering, Vendor Support and User Involvement (Altamony, Al-Salti, Gharaibeh & Elyas, 2016). Yet, managing technological changes is different from traditional organisational change, and requires different approaches to ensure successful technochange management (Markus, 2004). *Completeness* and *alignment* between the technochange solution and organisational processes, culture, and incentives are characteristics of triumphant technochange. Successful technochange necessitates careful planning ahead of time, a delicate balance of technological and social subsystems, and a seamless integration of technical and organisational implementation (Mattia, 2011).

Information technology (IT), on the other hand, cannot be considered a deterministic artefact because it does not always operate in a predictable and orderly manner (Grint & Woolgar, 1997). Stakeholders in corporations have the ability to understand, adapt, and ultimately alter IS in a variety of ways (Orlikowski, 1992). This is evidenced by identical technologies used in very similar organisational environments, which could produce outcomes that are drastically different (Orlikowski, 1993). User resistance and, in extreme circumstances, system rejection are common outcomes of IT-driven organisational change (Martinsons & Chong, 1999). Thus, technology acceptance is a crucial factor to assess the success of technochange management.

Technology acceptance was defined as "an individual's psychological state with regard to his or her voluntary or intended use of a particular technology" (Hendrick & Brown, 1984). The technology acceptance model (TAM) addressed users' attitudes toward using and the actual usage of a technology (Davis, 1989; Davis, Bagozzi & Warshaw, 1989). TAM has been used extensively as the theoretical basis for studies of user technology acceptance (Adams, 1992; Mathieson, 1991). TAM focuses on the individual user of an IS, with the concept of *perceived usefulness* and *perceived easy to use*.

1.4. Objective

This research aims to analyse and measure the perspectives of HR employees at JET on robotic process automation (RPA). In the early stage of technological change, understanding employees' viewpoints concerns and feelings (both positive and negative) can help the organisation adjust the implementation plan to ensure success.

Based on the gained insights, professional deliverables will provide appropriate and timely interventions and suggestion on how the HR department can better manage the RPA technology. Therefore, the centre question of this thesis study is formulated:

What are the current perspectives of HR employees about RPA technology?

1.5. Thesis Outline

This thesis report includes a thorough and well-organised description of the research projects, as well as the findings, conclusions, and recommendations. The outline of the thesis is presented in figure 3.

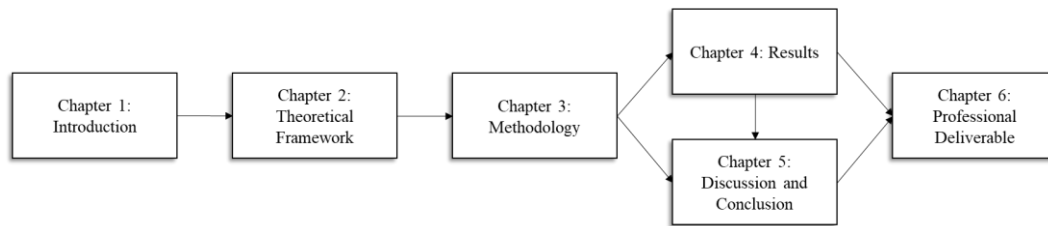


Figure 3. Thesis Research Outline

The first chapter is the introduction chapter, which includes the company description, problem analysis, and research questions. Chapter two is literature review on technology acceptance model (TAM), Technochange management, Resistance to change management and Chapter three presents the research methods. The results of the interviews will be described in Chapter four. Following that Chapter five gives an overall discussion and conclusion to the thesis. Finally, Chapter six is the recommendations based on the outcomes of the previous chapter.

Chapter 2: Theoretical Validation

Chapter two discusses in-depth the theoretical framework of Technochange Management, Resistance to change and Technology Acceptance Model (TAM), which highlight the influential factors openness, readiness, commitment to change and perceived usefulness. Following is the conceptual model (see figure 5) as visual representation of the key variables of this research, as well as the main research question and sub-questions.

2.1. Technochange Management

2.1.1. Definition of Technochange Management

IT has transformative potential, and research into the implications of IT on organisational change is an important part of IS research (Markus and Rowe, 2018). The related literature of IT project management research has traditionally taken a technology-focused approach to IT project management, ignoring organisational change, and hence would not be appropriate to transformative endeavours (Hartl & Hess, 2019).

Technochange is a prominent trend that is gaining attention in both profit and non-profit organisations. The concept of technochange was first introduced by Markus (2004), which was defined as using IT strategically to drive organisational (change) performance improvements (Markus, 2004; Mattia, 2011). It encompasses a wide range of technology-driven aspects that are related to and influence organisational change (Harison & Boonstra, 2009). Technochange is different from IT projects and ordinary organisational changes but a combination of both, thus requiring different approaches (Markus, 2004) (see table 2). Although software development and implementation are part of technochanges, they also encompass organisational changes such as culture, employee behaviour, job design, and organisational structures and procedures, all of which are closely linked (Weick, 2001).

Table 2. *Technochange Management vs. IT Project and Organisational Changes*

	IT Project	Organisational Change	Technochange Management
Target outcomes	Technology performance, reliability, cost of operation and/or maintenance, within project schedule and budget parameters	Improvement in organisational culture and/or performance	Improvement in organisational performance
The solution	New IT	Interventions focused on people, organisation structure and culture, or human resource management policies	New IT applications, often in conjunction with complementary organisational changes
Basic approach	Project manager who is expected to produce a working system that meets stated specifications on time and within budget	Changes in processes, structures, job redesign, etc.	A programme of change, including new IT but in combination with coherent changes in processes, job redesign, structures, etc.

Note. Adapt from Markus, 2004 and Harison & Boonstra, 2009

Organisational performance could significantly improve as a result of technochange. Change was enhanced when employees responded to opportunities, difficulties, and challenges, as they arose during the IT/IS deployment process (Jackson & Philip, 2010). The phrase intervention should be underlined in the context of technochange management (Xing, et al.,

2019). An intervention can be characterized as a series of sequenced and planned activities that can systematically improve organisational weaknesses as well as members' attitudes, values, abilities, and interpersonal relationships, allowing the organisation and its employees to better adapt to new changes (Markus & Bashein, 2006). Researchers have pointed out that technochange is a complex process (Harison & Boonstra, 2009) since tasks, roles, and organisational procedures must all change with IT to achieve such benefits.

2.1.2. Characteristics of a successful technochange management

There are three conditions to a successful technochange (Markus, 2004). The first is a technological change solution that, when correctly applied, has the potential to provide the required effects. Secondly is that the solution should be used properly. The third point is that the solution's advantages are actively captured. This paper will highlight the first two characteristics since the pilot is just in the beginning phase, thus there is no visible advantages to capture.

A workable solution – completeness

IT can have a significant contribution to an organisation's value, yet research has pointed out the IT productivity paradox – where IT seems to be present everywhere except in the productivity statistics (Brynjolfsson, 1993; Anderson, Banker, & Ravindran, 2003). In many situations, the benefits are only realized when businesses rearrange work in novel ways to capitalize on IT's capabilities (Hitt & Brynjolfsson, 2002). According to the report, when firms fail to implement complementary adjustments, they frequently lose economic value from their IT expenditures. When a bad business process is automated, it becomes a quicker, more costly, bad business process.

The additional adjustments needed to make IT productive are referred to as complementary modifications. The following are some of the complimentary adjustments that may be required to turn IT into a comprehensive technochange solution (Markus, 2004):

- Changes in business processes and workflow
- New job designs
- New skills training
- Management changes
- Changing HR policies
- New metrics and incentives

Complementary changes are required since IT alone will not deliver the promised advantages of technochange management (Markus, 2004). It cannot be seen merely as the introduction of new software systems or the start of an IT project (Sawyer, 2000). Without supportive organisational changes, one of three negative outcomes is more likely to happen: the technology may not be adopted and used, the technology may be used in ways that replicate old working patterns, or the technology may be used as expected but not yield the desired benefits. A good technochange solution balances new IT with supportive organisational adjustments to guarantee a successful change in organisational performance.

A working solution – alignment, implementability

The second requirement for a successful technological transformation is a solution that can be accepted and used. However, many technochange solutions cannot be adopted and implemented because they interfere with existing organisational structures, cultures, or practices. All technological development has the potential to elicit the human reaction known as resistance to change. The challenge of successful technochange management is to build or pick a comprehensive solution that will be adopted and used (Markus & Keil, 1994).

Many factors can lead to resistance to change, one of which is the alignment or fit between the organisation and technochange solution (Recardo, 1995; Canning & Found, 2015). There are three main types of misfits between technochange and organisation which are task or business process misfits, cultural misfits, and incentive misfits and this report takes into account two misfits (see table 3).

Table 3. *Technochange Misfits' Type*

Task or business process misfits	A solution may be technically adequate but still not fit the ways people work in particular settings.
Cultural misfits	A technically adequate solution may not fit particular settings for reasons that reflect organisational or national culture more than particular tasks. Arbitrary differences between technochanges and organisational culture can create friction and contribute to resistance, as can misfits associate with certain aspects of national culture.

Note. From "Technochange Management: using IT to drive organizational change" by M. L. Markus, 2004, *Journal of Information technology*, 19(1), 4-20

Situations involving task or business process misalignment, cultural misalignment, or incentive misalignment cannot be resolved successfully by focusing on technological sufficiency (IT functionality, ease of use and learning, reliability, availability of good technical and support infrastructures) (Markus, 2004). As a result, while building technochange solutions and dealing with apparent situations of resistance to technochange, it is critical to carefully consider possible misfits. Some additional variables of alignment will be elaborate in sub-chapter 2.3.

2.2. Resistance to Change

As aforementioned, technochange can have a significant effect on people's jobs, organisational business processes, and organisational performance outcomes. Yet the direct impact is rather on the employees, how daily tasks are performed by staff, collaboration among people, managers and hierarchical level or report line (Chaudhry, 2018). Many studies have pointed out that during an IS implementation, employees' perspective is one of the most challenging aspects (Aladwani, 2005; Armenakis et al., 1993) and employees' resistance tends to be the reason for implementation failure (Campbell & Grimshaw, 2016; Lin, Huang, & Chiang, 2018).

Resistance to change is frequently mentioned as a factor for implementation challenges and the failure of change projects (Shaul, 2006; Erwin & Garman, 2010). However, researchers believe that employees resist negative outcomes rather than the change itself (Dent & Goldberg, 1999). Thus, resistance to change might contain the possibility of understanding and dealing with actual organisational problems (Shaul, 2006), and scholars should aim to better address employees' subjective experiences to understand resistance (Nord & Jermier, 1994). It is proposed that resistance should be seen as a multidimensional attitude toward change (Piderit, 2000), and employees should have a positive view of the results of change as well as be dedicated to contributing to the process of change (Chaudhry, 2018). This emphasises the importance of workers' readiness, openness, and commitment to organisational change (Bouckennooghe, 2010), and avoids employees' doubtful emotion (see table 4).

