

# HUMAN RESOURCE AND TALENT MANAGEMENT IN IRELAND (USE OF ARTIFICIAL INTELLIGENCE AND HUMAN RESOURCE INFORMATION SYSTEM)

National College of Ireland

# Submission of Thesis and Dissertation

#### National College of Ireland

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**Title of Thesis:** Human Resource and Talent Management in Ireland (Use of AI & Human Resource Information System)

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Project Title:	Human Resource and Talent Management Human Resource Information System	t in Ireland	(Use of AI &
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#### [Insert Module Name]

# Research title: The Use of Artificial Intelligence and Human Resource Information System (Hris) In Human Resource and Talent Management in Ireland

Your Name/Student Number	Course	Date
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#### Abstract

This research is about addressing human resources and direct management in the digital era in Irish organizations. The primary objective is to address the impact of mobile decision management in the digital era in Ireland. The study has established a background regarding talent management and human resource management and has helped to establish the research hypothesis which has been attested in the literature review with existing research papers. Additionally, research questions and gaps in the literature based upon addressing human resource and talent management through understanding existing research papers have been established.

The literature review reveals digitalisation has positive influences on HR and talent management. Certain challenges have been identified here such as skill gaps, the existence of a generational gap, and high competition for recognizing rare talents. In this case, several factors related to the digital era such as employee satisfaction, cross-functional management, and digital transformation have been addressed. Regarding this, strategic negotiation and research-based view theory have been evaluated for addressing human resource and talent management in the digital era.

The findings of the study have showcased that data-driven HRIS and AI help to influence the talent management program and manage human resources in Irish organisations. Moreover, the survey analysis has analysed that AI and data-driven decisions are crucial to improve retention of talented employees, however, awareness of technological adaptation is crucial for this. Additionally, the findings of this study also demonstrated that employees' experience and satisfaction are crucial along with the talent management process to increase the high employee retention process and reduce attrition. Additionally, AI and HRIS help to minimise skill and communication gaps and enhance the relationship between HR and employees.

The discussion section of the research helps in analysing potential key findings from the survey session, the literature review part along with overall analysis of the findings related to digital transformation essentialities for Hr and talent management in organisations of Ireland. Moreover, objective-based information analysis with the alignment of key findings has been also analysed along with the information theoretical re-establishment for the current research.

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# **Chapter 1: Introduction**

#### **1.1 Introduction**

The digital revolution has created business and organisational practices as a digital-based approach. Regarding this, HR or Human Resources and Talent management have also been impacted due to digital transformation. This is because HR and talent management are considered strategic pillars in achieving organisational success. Here, this research is about addressing human resources and talent management in the digital era in Ireland. This chapter is about addressing human resources and talent management in the digital era by identifying the background of the research context and discussing the aim, objectives, question, justification, and structure as well.

#### 1.2 Background of the research

Nowadays, businesses are going through a dynamic technological evolution in a digital world that has developed a radical change for human disease management and talent management as well. According to Cherep *et al.*, (2022), human resources processes and activities are being modified and updated to new technologies considering a radical transformation in terms of digitising the workforce. Changing business aspects and adopting technology that requires specific skill sets have affected the independent workforce in Ireland (Assets.gov.ie, 2018). Figure 1.1 mentions that different Irish workforces have displaced adopting digital technologies from 2016-2023.

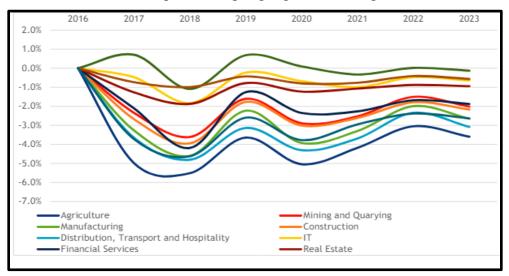


Figure 1.1: Workforce displaced due to automation

# (Source: Assets.gov.ie, 2018)

A report has addressed that 29% of employers of different organisations agreed to be less equipped to be digitally skill-ready in the recent job market (The Hr Department. ie, 2022). However, Irish

organisations have considered the talent crunch to acquire the right talent and technology through efficient HR management in current workforces for thriving in the digital-based era. KPMG (2020) has reported that about 70% of organisations are planning to upskill their employees, whereas 30% also are willing to improve digital capabilities through managing talent for the next three years. The report has also addressed that different Irish organisations have shifted their HR leader parties to mind-set investments and also to retrain the employees with new skills (KPMG, 2020). In this regard, it was found that 58% of CEOs in the organisation have considered HR as an administrative manner rather than a value driver and 79% have stated that HR needs to transform itself. However, 81% have mentioned HR plays a crucial role in fulfilling an organisation's response to the pandemic (figure 1.2).