Table 4. *Influential Factors to the Perceivment to Change*

Readiness to change	The belief and positive attitudes of employees toward the need for organisational change as well as the trust in the organisation's capacity to accomplish the changes and such changes will have positive outcomes (Armenakis, Harris, & Mossholder, 1993).
Openness to change	The belief that the upcoming change will be beneficial in some way, and it manifests in support for the change (Chaudhry, 2018).
Commitment to change	The ability to compel employees to perform voluntary actions that will result in effective implementation (Herscovitch & Meyer, 2002).

Note. From "Managing employee attitude for a successful information system implementation: A change management perspective" by Chaudhry, 2018, *Journal of International Technology and Information Management*.

It is crucial to consider the elements that impact resistance to changes. As above established, the misalignment between task and culture to technochange is one of the aspects of resistance. This report will highlight some additional organisational factors that influence employees' willingness to change, which are history with changes, change information and participation in the change effort.

History with change

History of change management and individual transformation experiences have a substantial impact on the formation of long-term change-related attitudes (Bordia, Restubog, Jimmieson & Irmer, 2011). Poor change history could create prejudices toward the change being implemented as well as needs for future organisations' alternation, since individual frequently react to the present as if they were reliving the past (Karniol & Ross, 1996). Cynicism regarding change arises in circumstances where employees have been exposed to a history of change attempts that have not been completely or visibly successful (Wanous, Reichers, & Austin, 2001). In addition, poor change management affect negatively to trust in the organisation and openness to change (Bordia, et al, 2011).

Information

The quantity and quality of information offered can affect how organisational members react to change. Studies have pointed out that there is a positive correlation between employees who received information regarding change and commitment to change (Wanberg & Banas, 2000; Lewis, 2006). Information provided to employees as part of management's efforts to improve employee involvement in organisational decision-making influences employees' reluctance to change (Coch & French, 1948; Kotter & Schlesinger, 1979). Consequently, the more detailed information the organisation communicates about change, the less resistance to change (Lewis, 2006).

Participation in the change effort

Participation is defined as involvement in the initial assessment and formulation of the change plan, and in addition, the ability to reject participation in the process (Lines, 2004). Various studies have demonstrated that commitment in change projects is connected with more positive views of the change, less resistance, and better goal achievement (Lines, 2004; Giangreco & Peccei, 2005). Employees are more willing to participate, respond favourably to participation opportunities and less repel to change initiatives if provided with the access to receive information, express opinions and involve in the decision-making process (Msweli-Mbanga Potwana, 2006).

In addition, research pointed out that commitment to change is influenced by organizational commitment, and can be thought of as being comprised of three components, which are defined as (Herscovitch & Meyer, 2002):

- Affective commitment: feelings of attachment to the organization, and desire to support change initiatives.
- Normative commitment: sense of obligation to be supportive of the organization's plans for change.
- Continuance commitment: fear of costs of leaving or resisting organizational changes

Different studies emphasised the importance of affective commitment as having the most significant effect among three components (Sinclair et al, 2005). Thus, it is necessary to consider element that positively related to affective commitment such as Perceived improvements in organizational performance (Parish, Cadwallader & Busch, 2008). Perceived improvements in organizational performance incorporate perceptions of both financial and non-financial impacts on organizational performance (Homburg, Hoyer & Fassnacht, 2002). Financial performance includes return on investment and return on assets (Chakravarthy, 1986) while non-financial performance includes variables such as customer satisfaction, customer loyalty, and market share (Menon et al., 1996).

2.3. Technology Acceptance Model (TAM)

Other than factors that prevent resistance, it is crucial to consider factors that trigger technological usages voluntarily. TAM is first introduced in 1989 in Davis's doctoral proposal. It began as an adaptation of the more generalised Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975) and was later developed more specifically to predict and explain technology usage behaviour, identify the factors that lead to a user's acceptance or rejection of technology, as shown in figure 4 (Davis et al., 1989; Davis, 1989). The two significant factors of TAM are *Perceived Usefulness* and *Perceived Ease of Use*, which are defined as follow (Davis, 1989):

- *Perceived Usefulness*: "the degree to which a person believes that using a particular system would enhance his or her job performance." A system proven to be *Perceived Usefulness* exists positive use-performance relationship.
- *Perceived Ease of Use*: "the degree to which a person believes that using a particular system would be free of effort." It is claimed that with all variables similar, a system's *Perceived Ease of Use* is more believably accepted by users.

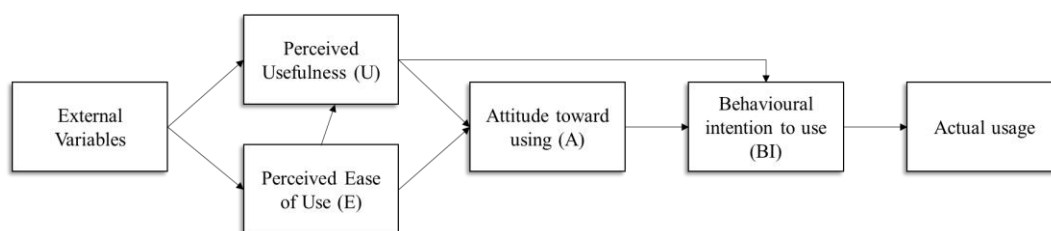


Figure 4. First Modified TAM (Davis et al., 1989)

TAM explores the connections between these two elements, and the users' attitude, intention, and actual technological behaviour to explain user behaviour. It is stated that by manipulating the two dimensions, system developers can better influence users' beliefs about the system, hence forecasting behavioural intention and actual usage of the system (Shroff et al, 2011). Attitude towards using a new system has been defined as either a determinant of future behaviour or a cause of intention that eventually leads to a specific behaviour (Alomary & Woollard, 2015). The evaluative effect of positive or negative feelings of an individual in

executing a specific behaviour is referred to as attitude toward using a system in TAM (Shroff et al., 2011).

TAM has been recognised as a valid and highly reliable predictive model (Legris et al., 2003; Sharma & Chandel, 2013) and an important theoretical contribution to the study of information and communication technology (ICT) usage and acceptance behaviours (Chen & Li, 2011). Various scholars, however, have criticised the model (Adams, Nelson, & Todd, 1992). TAM is oversimplified and overlooks critical variables (Bogozzi, 2007) and does not take into account any obstacles that can prevent a user from adopting a certain technology (Taylor & Todd, 2001).

Later research of TAM suggested that Perceived Usefulness and Perceived Ease of Use had a direct impact on Behaviour Intention, as a result, eliminating the necessity for the attitude component (Venkatesh & Davis, 1996). The TAM is continued to be developed by Venkatesh and Davis (2000) (TAM2) and Venkatesh and Bala (2008) (TAM3) by analysing external factors that influenced usefulness and ease of use. Nonetheless, the extensions of TAM (especially TAM3) have too many variables, and the relationships among variables are too complex (Alomary & Woollard, 2015).

Table 5. *External Variables of TAM*

Determinants	Definitions
Job Relevance	The degree to which an individual believes that the target system is applicable to his or her job (Venkatesh & Davis, 2000).
Output Quality	The degree to which an individual believes that the system performs his or her job tasks well (Venkatesh & Davis, 2000)
Result Demonstrability	The degree to which an individual believes that the results of using a system are tangible, observable, and communicable (Moore & Benbasat, 1991).
Perceived Enjoyment	The extent to which “the activity of using a specific system is perceived to be enjoyable in its own right, aside from any performance consequences resulting from system use” (Venkatesh, 2000, p. 351).

Note. Adapt from Vankatesh & Davis, 2000; Vankatesh & Bala, 2008

Considering when conducting this research RPA system has not been implemented at JET. Hence the factor Perceived ease of use from TAM is eliminated in this research. However, it is still a valid and necessary element of technology acceptance and would require further research.

2.4. Conceptual Model

Based on the theoretical analysis and the actual situation at JET, the conceptual model of this research is presented in figure 5. This research will take into account some variables that affected the usages of a new technology, based on the analysis of TAM2 and TAM3 (see table 5). Variable like task and business process fit (see table 3) is incorporate with job relevancy, and the variable perceived improvement in organizational performance is incorporated with output quality.

This research is only intended to measure employees' views on the change initiative, which identify the level of enthusiasm or engagement with technological change to introduce appropriate intervention. Thus, the conceptual model considered four variables of employees'

perspectives which are alignment, experience, attitudes and organisational factors. These four variables have strong linkages to factors of change adoption and technology acceptance.

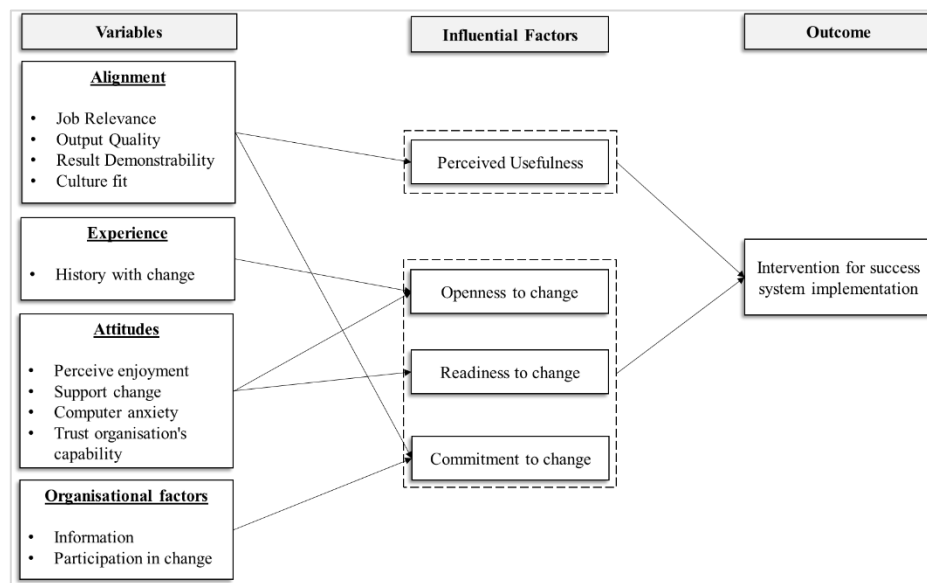


Figure 5. Variables of employees' perspective on technological change – The Conceptual Model

2.5. Research Questions

Taking into consideration the main problem, the objectives of this report and the conceptual model, the following main question is formulated:

What are the current perspectives of HR employees about RPA technology?

It is important to aware of the factors that impact users' experience towards the technology before providing timely recommendations to the company. Consequently, the sub-questions are presented as follows:

1. How was HR Ops employees' experience with technological change?
2. What are HR Ops employees' attitude towards RPA technology?
3. To what degree do RPA align with the task of HR Ops and the culture of JET according to HR employees?
4. To what degree do HR Ops employees receive information about RPA and participate in implementing RPA?

Chapter 3: Methodology

This chapter presents the method for determining answers to research questions by describing the procedures for performing this research from data collection to data analysis. In this study, qualitative interviewing was chosen, to ensure received data revolving around established variables. It also mentions research measurement and research population.

3.1. Research Design

As established above, the assumption for this thesis was that the nature of technology such as RPA could cause resistance to change, which could result in implementation failure. Due to the fact that the implementation was not yet complete when this research was formulated, the centre question focused on HR employees' viewpoints on RPA to identify potential threats to the change plan. To best tackle the question, the qualitative research method was chosen for this study. Qualitative research provides more data and contributes to a better understanding of human thought and the motivations behind certain societal actions (Berg & Howard, 2012).

This paper was produced simultaneously with the RPA pilot, as the case started in the middle of February and would be completed at the end of quarter three of 2022. At the time, the pilot at JET had finished all its legal documents, and the vendor was building the software bot for an HR Ops business process. Research on employees' perspectives on RPA from the beginning of the implementation could provide immediate suggestions to avoid resistance or refusal to change. Therefore, the author has chosen the qualitative method for the thesis, as the paper is based on a practical situation and would result in solving real problems based on the set of contributors' experiences. Understand employees' thoughts and motives could help JET capture likely concerns, eliminating change refusal risk from the beginning.

Interviews were used as a tool to collect data for qualitative research, which offered in-depth viewpoints and reflections on the newly introduced topic of RPA. Interviews focus on individual answers, which were more suitable to discover the answers to this research than a survey, observation or focus group. Surveys might not be sufficient to provide a representative view of established variables at JET, while observation was a non-delimited process and does not happen at fix moment. Conducted interviews also limited the possibility of untruthful answers from respondents when sitting in groups with peers.

Arguably, interviews were the most suitable method for this research as they captured independent thoughts and personal experiences of HR Ops employees. Interviews could help measure non-quantifiable factors, such as personal feelings, which could be descriptive in looking for evidence for the central question. By using this tool, the author could also analyse participants' expressions, hence better-identifying actual attitudes, and perspectives towards technological changes.

3.2. Participants

It is crucial to distinguish the suitable participants. The research population of this study were employees of the HR Operations department from different regions at JET. This included two sample groups: HR Ops Associates and three subject matter experts (SMEs) of the RPA project. This target group was chosen since they and their work processes are directly impacted by RPA once the technology is implemented in the organisation.

Criteria such as the gender of participants, their location nor their level (junior or middle) were not important to this study, as long as they were in the HR Ops department and performed HR Ops tasks. However, this paper only considered the viewpoint of employees

and eliminated the manager's attitude since the influence on workers was much more significant. In total the author interviewed ten HR Ops colleagues to obtain as many viewpoints as possible.

The research group was chosen by the managers. HR Ops regional managers and project managers were the bridge that connected the author to this group of participants. While the SMEs had a thorough knowledge regarding RPA, participants introduced by managers had a brief or limited understanding of the project. They knew about the technological change but not the detailed information on the implementation. This would result in a suitable research group for the thesis, as participants know just enough to either form bias or prejudices. Multiple angles and perspectives offered the author a more precise and descriptive pool of data, making the research more valid.

3.3. Measurement

The aim of this qualitative research is to systematically gather information concerning the variables in the conceptual model and subsequently present timely recommendations to JET on how the attitudes of employees could affect RPA implementation. In order to achieve such a goal, a semi-structured interview protocol was used. It provided a predetermined thematic framework to the interview, yet also allowed participants to elaborate on the sections of the question that were important to them, thereby deepening the dialogue. The interview consisted of both closed and open-ended questions meandering around the variables. Using a semi-structured interview protocol could enhance the reliability. In the same context and situation, these questions could be applied and would produce the same set of influential factors. The question list is presented in Appendix A.

The interview protocol covered all factors introduced in the conceptual model. The total of eighteen questions intended to complete the analysis of the current perspectives of employees on technological changes, as well as present the investigation for improvements. The questions for the interview were divided into four relevant categories, which were:

- Interviewee's Background & Experience
- Attitude
- Alignment
- Organisation factors

Questions established from the Interviewee's Background and Experience provided basic information for the analysis. Moreover, the question "Do you have prior experience with technological changes that impact your way of working?" also collected interaction or history of employees to technologies. Questions in the remaining four topics underlined vital variables for the perceivment of change. In Attitude topic, the researcher could figure out the support of employees towards RPA. While in Alignment topic, the question "How can RPA help the development of HR and JET?" could point out how employees perceive the automation technology fit with the company. Under Organisational factors, the question "How have you been informed about the implementation of RPA?" determined the quantity and quality of information employees receive about the pilot project.

The data was gathered and then later coded with the help of the ATLAS.ti program. Details on how data coded for this research were presented in the subchapter Analytical plan. The codebook for this research can be found in Appendix B.

All questions were closely connected to the theory, as they explored the above-mentioned variables that link to the influential factors, making it more valid. However, the richness of information in interviews might lead to incoherent data due to personal languages, differences in interpretation, and terminology. The small target group also created the problem of not receiving enough data, thus hurting the reliability of this research. Nevertheless, the face-to-face interview method provided the opportunity to observe participants during the conversation and collect the necessary information.

3.4. Procedure

All respondents were contacted by the researcher via email (see example email in Appendix C). The general context, as well as the study's purpose, were explained in the email. But the question list was not sent to the target group to ensure the validity of the data. A meeting invitation was included in the email, as the author had visibility to the participants' calendars.

The interviews were conducted in English via the Google Meets platform and recorded with the consent of JET's employees. The interviews took 30-45 minutes. The interviews began by introducing the author and the research, followed by the list of questions and lastly a few minutes for the responders to raise concerns or possible inquiries to the author.

3.5. Analytical plan

The research software used to analyse the data from the interviewees was called ATLAS.ti. The information retrieved from the interview protocol consisted of eighteen questions in total. Four variables were used as the coding groups to measure the personal perspectives of ten HR employees. These variables are Perceived usefulness, Open to change, Ready to change, and Commitment to change.

The coding method used for this analysis was the deductive approach. Appendix B shows the codebook in detail. Out of the eighteen questions, nine of them were coded in different code groups. Questions 3, 4, 5, 7, 13 and 17 were open coding since interviewees' answers might not be relevant to the items of the dimensions. The remainder questions (questions 1, 2 and 18) were not coded since they did not have an influence on the result of the thesis.

Ultimately, the interview questions helped answer this analysis's main question, by measuring different variables of HR employees' viewpoint on technochange. Hence, these relevant analysis questions were created:

- To what extent do HR employees perceive RPA as useful?
- To what extent do HR employees ready to change?
- To what extent do HR employees open to change?
- To what extent do HR employees commit to change?

For this analysis, the author made use of two sample groups, meaning dividing ten interviews into two different document groups. The two document groups were SMEs (3 documents) and HR Ops Associates (7 documents). This was because the SMEs participated in the project from the beginning, and thus would have different views from HR Ops employees. Appendix D explains the order of interviews, sample group and participant code table. Variances between the two sample groups could highlight the different degrees of Perceived usefulness, Openness, Readiness and Commitment.

The analytical procedure started with conducting interviews with recordings. Once done with the question-and-answer sessions, the recordings were then transcribed into ten documents and uploaded to ATLAS.ti. Each document was then coded based on the structure of the

codebook. For questions marked with open coding, the author coded by keywords, rather than listed in a particular group code. When finished, all codes were analysed, and it was noticeable that some had connections to others. Thus, multiple tables were run to determine associations between codes.

To view the concurrence or contradiction, the Code-Document tables were run. Code-Document Table helps compare group documents by related codes or code groups. In this analysis, the author ran tables for items related to Attitude and Organisational Factors with the two sample groups.

Some quotations from interviewees had two or more different codes, which might suggest overlaps or correlations between variables. As a result, the Code Co-Occurrence Table was used to show the frequencies of co-occurrence in form of a matrix and points out related topics or topics discussed together. Code Co-Occurrence table also created Sankey diagrams for visual effect. In this analysis the Co-Occurrence tables were run between items in Openness with items in Readiness and items in Perceived usefulness with items in Commitment and Readiness.

Furthermore, the results gathered in the Alignment and Organisational Factors code group were rather significant compared to the other. As a result, the author built two networks by using codes in this section, to better visualise the outcomes. Details of constructed tables, figures and networks can be found in Chapter 4.

The documents were transcribed and coded by the author, thus ensuring consistency among the coding results. In terms of validity, the literature on the variables was well researched before adding the codes.

The author also had a chance to present findings of the interviews in the bi-weekly RPA Change Management meeting with the project team. The author explained the outcomes of the interviews, the concerns of the participants and what they would like to know. The primary results of the interview presented to the project team at JET can be found in Appendix E.

Chapter 4: Results

This chapter presents the results of interviews conducted with ten HR Ops Associates at JET (included three SMEs and 7 HR employees). Outcomes in this chapter indicate answers of the four the sub-questions. In addition, there will also be analysis on specific patterns appear from the results.

4.1. How was HR Ops employees' experience with technological change?

Question 3 intends to collect HR employees' understanding of RPA. This has a slight association with how they perceive this technology due to incorrect perception could lead to negative attitudes or misleading positive attitudes. The majority of the interviewees understood that RPA helps them alleviate repetitive tasks, automate processes and simplify work, which is the basis of this technology.

"RPA is the software to that partially or fully automate our human activities that are manual rule-based and repetitive. So thanks to it, we can gain support with the most repeated task and we can spend more time on other tasks that, for example, require creativity, improve our processes, or give us some more space for development." (4)

However, existed some misapprehensions that RPA is a physical bot or that this technology is similar to machine learning (part of AI – artificial intelligence).

"Well, my understanding is that RPA is like, say a robot, a different kind of robots that basically can imitate the actions that we do as humans, and then we could teach them to do them instead of us. So kind of like I guess machine learning. We teach them how we do things and then they can do it." (10)

The purpose of questions 4 and 5 is to discover participants' experience with RPA and their history with technological change. Out of the ten participants, only one have experienced RPA previously. Although not explicitly involved in the implementation process, this interviewee had a very positive attitude toward process automation.

"Yeah, definitely. I mean, it took away all the copy-paste, manual labour of adding new hires, job changes, change of working hours, things like that, that we always had to manually add into the system. Took all of that away. So definitely was very positive for us." (6)

In terms of history with change (question 5), there seems to be a unanimous answer among all respondents. Despite some uncertainty, doubtfulness or technical issues at the beginning, all changes have yielded beneficial results. One, however, expressed the matter of not being able to actively maintain the system, which can turn into a concern.

"I am not sure what RPA leader, but for the other projects, we don't really have a say in it. We do raise it from time to time, that say something is not maintained. But then the follow up is also not that amazing." (2)

4.2. What are HR Ops employees' attitude towards RPA technology?

Let's first look at employees' concerns about RPA, which is an important aspect of employees' attitude. All ten interviewees have apprehensions about the implementation with various reasons, and some having more than one. Four out of the ten participants worried about system maintenance, what to do when there is a malfunction and how to resolve technical issue or bugs in system to ensure quality of data.

"So if there is a bug or like a technical issue, I don't know how long it would take to fix or how things could be not messed up. But like if there be something wrong, like if the wrong data is being

transmitted? I think that would be something that could be concerning. Like if there's a bug or a problem, how do we fix it? And also, is making sure that the data is 100% accurate.” (6)

Three participants expressed concern over not fully aware of RPA, which lead to uncertainty of not knowing exactly what to do or how to use the system.