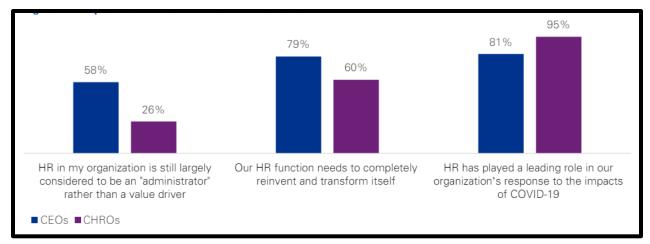


Figure 1.2: Perception of HR management and function in Irish Organisations (Source: KPMG, 2020)

As studied by Fenech (2022), HRM and talent management in the digital era have become more digitised to leapfrog functions such as replacing manual curriculum fatigue with automatic screenings with real-time monitoring systems. Regarding this, CIPD (2024) has reported that 91% of Irish organisations are facing a skilled workers shortage which can jeopardise overall economic growth and hinder employment.

Based upon the study of Dahlbom *et al.*, (2020) HR and talent management in the digital era have increased transparency and greater access to employees' data. Fenech (2022), opined that different organisations consider LinkedIn, Skype for video conferencing and Facebook to be used as a platform to hire employees.

Hence, based on these past findings the key variables consisting of both independent and dependent can be addressed in research hypotheses.

#### **1.3 Research hypotheses**

H1: There is a positive and strong relation between digitalisation (IV 1) and HR and talent management (DV)

H2: There is a strong and dynamic relationship between employee experience and satisfaction (IV2) and HR and Talent management (DV)

**H3:** There is a positive and strong relationship between digital transformation (IV 3) and HR and Talent management (DV)

**H4:** There is a strong and dynamic relationship between cross-functional management (IV 4) and HR and Talent management (DV)

**H5:** There is a positive and strong relationship between the digital skills landscape and the digital skills gap (IV 5) and HR and Talent management (DV)

**H6:** There is a strong and dynamic relationship changing market needs (IV 6) and HR and Talent management (DV)

# **1.3 Aim and Objectives**

#### Aim:

The research aims to address the impact of human resource and talent management in the digital era in Ireland.

# **Objectives:**

**RO1:** To address the impact of digitalisation on HR and talent management.

**RO2:** To explore different factors related to HR and talent management in the digital era.

**RO3:** To identify key issues faced by Irish organisations in managing talent in the digital era.

**RO4:** To find best practices for managing HR and talent management strategies in the context of digitalisation in Ireland.

# **1.4 Research questions**

RQ1: What is the impact of digitalisation on HR and talent management?

RQ2: How do different factors relate to HR and talent management in the digital era?

**RQ3:** In what manner are the issues faced by Irish organisations hamper management talent in the digital era?

**RQ4:** What are the best practices for managing HR and talent management strategies in the context of digitalisation in Ireland?

#### **1.5 Research justification**

The research about the impact of talent management and HR especially in the digital era. According to Gilch and Sieweke (2021) the current digital revolution challenges where organisations face issues on retaining employees. In this regard, this research is important for many reasons as it provides information regarding acquiring talented employees and minimising the gap between traditional and modern HR management. CIPD (2024), reported that 90% of organisations in Ireland have championed diversity, 89% on improving the employee experience, and other HR and talent management. This factual information has been illustrated in the figure below.



Figure 1.3: Importance of HR and talent management in Irish firms

# (Source: CIPD, 2024)

This research will provide suitable practices for retaining and attracting talents and considering the focus on upskilling programs in Irish businesses. This research has also the potential to address the importance of the Irish workforce in terms of empowering talent management and HR professionals which can lead to more competitive advantages and achieving sustainable, talented people for business.