“I think there's probably a bit of uncertainty for something new. So says it's quite technical that you have to write coding on. So I'd want to make sure that my team knows exactly how to use it, or I knew exactly how to use it. So I could then communicate that with them. Yeah. Because I think that's the worst part, isn't it? Not knowing what you're doing?” (1)

Another result collected was that two see that in the future, the technology can eventually take over job. Some additional apprehensions from the interviewees include the follow-up of RPA, unexpected things that were not considered during configuration and whether or not there are enough time and resources during implementation because of the high workload.

Answers gathered from the participants also demonstrate that there is a high trust on the company's capacity, that JET has all the capabilities, knowledge and resources to successfully implement this technology. One interviewee, although believe that JET can implement this, stated concern about will people use RPA when it implemented.

Regarding feeling vital, the results has pointed out that while all three SMEs feel vital in the change initiative, only two out of the seven HR Ops Associates shared a similar thought.

However, despite all concerns mentioned above, answers from questions 6 and 8 portrait a pattern of favourable results of employees' attitudes. This also demonstrated the answer to the first sub-question. Responses from participants reflect that the entire interviewee has moderate to high expectations and eagerness for RPA implementation. There was a shared agreement that RPA is a positive change with desirable outcomes, and support for this technology is rather high.

“Yeah, I think in general, all the systems that are coming with the HR Ops, or the new things that they're trying to create to alleviate a workload. Things that I am now doing manually, can be optimized. I think that that's only a positive push towards the right direction.” (9)

“And, actually, I'm really happy about it, because it saves a lot of time for me, and doing administrative work and focus more on like projects, and also like talking to employees.” (5)

By running the Code-Document table of two document groups (SMEs and HR Ops Associates) and four factors related to attitudes, it is visible that the attitudes revolving around RPA, in general, were positively perceived by every member of the interviewed employees. As presented in table 6, all respondents expressed optimism about change, with a total of 34 codes for the HR Ops Associates and 17 codes for SMEs.

Table 6. Attitudes in two document groups (Co-Doc table)

	HR Ops Ass... 7 180	SMEs 3 90	Totals
◆ A positive attitude towards the nee... 13	9	4	13
◆ Change will create positive outcomes 12	8	4	12
◆ Open to the idea of change 12	7	5	12
◆ Support change initiative 14	10	4	14
Totals	34	17	51

Further investigation, it is noticeable that some quotations in this section have more than one codes, which suggests overlaps in the two groups Open to change and Ready to change. A Co-Occurrence Table between the items of the two code groups was run, however a Sankey diagram was presented for visualisation. Figure 6 illustrates the Sankey diagram of margin area attitudes toward RPA. Observable, the code "Change will create positive outcomes" co-occurs three times with "Support change initiative" and five times with "Open with the idea of change". At the same time, the code "A positive attitude toward change" co-occurs eight times with the code "Support change initiative" and four times with "Open to the idea of change".

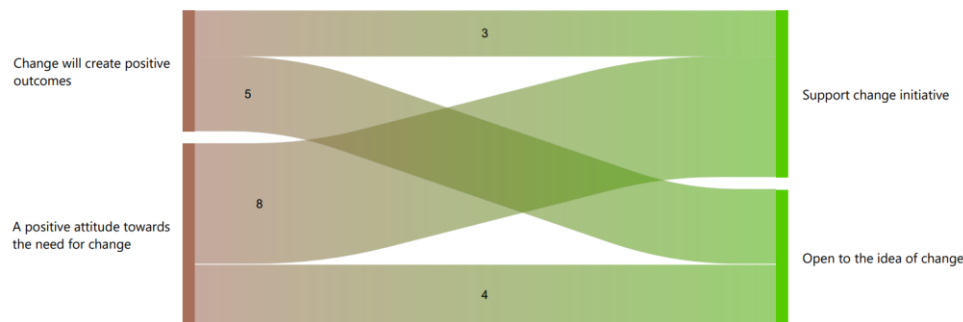


Figure 6. Sankey diagram of four variables of attitudes (Co-Oc)

4.3. To what degree do RPA align with the task of HR Ops and the culture of JET according to HR employees?

Questions in the alignment section help determine how employees perceive RPA technology and how this change is relevant to tasks and business processes. Looking into the theories, technological change aligns with jobs when it fits the ways people work in business settings and helps perform tasks well. Considering implementing RPA system is technochange, as a result, items in Perceived Usefulness could be viewed as part of the item “Tasks and business processes align with change” in Commitment to Change, which suggest a transitive relationship among the code and codes groups. Figure 7 presents the alignment network of Perceived Usefulness and Commitment to visualise the correlation. It entails that since Perceived Usefulness is part of “Tasks and business processes align with change”, it is also part of Commitment to change

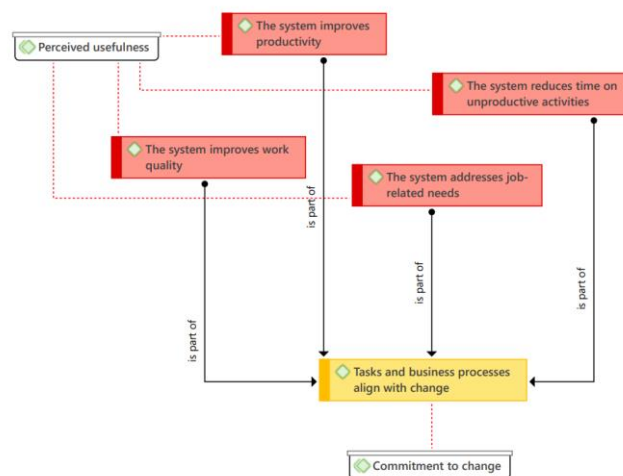


Figure 7. Alignment network - Perceived Usefulness and Commitment to Change

To demonstrate the correlation presented in the network, a Co-Occurrence Table was run to look for numbers of quotations with overlapped codes. It is clear from the Sankey diagram in figure 8 that all four items of Perceived Usefulness connected with the item “The belief that tasks and business processes align with change” of Commitment to change.

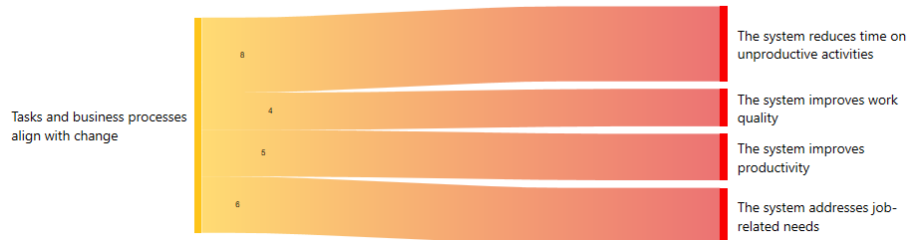


Figure 8. Sankey diagram of Perceived Usefulness and Commitment to change (Co-Oc)

In terms of how RPA affect the quality, all ten interviewees strongly trusted that RPA would enhance work standard and that the output quality would be visible. Everyone concurs that this technology will reduce time on unproductive tasks, giving HR Ops more time to improve service to employees and more significant projects. Additionally, interviewed members indicated that the system could reduce human error, problems with SOX compliance (Sarbanes-Oxley Act), GDPR (General Data Protection Regulation) and increase data quality. An interviewee also believed that this system could make HR Ops happier in their roles.

“And other than impacting the company, or HR Ops to be you know, I guess happier in the role because you feel it make more impact, because you have more time to, I don't know, maybe take projects or think about things or engaging in things that challenge you, which is what makes people happy.” (10)

Regarding how this technology is applicable in HR Ops' everyday tasks, while nine (three SMEs and six HR Ops Associates) asserted there is a high relevance, one actually saw no outstanding impact on the daily jobs since the information provided is not sufficient. Similar to how to align RPA is to JET culture, whilst three SMEs and six HR Associates believed RPA met the culture of JET, the same interviewee expressed:

“I don't know what's feasible with these systems. I don't know what they're planning on doing. I know that they're planning on going to implement it within takeaway pay portal. But other than that, I have no idea.” (9)

“I don't know what it's capable of, as I said before, I don't know what it can do and what things you can take away, we're also implementing a new document management system, I don't know if that's connected to RPA, but that will definitely change our working style. I don't know what RPA will have in, you know, the future.” (9)

4.1. To what degree do HR Ops employees receive information about RPA and participate in implementing RPA?

Questions in Organisational factors aim to find to what extent HR employees receive information about RPA and to what extent they participate in this project, which was the final sub-question. Hence quotations in this question group are coded using the code group Commitment to change.

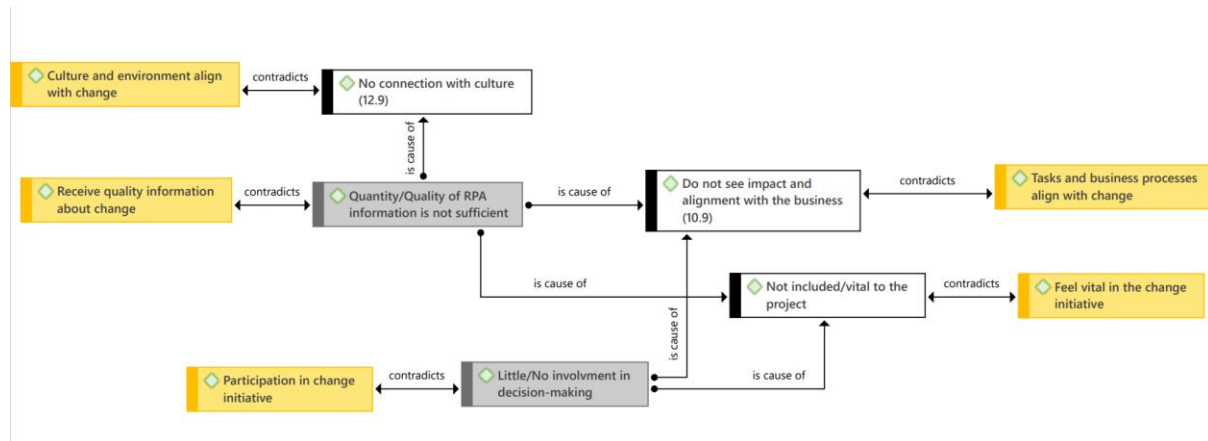


Figure 9. Organisational factors network - Commitment to change

By collecting and examining all codes in this section, it was noticeable that with every code in Commitment, there was an opposite open code. Thus, a network was built to illustrate the linkage between cypher variables. As the theories indicated, information and involvement in decision-making have a positive correlation with the inclination to change and reasons as well as benefits of change. Accordingly, “Quantity/Quality of information is not sufficient” and “Little/No involvement in decision-making” is the cause of “Do not see an impact to business”, “Not included/vital to the project”, and “No connection with culture” (See figure 9).

To observe in detail the differences between the two-document classification, a co-doc table between two groups HR Ops Associates, SMEs and ten related codes was run (See table 7). From the table, it is clear that the SMEs comprehended solely positive variables, while HR Ops Associates existed both favourable as well as unfavourable variables.

Table 7. Commitment to change in two document groups (Co-Doc table)

		HR Ops Ass... 7 178	SMEs 3 91	Totals
● Culture and environment align wit... (12.9)	9	6	3	9
● Do not see impact and alignment... (10.9)	1	1		1
● Feel vital in the change initiative (11.5)	5	2	3	5
● Little/No involvement in decision-... (11.7)	7	7		7
● No connection with culture (12.9)	1	1		1
● Not included/vital to the project (11.2)	2	2		2
● Participation in change initiative (11.6)	6		6	6
● Quantity/Quality of RPA informati... (11.10)	10	10		10
● Receive quality information about... (11.8)	8	3	5	8
● Tasks and business processes align... (11.18)	18	11	7	18
Totals		43	24	67

All three SMEs saw alignment between HR tasks and culture of JET to RPA. Moreover, the group considered them vital or important to RPA pilot since they participate heavily and receive quality data about the technological change project.

“Because I am one of the SMEs. So, I am actively involved, I am actively informed about things.” (2)

"Yes, I feel involved in the process, because right now I'm involved in the pilot process (...), we are involved in the process analyst workshop meetings, and we are reviewing the solution documents presented to us by developers. So, we are very involved" (4)

"Yeah, I think we do make decisions in terms of, I mean, we are telling the whole process and how it can be automated. So our opinion is always considered in this whole process. And that's why I think we do have an impact on this project and decisions." (5)

With the HR Ops Associates, the most significant result visible was that all seven of them have little or no involvement in the decision-making process, evident in none of them participate in the change initiative.

"Not really. Right. Not at all." (7)

"I don't feel directly involved. But indirectly in our HR Ops, we have some meetings with our manager, regional manager, we have discussed that and have all confirmed that such improvements will be accepted by all of us and will definitely help our work" (8)

Five out of seven HR Associates confirmed that they did not receive enough information about RPA, or the quality of information is beneath expectations. However, all seven wished to have more information about this project and RPA in general.

"I think at the moment, we haven't received too much information on it." (3)

"I wouldn't say, particularly, a lot are informed in depth, because the only thing that I know that I told you was the basically the takeaway pay change." (7)

As mentioned above, only two HR Ops employees feel vital to this pilot. However, one said the importance of feeling was in the past, and that now this person would like more involvement.

"Well, as I did last year, because each one of us involved in those calls, so yeah, definitely. And I'd be keen to get involved in the Go Live as well. So if you need any volunteers to jump on any calls, I'm super keen to get involved." (1)

Despite of the fact that only two felt important, yet just two actually expressed that they do were not perceive as important to the project.

"Um, at the moment, I wouldn't say so just because we haven't really had too much involvement in it so far." (7)

4.2. Summary of the results

In response to the research sub-questions, HR employees had a rather positive experience with technological change, with all respondents mentioning previous changes were beneficial. Concerning attitudes regarding RPA, although existed apprehensions, yet attitude viewpoints toward the software bot were relatively high. In addition, the majority of employees also perceived high relevance between RPA and HR Ops functions and responsibilities, as well as high alignment between RPA and the culture of JET. However, there seemed to be rather low participation in the change initiative, with only three out of ten interviewees took part in the decision-making process. And information about RPA was not effectively communicated when only five confirmed qualities of news were efficient, yet seven wished for more updates.

Chapter 5: Conclusions and Discussion

This chapter provides the conclusion of the results found in the previous chapter, which generates arguments for the recommendation in the next chapter. Besides, the chapter also discuss and evaluate the research in terms of its usability, validity, reliability, and generality.

5.1. Conclusion

The purpose of this research is to measure the employees' perspectives on technological change. As aforementioned in the problem analysis, JET is implementing new technology with a robotic based thus, the author made the assumption that RPA could cause anxiety and uncertainty to HR Operation employees. Implementing RPA is a technochange management project. Understanding how employees perceive this change (positively or negatively) would help JET to develop an intervention plan to ensure a successful technological change.

Hence, the central question for this analysis was: **“What are the current perspectives of HR employees about RPA technology?”**. Answer to this question could result in formalising proper recommendations for the company to tackle this problem. According to the outcomes of the research, it has been concluded that **HR employees possess positive attitudes toward RPA and acknowledge the technology as useful. But other than the SMEs, HR associates did not receive enough information about the change and were not participate in the decision-making process.** It can also be drawn out from these results that while SMEs are open, ready, and fully committed to change, HR Operations Associates are only open and ready but are not committed to RPA. Consider the results of TAM variables, HR employees at JET perceived RPA as useful.

HR employees are open to change!

It is logical that HR employees at JET are open and support technological transformation. For starter, JET is a tech company focus on innovation and is growing at a fast pace. Consequently, employees are familiar with organisational changes, or more specifically, technological changes. Scholars have pointed out that employees' perceptions of their organisation's change history are important since individuals who were subjected to ineffective change history have had a significant impact on lowering favourable expectations for future improvements (Rafferty & Restubog, 2017).

HR employees understood the ideas of the technology rather well, which suggest there were little to none misleading expectations. Furthermore, the majority of the participants considered history with changing history to be beneficial. One even mentioned experience with RPA change was favourable. This positivity toward technological change could translate into a positive bias, which converted to being more open-minded to change initiatives.

New technology? HR employees are ready

Outcomes in the sub-chapter Attitudes in the previous chapter expressed a high rate of readiness to change. Consider the theory mentioned readiness as “The belief and positive attitudes of employees toward the need for organisational change as well as the trust in the organisation's capacity to accomplish the changes and such changes will have positive outcomes” (Armenakis, Harris, & Mossholder, 1993), it can affirmatively conclude that HR employees are ready to RPA change. The attitudes towards the software were rather positive, and there was high trust in the organisation' capability.

Surprisingly, the concern made in the assumption that HR Operations employees were worried about being replaced by RPA only appeared twice, which is far less than expectation. Moreover, interviewees stated that this was only a concern for the future, not for now,

meaning at the time, HR Ops see no apprehensions, fears or threats toward the technology. The majority of the concerns are about system maintenance and information insufficiency, which have no effect on the rate of readiness.

HR employees are not committed to this change

Commitment is acknowledged as one of the most essential indicators in describing employee behaviour and desired work-related outcomes in organisations (Choi, 2011). Scholars all shared the notion that Commitment to change reflects participation in the change project, which results from awareness of the change (Jaros, 2010). Individuals develop commitment to change when they realize the importance of organisational change (Rogiest, Segers & Witteloostuijn, 2015) and how change is implemented has a significant impact on commitment (Yilmaz, Ozgen, & Akyel, 2013). This emphasises the importance of involvement in the decision-making process of change projects and the quality of the information provided to employees, and how they impact engagement in technological transformations.

Looking into the results of the sub-chapter Organisational factors, it is obvious that while the SMEs are committed to technological change, this ratio in HR Ops Associates is much lower. They did not receive enough information about RPA, nor updates on the pilot. More importantly, they did not see themselves as vital to the project and they did not participate in this project at all. Without correct awareness, HR Ops Associates cannot commit to this change, thus are not motivated to voluntarily perform activities in favour of successful implementation.

However, all employees acknowledged an alignment between RPA with HR tasks as well as with JET's culture. Which indicates to some extent associates were still committed to RPA, and that in big picture, HR Ops notice overall relation of the change with the vision and direction for the organisation.

RPA is practical and useful to HR employees

Undeniably results have proven that HR staffs were aware of the applicability of RPA and that the system is functional, useful, and related to HR daily tasks. High level of perceived usefulness could contribute to technology acceptance and technology usages. As aforementioned, all ten respondents trusted that RPA would reduce times on unproductive or mundane tasks, giving them more time to work on valuable projects or enhance assistance to employees' queries. Ultimately, the system could increase the well-being and happiness of HR employees since they no longer need to do tedious job. Consider that the greater importance of Global HR Operations at JET is automation and digitalisation, respondents perceived RPA as useful has reflected that HR Ops employees understand the mission and vision of their department.

5.2. Discussion & Evaluation

5.2.1. Validity and Reliability

The study has delivered interesting and useful results for employees' viewpoint on technological transformation. Although not an original research, yet it remains a valuable addition to the existing literature in the field of managing technochange, as it incorporates important variables of change in one conceptual model.

Ultimately, the research managed to measure what it intends to measure. Hence, it is considered valid and the answers from the HR employees are sufficient as they are based on personal perception. It is essential that organisations understand thoroughly the impact of

employees' perspectives, due to the fact that the influence of employees would result in the more effective and optimal management of changes in technology.

The paper also has high reliability since it can be widely used in different companies in the same technological change circumstances. All measured variables have been tested in their original studies and widely applied in follow-up research, thus proven to be reliable. In the same context and situation, these questions could be used and would produce the same set of influential factors. The design of the methodology ensures that the results and redesign from this study are relevant. Firstly, it mentions personal background with technology as well as past interactions with change and whether participants support technological transformations to measure openness. Next, the questions evaluate perceived usefulness by looking at how respondents see the machinery/software address job needs, performance, or productivity. Following that, readiness is determined by positive attitudes, trust in organisations' capabilities and ability to handle change. Lastly, commitment is measured by the extent of alignment with culture and the business, as well as the information received and participation in a change project. This has suggested that by applying the findings of this research, firms can comprehend employees' perspectives and thus can regulate and manage change initiatives successfully.

5.2.2. Limitation of this research

This paper is deemed as qualitative research, in which purposeful sampling is a method whereby researchers select the samples most useful for their research by relying on personal judgements. This method makes the paper prone to vulnerability since answers could be interpreted with bias respectively. Moreover, it is not reasonable to draw conclusions that the findings are covenant to the whole HR Operations department since only ten selected employees have conducted interviews with the author.

Qualitative research could also create a barrier to obtaining quality data since not everyone is open to a recorded interview. Respondents could provide untruthful answers, meaning answers that are socially acceptable rather than what they feel or blindly agree with the researcher just to complete the interview.

The current research on commitment is limited since it focuses on the quality/quantity of information, participation and how technology aligns with the business. There could be other factors that could affect employees engaging in technological change such as the organisation's political elements, report line, training sessions, etc.

5.2.3. Further research

It would make sense to re-structure the order of the questions in future study to reduce the rate of code overlaps between openness and readiness (as mentioned in subchapter 4.2 – figure 6). Although code co-occurrence only points out related topics or topics discussed together, it is better to decrease the overlap rate since researchers could easily distinguish between different variables. Re-structuring also explicit a more logical flow to the order of acceptance of technological change, from openness to readiness and finally commitment to change.

Results from this research are pointing out that Perceived usefulness is actually a part of Commitment to change (sub-chapter 4.3 – figure 7 and 8), and correlate to some extent with the theories of Openness and Readiness. Thus, further research could incorporate perceived usefulness to other to reduce the number of variables. Additionally, it can reduce repetitive questions.

One noteworthy point of this research specifically was that Perceived ease of use is not measured since HR employees have not utilised RPA. Perceived ease of use is a crucial factor to assess technology acceptance and technology usages. Hence, it is recommended in further research that this feature should be evaluated when the new system has been implemented.

Considering combining quantitative and qualitative research methods in this study is worthwhile. Although established in chapter 3.1, interviews would be the best tool for this thesis research since they can capture personal thoughts and emotions as well as create the possibility for follow-up questions to further investigation. However, previous research has proven that it is difficult to measure Perceived ease of use by qualitative research. By using a quantified survey for this specific variable, researchers can easily find to what extent is using the system effortlessly. Moreover, using quantitative for this factor could also reduce close-end questions.

Chapter 6: Recommendations

This chapter describes three recommendations that aim to enhance communication, as well as develop a standardise way of working with RPA. the professional deliverables (1) “Future of Work” community (2) standardise operating procedure and (3) further research align with the HR strategy of JET is to be transformed into a scalable, high-quality, increasingly digital organisation and the HR purpose of empowering the people.

All three proposals in this chapter have been discussed with the RPA project manager at JET.

6.1. Recommendation 1 – “Future of Work” Community

As the results stated, HR employees are open and ready to change but they are not engaging or committing to it due to a lack of information. Thus, it is essential to communicate quality information about RPA. High-quality change communication is defined as providing accurate, timely, and detailed information that addresses employee concerns (Miller, Johnson, & Grau, 1994). Therefore, the first recommendation is to build a website community on the company intranet to spread technology-related information.

Well-defined RPA communication and advocacy plan are considered to be one of the best practices to successfully implement RPA, and “telling the whole story” to all levels in the organisation is vital in clearing up common misconceptions (Ezer, 2020). The vision of JET’s board of directors is that RPA will be further developed in the organisation, along with other futuristic technology that transforms ways of work. Thus, it is crucial to have a place that only focuses on information about innovative technologies in JET, which could be called the “Future of Work”. The community can be seen as a communication tool for announcing, explaining changes and preparing employees for the negative and positive effects of change (Spike & Lesser, 1995).

A productive communication best practice consists of transparently and openly conveying strategy, financials, and operations and encouraging two-way communication between managers and employees. The “Future of Work” community can effectively do both. It can spread clear messages regarding the RPA (and future) project plan, update use cases, and success stories via published articles, webinars and videos and performance dashboard. News should address and void out apprehensions from employees (as stated in the interviews) accordingly to alleviate concerns (Bordia et al., 2004) which would enhance positive perceptions about the change. In addition, training and e-learning courses can be published to the community to give employees access to educational tools to learn more about an upcoming RPA project. To stay true to communicating transparent news, setbacks, as well as failure stories, should also be shared with the employees. They can describe lessons learned, address specific concerns, and highlight any new plans to make sure the RPA project is back on track.

Employees should be able to express their ideas, suggestions, and comments to managers on projects that will directly affect their daily work. According to researchers, dealing with defensive in change requires space for reflection and dialogue (Schein, 2003), which empathises the importance of interpersonal communication (or two-way communication). The community boost two-way communication as it works similarly as a miniaturise social media platform. Employees can comment on the articles, and open threads to actively discuss ideas, raise questions or concerns with colleagues, project managers and even members of the board, which can be maintained by tagging their names. This can create a sense of participation, as employees are invited and encouraged to share opinions and ideas. Project

teams can also upload questionnaires or surveys to measure the overall effectiveness of the pilot by periodically checking in with employees.

Convincingly, other than improving internal communication about technological change, the community also reduces confusion and resistance to change (Lippitt, 1997) and ultimately increases commitment to change and the organisation since it involves employees in the business making employees feel valued and trusted (Vulpen, n.d).

Concerning RPA, JET's project team has two plans which are (1) providing the RPA bot – Jetty with a visual animation and (2) implementing an RPA champion community. They can all be incorporated into the community. Firstly, JET has named this “digital colleague” Jetty and at the moment is designing a visual animation for the software bot, aiming live in July. Consequently, presenting RPA information along with the bot visual could be inspirational and create a “buzz” in the community as well as a positive atmosphere about change. Secondly, the automation centre of excellence or RPA super-users facilitates the automation lifecycles within their departments, meaning they have throughout understanding of RPA and be seen as owners of a Q&A hub in the community or go-to-person to ask questions.

The challenge of introducing the community is making sure it is well perceived and maintaining the site activities. Thus, once the community is implemented, it is essential that there are an article introducing the community in general, digitisation and new generation technologies. Employees need to understand the purpose to fully utilise the benefits of the community. HR can also introduce the “Future of Work” community on the company intranet so that people are aware that (1) the site exists and (2) where to find it. In addition, news articles should be attractive, short to the point and regularly to ensure people are engaged with the community and are constantly updated.

Regarding the RPA pilot, since there are three HR processes in the pilot, there should be at least seven articles. The first can explain what RPA is and introduce JET's culture, HR strategy, visions and how they align with RPA. The next article can introduce the pilot project and the three processes to be automated. One more paper can present the animation of the “digital colleague” once the design is finished. Following articles can update the information and celebrate the success or failure of each case. Lastly, there should be an article that summarises all three cases and discusses the plan with RPA.

Details about the recommendation can be found in Table 8 – Appendix F

Cost

Developing a website could be costly. The author takes the average salary of an IT consultant in the Netherlands which is €68 per hour. On average, the time to develop a website is 2-4 months. Here the author states two months to complete the site since internal IT is more familiar with the company interface and would prioritise the in-house project, thus can be complete in a shorter period. There is no cost associated with the cloud server since the website could be stored on the company cloud. Site maintenance is calculated as 2 hours/day for 20 days/month since it does not require to maintain all the time. In addition, the hourly wage of HR managers in the Netherlands is averaged at €24 per hour.

In total, the cost to implement the “Future of Work” community, with at least eight articles would cost roughly €35.552 for four months, average at €8.888 per month. In the future, there will only be maintenance cost and articles, news, videos cost.

6.1.1. Quick wins

HR newsletter

However, developing a community website can be quite costly, adding expense to a rather expensive pilot, thus the HR Director is reluctant to approve the implementation of the “Future of Work”. Nevertheless, the author’s view is that the community would be a suitable investment since it would solve the problem of sharing high-quality information with employees about the project. Moreover, it is better to have a focus space to share communication-related technologies rather than having the information or materials on the same topic scattered in different places.

But understanding the impact of the cost as well as the urgency of sharing news with HR employees, the author advises a quick-win solution that is easy and economical to implement (ACI, n.d.) to this recommendation.

If the community is not implemented, RPA information could be updated to employees regularly in the weekly HR newsletters (which are sent by HR to employees every week). These newsletters could also be recycled to post in the community later when the HR Director decides to invest in the idea. Furthermore, the newsletter format also meets the expectation of HR Associates since they will not take more than a minute to read. By presenting to HR employees frequent and exciting updates on the projects, they are more likely to be inspired by the change initiative and thus are more committed to the change and ultimately to the organisation. However, a drawback to this recommendation is that there is no certainty that employees will read the newsletter.

Table 8 – Appendix F describes the cost and benefits of the quick win RPA newsletters

Cost

Since the HR weekly newsletter is already in use at JET, there is no implementation cost. This recommendation only cost HR time to creating update newsletter about the project. In total, & newsletter would cost €168 for seven articles, costing €24 per article.

Slack channel – HR & RPA

Considering the importance of two-way communication, the author advises implementing a slack channel designated for RPA news related to HR. The targeted audience for the RPA pilot is currently HR Ops employees, as they are directly affected by the software bot. Thus, it is critical to connect with HR Ops employees to avoid disengaged, as well as garner their support, and make sure they are fully invested in the project to ensure successful implementation (Ezer, 2020).

The slack channel can place the role as a feedback system from employees to project management. Having a channel to share feedback could lead to a more effective technological change. By enhancing the communication flow between project managers and HR Ops Associates, ideas can be regularly exchanged, and employees can see that their input is welcomed and valued. In every change initiative, validating feedback is essential. By utilising a channel for regular exchange, project managers can base on employees’ recommendations to act accordingly.

At the moment, there is no channel for employees to state their ideas or provide feedback to the project team, which is why they do not feel vital or included in this project. Open a channel that promotes two-way communication can prevent misunderstandings and one-directional thinking. More importantly, it can improve team alignment and collaboration and eventually create employee engagement.

Cost

Since the company is already using Slack as a communication channel, there is no implementation cost associated with this recommendation. HR only needs to create an RPA & HR group chat and start by updating news to maintain the continuous flow of information. When the project managers initiate a discussion about RPA, HR plays the role of facilitator or paradox navigator to regulate the conversation.

6.2. Recommendation 2 - A Standardise Operating Procedure

Introducing a new project means introducing new business procedure and possibly creating new metrics, adding skills to employees or changing organisation structure. New business procedures and job responsibilities could create confusion to employees; thus, it is essential to systematise way of working.

The second proposal aims to standardise the operating procedure of an RPA project by placing the employees (HR Ops associates) in the centre. Having this procedure standardise can increase consistency, save time and improve quality assurance (Eisner, 2021). The recommendation aligns with strategy of transform into a high quality, digital organisation. By putting employees in charge, this recommendation not only increases participation in decision-making but also increases employees' autonomy and ownership, which align with JET's adhocracy culture and HR purpose.

Scholars suggested that offering opportunities for participation in decision-making are one of the strategies to increase involvement, value relevance and commitment (Herscovitch & Meyer, 2002; Choi, 2011). Employee participation will boost the ability to have a voice and influence the result of the change (Rogiest, Segers & Witteloostuijn, 2015), as well as enhance motivation to support change (Caldwell et al., 2004).

As established, process automation will start with employees, since they are the ones who understand the processes best, it makes sense to seek their professional opinions. HR will create a survey for employees to fill their proposals to the project manager or to the RPA champion in their department about processes should be automated. However, the proposals should be able to answer the question:

- What do people want to achieve with this automation?
- What value will it build to the department and the organisation?

However, not every process is suitable for automation thus, and choosing an appropriate process to automate is the most crucial part of implementing RPA. This requires HR and project manager to create a new metric to assess the appropriateness of processes for automation. Each organisation has different a strategy and requirements for process automation; thus, the process scoring system need to be tailor to organisation's needs accordingly. Due to the nature of RPA, some fundamental criteria that must be consider when scoring a process include:

- Is the process primarily rules-based, or many exceptions requiring human judgment?
- Is it manual and repetitive?
- Is the data in a structured format within a database and is easy to digitally analyse?
- Is the process prone to human errors?

Organisations can add in additional criteria that is suitable to their demand. The metrics should be included in the sent survey for employees to score their proposed process themselves. The process scoring system will be in a score-range method, with a criterion scoring from 1 to 5. For example, a score of 5 describes if the process is primarily or entirely rule-based and a score of 1 describes if the process requires human judgement. When all

elements are scored, employees need to sum to get the total result, thus be able to identify potential process according to the score range:

- d+: Process is a good candidate for automation
- b - c: Process might be a candidate for automation
- 0 – a: Process unlikely to be a good current candidate for automation

The score range depends on the number of organisations' criteria for process automation. JET is now prioritising global processes, hence if the suggested idea from an employee is suitable and can be aligned globally, it is more likely to be chosen.

Once a process is identified as a potential subject for automation, HR will notify the employee and he/she will work with the project manager as a subject matter expert (SME) for the project. As SME, the employee needs to analyse the process to identify the project scope (global/regional or country). Moreover, the employee is responsible to map the process (before and after), alternate the process accordingly to fit with RPA and aligning the process in different regions. This process might be time-consuming, depending on the complexity of the process and the project scope. HR can participate in the meeting to oversee the progress, act as a facilitator and strategic partner and change agent, to communicate the effect of process automation to employees.

However, for employees to participate in the project as SME, they need to acquire new knowledge and skill set. Employees need to understand what RPA is, and what it can and cannot do to alternate processes correspondingly. In addition, employees might need to develop collaboration, share resources and concerns about key values (strategic partner), plan, report, and control and encourage the flow of ideas (admin expert). This suggests that HR should plan a learning and development course to transfer needed skills and knowledge about RPA and personal development to employees.

Implementing this recommendation not only encourages employees to partake in decision-making and participate in the project but also standardises the working process of RPA. meaning besides increasing employees' commitment, it also establishes a unified strategy for an automation project. Moreover, it gives the employees the chance to be more proactive, have full responsibility, and ownership of an RPA project and might learn new skills to become strategic partners, change agents and admin experts.

This recommendation is suitable for a technochange project, as it introduces a new IT application, but in conjunction with complementary organisational changes (Markus, 2004). Firstly, it can alternate a business process to be more rule-based and repetitive, making it suitable for automation. Secondly, HR and project managers need to create a unified metrics system for assessing future processes. Thirdly, when a process is automated, employees need to adjust to the new way of working, as the bot is now performing that tasks. Finally, employees need certain skills to take charge of the project, thus requiring HR to create new learning courses to enhance and develop knowledge, skills.

Details of implementation to this recommendation (with possible steps) can be found in Table 10 – Appendix G

Cost

The duration of each step is an estimation since in practice, it may take longer or less time depending on the working speed and the number of people, who are working on the research and their business. Besides, there is no information related to the salary of people working in JET. Thus, the cost is based on the average hourly salary of HR managers, HR officers and project managers in the Netherlands. Some tasks are unable to define a duration or cost since

it depends on the complexity of the process and the availability of employees and project managers.

6.3. Further research on Perceived ease of use and Commitment to change

Considering that Perceived Ease of use is not measured in this research, it makes sense to evaluate this variable when the system is done implementing. Perceived ease of use is important because, with Perceive usefulness, researchers can identify is the technology acceptance or rejection by individuals, which is crucial to assess the success of managing technochange.

However, RPA is different from other technological systems. Besides the configuration at the back office, HR employees do not interact with the software bot. RPA can work on outlined, rule-based tasks its own. Thus, it can be difficult to know if the interaction with RPA is frustrating or effortless. As a result, the author proposes new items as shown in the survey to specifically measure ease to use for RPA that require testing. Detail of the survey can be found in Appendix H.

The survey is based on the original research “Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology” by Davis (1989); however, some elements is changed by the author to meets the nature of RPA technology. Concentrated elements to this assessment of Perceived ease of use included:

- The ability to learn/understand RPA
- Working with RPA is simple/complex
- Easy to be skilful
- Easy to detect errors (new)
- Easy to fix errors (new)
- RPA makes the process too complex (new)

The survey on perceived ease of use addresses all above-mentioned elements in a rating scale method range from 1 to 5 (Extremely disagree, Disagree, Neutral, Agree and Extremely agree). It can be interesting to see the result of this survey and how applicable it is since there has not been any research that measure is RPA easy to use in employees' viewpoints. The survey can become a new metrics system to evaluate perceived ease of use on RPA, if the testing present high applicability.

In addition, it would be applicable to re-evaluate commitment after implementing the two recommendations above. Then the different levels of engagement before and after introducing the two influential factors and determine whether or not they are the main factors that affect the commitment level at JET. If not, HR needs to re-investigate to find real issues that reducing employees' commitment, which might stem bigger problem under the surface.

The first step is to review and send out the survey to employees “working with” RPA and directly affected by the above-mentioned recommendations (HR Ops Associates). The survey can take around 10 minutes and it may also require employees' age, gender, as employees' names could be optional because not all employees may feel comfortable sharing information honestly especially if there is an issue if they could be tracked down. The second step will be to analyse the obtained data and to draw conclusions.

In the end, by using quantitative research method, a comprehensive understanding of the factors that affect technology acceptance and commitment to change can be gained. Consequently, appropriate interventions to maintain high level of engagement and acceptance can be developed and implemented. Ultimately, happy to change initiative could lead to more job satisfaction and dedication to organisation.

Details of the cost-benefits of this recommendation as well as HR roles are presented in Table 13 – Appendix H.

Cost

The author takes the hourly wage of HR managers in the Netherlands at €24 per hour and the hourly wage of HR officer in the Netherlands at €16,16 per hour. In rough total, this recommendation cost €525.4

6.4. Roles of HR

Overall, the roles of HR in the three recommendations are the business partner role, the innovation role, and the change agent role.

HR acts as the business partner when it comes to understanding and analysing whether process automation and transformation plans correspond with business strategy. They can also develop relevant HR approaches to address issues as they arise and ultimately contribute to the organisation's success (Amstrongs, 2020).

When it comes to the role of innovation, HR provides certain new methods or metrics that attempt to improve the organisation's effectiveness. In order to fulfil this position, HR must be in charge of project planning and resource requirements assessment. Furthermore, they must be clear about their innovation goals and lead them in the appropriate path (Amstrongs, 2020).

Most importantly, HR takes the role of change agent to facilities changes and enhance employees' commitment by providing advice and support on its introduction and management (Amstrongs, 2020) The implementation plans indicate HR change agent on two dimensions: Incremental change – gradual adjustments of HR policy and practices that only affect single activities or multiple functions and HR expertise – the unique knowledge and skills that define contributions of what HR can do to effective people management (Caldwell, 2001).

6.5. Personal reflection of the author

This sub-chapter is specifically for me to reflect on the final thesis in my fourth year of studying International Human Resources Management at Saxion University of Applied Sciences. It has been an incredible journey and such a roller-coaster experience writing this HR thesis. I have had the opportunity to widen my knowledge on the topic of technological changes as well as develop my professional skills while completing this thesis research.

This research has allowed me to understand the necessity of employees' viewpoints, their concerns and/or resistance when introducing new technologies. I learned that there are a lot of factors that can influence employees' perception of technology acceptance and how a company can manoeuvre those factors to ensure change is managed successfully. It is interesting to see how this research develops from the problem analysis and how the results differ from the assumptions. With deep knowledge about the topic as well as thoroughly discussing it with the RPA project manager, I was able to formulate recommendations to enhance commitment to technological changes.

Participating in this pilot has also taught me about project management that drives change, and how to define and convey key messages and KPIs (key performance indicators) to managers and employees. In addition, I got to learn about different HR systems in a company landscape, which can transform and digitalise the way we work.

Regarding personal development, there was a noticeable improvement in my communication skills, namely reading, writing, and speaking in delivering ideas and information. I have read many articles and research about the topic and was able to concentrate on important matters. Moreover, being directly involved in the pilot has advanced significantly my ability to converse. I have met and discussed RPA with many stakeholders, regional HR managers and the collaborated vendors and stated my opinions on the project, which were all well-perceived. The interview's results as well as the recommendations mentioned above were all discussed with the RPA management team, which could be implemented in the near future.

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Appendices

Appendix A: Interview Protocol

Introduction

Dear participant, thank you for participating in this research project on employees' viewpoint on technochange. My name is...

- The goal of this interview is to gain information on how employees' perspectives impact the implementation of technological change (implementation of RPA in HR operations).
- The interview data will be processed anonymously
- The interview will take around 30-45 minutes
- Do you agree with my recording of the interview?
- Do you have any questions before we start?

We would like to start with some general questions about you and your experiences with RPA. After that we will move on to more specific questions about your personal viewpoint (attitude, alignment, skills and organisation factors) of RPA.

Interviewee's Background & Experiences

1. How long have you worked for JET?
2. What is the industry of the company you work for before JET?
 - ✓ How agile is said company to technology compared to JET?
3. What is your understanding of RPA?
(Provide definition: a software bot that will work side by side with HR Ops teams, help automate repetitive tasks within the HR process, giving back more time to HR Ops to focus on value-added projects and quality customer experience.)
4. Do you have prior experience with RPA or any software bot?
 - ✓ How do you perceive this change? positively or negatively? (if yes)
 - ✓ How much were you involved in the implementation of said technology? (If yes)
 - ✓ What action was taken to improve your behaviour towards the change? (If negatively)
5. Do you have prior experience with technological changes that impact your way of working? (e.g., Workday) (skip 5 if 4 is yes)
 - ✓ How do you perceive this change? positively or negatively
 - ✓ How much were you involved in the implementation of said technology?
 - ✓ What action was taken to improve your behaviour towards the change? (If negatively)
 - ✓ What is the end result of implementing said technology? Good or bad?

Attitudes

6. Do you personally support the idea of implementing RPA? If yes, why? If not, why?
 - ✓ If yes, do you believe that using the system is (will be) enjoyable for you? If so, what are they? (Perceived enjoyment)
(Either enjoyment of learning on how to use new system or the enjoyment of using the system itself, not enjoyment from the benefits)

- ✓ Do you think JET has the capability to implement RPA? (In terms of capacity, resources, knowledge, etc) If yes, why? If no, why and what is the company missing?
- 7. What are your main concerns about the implementation of RPA?
 - ✓ Do you think you will have any apprehension or even fear of using the system? (Computer Anxiety)
- 8. Do you look forward to the implementation? If yes, why? If not, why?
 - ✓ How well do you think you will adapt to the implementation of RPA?
- 9. Do you feel included and/or important in the implementation of RPA? If yes, why? If not, why?

Alignment

- 10. In your opinion, how is RPA align with your everyday task? (Job relevance)
- 11. In your opinion, how can RPA improve the quality of your work?
 - ✓ Do you believe RPA can help you perform your task well? (Output quality)
 - ✓ Do you believe the results of using RPA are tangible, observable, and communicable? (Result demonstrability)
- 12. In your opinion, how is RPA aligned with the culture of JET and the HR Department? (Culture fit)
- 13. How can RPA help the development of HR and JET?

Organisational factors

- 14. How have you been informed about the implementation of RPA?
 - ✓ Do you think you have been thoroughly informed about RPA, and does the quality of the information meet your expectation?
 - ✓ What type of information do you think can be better communicated by JET?
- 15. How much are you involved in the process of implementing RPA in terms of decision making?
 - ✓ Do you communicate your ideas or opinions about RPA with your manager or colleague?
 - ✓ If you were involved in the formulation of RPA, what type of decision would you bring? (Your opinions on decision-making)
 - ✓ Would you be interested in being an ambassador for RPA within your region? If yes, could we contact you once the time is near? If no, why not?
- 16. What type of changes do you think RPA will cause to your workflow and business processes?
 - ✓ How do you think RPA will impact work design, HR policy, and/or restructuring departments?
- 17. What type of training do you think JET should provide to employees to use RPA?

Concluding remarks

Thank you for enabling me to ask these questions and answering them with this amount of detail, the information gathered will be a valuable addition to my research.

- 18. Is there anything we missed/what you would like to add?

Thank you again, I will now stop the recording.

Appendix B: Codebook

Questions	Variables	Labels
1	Interviewee's background	No code
2	Interviewee's background	No code
3	RPA Understanding	Open coding
4	Experience with RPA	Open coding
5	History with technochange	Open coding
6	Attitudes (Support)	Perceived ease to use Readiness to change Openness to change
7	Attitudes (Concern)	Open coding
8	Attitudes (Look forward)	Perceived ease to use Readiness to change Openness to change
9	Attitudes (Vital/Important)	Commitment to change
10	Alignment (Job relevance)	Perceived usefulness
11	Alignment (Output quality & Result demonstrability)	Openness to change
12	Alignment (Culture fit)	Commitment to change
13	Alignment (Development of department & company)	Open coding
14	Organisation factor (Information)	Readiness to change Commitment to change
15	Organisation factor (Participation)	
16	Organisation factor (Changes to business & workflow)	
17	Provide training	Open code
18	Interviewee's suggestion	No Code

Dimensions	Items
Perceived usefulness	The system improves work quality
	The system improves productivity
	The system reduces time on unproductive activities
	The system addresses job-related needs
Readiness to change	The belief change will create positive outcomes
	The belief organisation has the capacity to accomplish change
	A positive attitude towards the need for change
	Ability to handle change
Openness to change	Open to the idea of change
	The belief change will not create any negative outcomes
	Support change initiative
Commitment to change	The belief that organisation's culture and environment align with change
	The belief that tasks and business processes align with change
	Vital in the change initiative
	Participation in change initiative
	Receive quality information about change

Appendix C: Sample Email to Participant

Dear

We would like to invite you for a short interview for our project regarding the implementation for Robotic Process Automation (RPA) within HR Operations department.

RPA is short for robotic process automation, a new system which will be implemented in the HR Operations department. RPA will allow maximum efficiency through robotics and automation, as well as ensure data quality.

We would like to involve the employees early in the process to be able to gather insights, to identify potential resistance and to collectively make this project a success. The interview will take no longer than 30 minutes and will be consisting of questions such as; "What is your opinion on implementing RPA within JET?" and "How does RPA help with the development of HR within JET?". The questions are focused on gathering information on the attitude towards RPA, the alignment with the current job, the necessary skills in order to perform RPA and the organizational factors.

I have found a time slot that is open for both of us. Please feel free to adjust accordingly, if not suitable. Thank you.

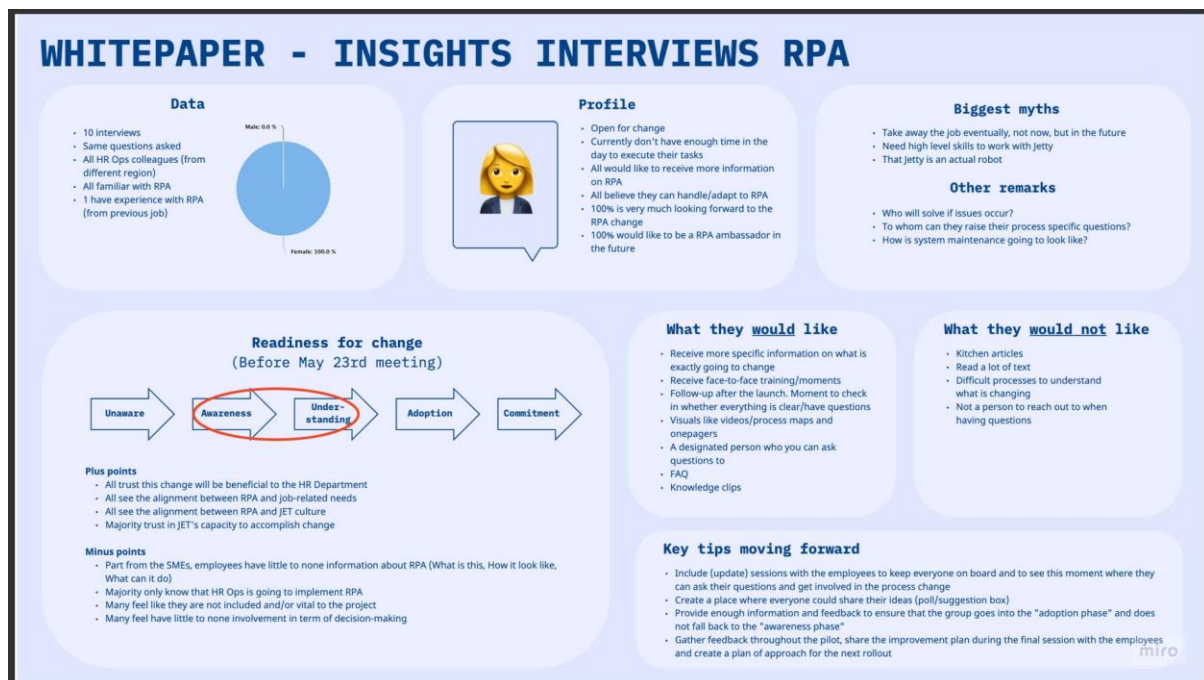
Best regards,
Van

Appendix D: Participant Code Table

Sample groups	Participants	Code
HR Ops Associates	Interview 1	(1)
	Interview 3	(3)
	Interview 6	(6)
	Interview 7	(7)
	Interview 8	(8)
	Interview 9	(9)
	Interview 10	(10)
SMEs	Interview 2 SME	(2)
	Interview 4 SME	(4)
	Interview 5 SME	(5)

Appendix E: Primary Results of Interviews

The image below is the results of the interviews gathered by the author to present to the project team at JET



Appendix F: Implementation plan – Recommendation 1

Table 8. Implementation plan of "Future of Work" community

Steps	Ownership	HR Role	Duration	Cost	Benefits
Build "Future of Work" community	IT	-	2 months	Average Salary: €68 x 8h x 45 days = €24.480	A space designated for technologies use in JET
Website maintenance	IT	-	-	Average Salary: €68 x 2h x 20 days = €2.720/month	Regular update and maintain to ensure site run in full capacity Increase site security and site traffic
Create RPA articles	HR	Credible Activist Technology and Media Integrator	1 hour per article 2 articles per month	Average Salary: €24 x 1h x 2 articles = €48/month	Share news about newly implemented technology (RPA) Share stories, celebrate success/failure implementation Increase information quality and quantity to employees about RPA

Table 9. Implementation plan RPA news in HR weekly newsletter (Quick win)

Steps	Ownership	HR Role	Duration	Cost	Benefits
Create and send RPA newsletters (1 st article)	HR	Credible Activist	1 hour	Average Salary: €24 x 1h = €24	Share information about what is RPA, how to use it and how it aligns the company's strategy
Create and send RPA newsletters (2 nd article)	HR	Credible Activist	1 hour	Average Salary: €24 x 1h = €24	Introduce the pilot project and the 3 processes to be automated.
Create and send RPA newsletters (3 rd article)	HR	Credible Activist	1 hour	Average Salary: €24 x 1h = €24	Update on the results of the first pilot process
Create and send RPA newsletters (4 th article)	HR	Credible Activist	1 hour	Average Salary: €24 x 1h = €24	Share animation of software bot when it is finished
Create and send RPA newsletters (5 th article)	HR	Credible Activist	1 hour	Average Salary: €24 x 1h = €24	Update on the results of the second pilot process
Create and send RPA newsletters (6 th article)	HR	Credible Activist	1 hour	Average Salary: €24 x 1h = €24	Update on the result of the final pilot process

Create and send RPA newsletters (7 th article)	HR	Credible Activist	1 hour	Average Salary: €24 x 1h = €24	Share the overall result of RPA in HR Ops
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Appendix G: Implementation plan – Recommendation 2

Table 10. *implementation of standardise working procedure with RPA*

Steps	Ownership	HR Role	Duration	Cost	Benefits
Create a process scoring system	Project Manager	-	5 hours	Average Salary: €24.87 x 5h = €124.35	Create a new metrics system that help identify the potential processes
Create and send survey to employees	HR	Credible Activist	1 hour	Average Salary: €24 x 1h = €24	Encourage employees to participate in the decision-making process
Employees do the survey	Employees	-	1 hour	Average Salary: €16,16 x 1h x 35 employees = €565.6	Increase employee's participations
Clean and organize the obtained data	Project manager & HR	Analytics Designer and Interpreter	4 hours	Average Salary: (€24.87 + €24) x 4h = €195.48	-
Decide the process(es) to be automated	Project manager (RPA champion) & HR	Analytics Designer and Interpreter	1 hour	Average Salary: (€24.87 + €24) x 1h = €48.87	Define potential processes for automation
Create news and notify employees about the process and assign SMEs	HR	Credible Activist	1 hour	Average Salary: €24 x 1h = €24	Clear communication on new RPA project (process to be automated) and SME
Identify process with employees (process alternation,	Project manager & SMEs	-	-	-	-
Align process globally	Managers	-	-	-	-
Identify process scope	Project manager	-	-	-	-
Start automating process	Project manager & employees	-	-	-	-

Appendix H: Implementation plan – Recommendation 3

Perceived ease of use

1. I find it easy working together with Jetty

Extremely disagree	Disagree	Neutral	Agree	Extremely Agree
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2. I find it easy to understand/learn how Jetty work/operate

Extremely disagree	Disagree	Neutral	Agree	Extremely Agree
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3. It would be easy for me to become skilful at working together with Jetty

Extremely disagree	Disagree	Neutral	Agree	Extremely Agree
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4. Jetty often behaves in unexpected ways

Extremely disagree	Disagree	Neutral	Agree	Extremely Agree
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5. I don't know what to do when Jetty makes error/mistakes

Extremely disagree	Disagree	Neutral	Agree	Extremely Agree
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6. I find it difficult to troubleshoot to find out what went wrong with Jetty

Extremely disagree	Disagree	Neutral	Agree	Extremely Agree
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7. I find Jetty added complexity to the business process

Extremely disagree	Disagree	Neutral	Agree	Extremely Agree
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Commitment to change

1. I feel important to the project

Extremely disagree	Disagree	Neutral	Agree	Extremely Agree
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2. I am included in the process of decision-making

Extremely disagree	Disagree	Neutral	Agree	Extremely Agree
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3. I am actively stating my opinion

Extremely disagree	Disagree	Neutral	Agree	Extremely Agree
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4. The quality of information meets my expectation				
Extremely disagree	Disagree	Neutral	Agree	Extremely Agree
5. I have all the information I need				
Extremely disagree	Disagree	Neutral	Agree	Extremely Agree

Table 11. *Implementation of further research*

Steps	Ownership	HR Role	Duration	Cost	Benefits
Review and send survey	HR	Credible Activist	1 hour	Average Salary: €24 x 1h = €24	Measure employees perceived ease of use and commitment
Employees do the survey	(HR) Employees	-	15 minutes	Average Salary: €16,16 x 10m x 35 employees = €141.4	Measure employees perceived ease of use and commitment
Clean and organize the obtained data	HR	Analytics Designer and Interpreter	4 hours	Average Salary: €24 x 4h = €96	-
Analyse data	HR	Analytics Designer and Interpreter	4 hours	Average Salary: €24 x 4h = €96	-
Draw conclusions	HR	Analytics Designer and Interpreter	2 hours	Average Salary: €24 x 2h = €48	-
Develop recommendations	HR	Change Champion	5 hours	Average Salary: €24 x 5h = €120	Actions require to keep the acceptance and commitment level