# 1.6 Gap in literature

The research about the impact of human resource management and talent management in the digital era in Ireland poses several gaps that were not addressed in existing literature. For instance, in the rapid dynamism of the technological revolution, there has been a gap in determining the factors and impact of HR and talent management in the digital era to align global competencies and existing qualifications and knowledge among Irish workers.

This gap in the literature develops skill and educational gaps, especially in dealing with global business challenges for Irish companies on going over to traditional HR practices. In addition to this, there is no existing information about addressing information or presenting factual data about re-skilling employees, which develops a change in the situation in the organisation to retain talented employees (Jansson and Persson, 2020). Hence, there can be shortages of valuable positions for existing employees, which hinders motivation.

1.7 Structure of the research

Introduction Literature Review Methodology Findings and Analysis Discussion Conclusion and recommendation

#### **Figure 1.4: Research structure**

(Source: Developed by the researcher)

#### **1.8 Summary**

This chapter has assessed the background information about the impact of talent management in the digital era by addressing key aims, objectives, research questions, justification, literature gaps, and structure of this overall research paper. Here, the background information has helped to develop research hypotheses that have also been addressed with evidence and supporting pieces of literature in the literature review chapter.

#### **2:** Literature Review

#### **2.1 Introduction**

HR (Human Resources) plays an essential role within the organisation in handling employee relationships, talent acquisition, on boarding, payroll, and managing other activities. This chapter is going to elaborate on the main research context by developing different themes based on the research objectives. Past research articles and journals are taken into focus here mainly for analysing the themes in depth and along with this, case study examples are used here as well. With the help of theoretical perceptions, it can be possible to elaborate the research context in a more precise way and the conceptual framework is effective for highlighting the connections between independent (IV) and dependent (DV) variables.

#### 2.2 Analysis of the impact of digitalisation on HR and talent management

The presence of digitalisation within organisations is relevant for managing stakeholder groups such as HR along with line managers for identifying talents to a greater extent. The integration of HRM digitalisation strategy in organisations has been seen in different Irish organisations. According to Ali et al. (2023), advanced technology enabled HR functions to enhance the procedures of documenting, monitoring as well as recording functions for the organisational functions. On the other hand, the study of Bhat and Sheikh (2024) highlighted that despite all the beneficial factors there were also some challenging factors associated with digitalisation in HR management such as data security issues, lack of knowledge about operating digital tools, high fees of the digital software and others (Refer to figure 2.1). The technological advancement that is associated with human resource management refers to IT, cloud computing, big data analytics, cyber-physical systems, communication technological implications and many others. In Ireland, technology, IT, software and digitalisation skills are required for the growth of medium, big and large MES specifically 4.0 integration in HR management process and others (McDermott et al., 2023). In this context, it can be considered that awareness and communication will effectively facilitate this progress of digitalisation to overcome challenges related to HR management by Irish enterprises.

#### Advantages of Digitalisation

- •Automation saves time for HR professionals.
- Attracts better talen
- Encourages engagement by identifying and acknowledging employees' potential
- •Enables international connection and globalization through erecruitment
- •E-learning (training) saves costs and hassle of arranging it

#### Challenges of Digitalisation

- Relevance and high fees of digital software and e-HRM for HR departments
- •Employees may struggle to learn to use digital tools effectively
- •Negative implications such as data security concerns

#### Examples of HR Digital Transformation:

- Use social media platforms for job postings.
- Conduct video interview
- •Employs AI to filter candidates
- In-person interviews with HR executives and managers are the last step in the process, leading to faster and more accurate hiring.

# Figure 2.1: Details digitalisation impact on organisations for HR and talent management

(Adopted from Bhat and Sheikh, 2024)

The study by Abrahams, (2015) has addressed that the financial sector of Ireland benefited from the crisis scenario by acquiring HRM digitalisation strategies. Abrahams, (2015) also stated that the AIB (Allied Irish Banks), is one of the leading banks in Ireland. In the era of post-Second World War, a financial crisis was observed in Ireland as its GDP was reduced by 7.25% and there was a high presence of depression. The scholar has used qualitative research to understand the needs of the workforce including managers and the board of directors and how they have managed the financial crisis by hiring talented employees in Irish organisations (Abrahams, 2015).

According to Wiblen and Marler (2021), digitalisation including automation has a strong positive impact on the perceived legitimacy of the HR professionals in Irish organisations through which it is possible to conduct talent management quite easily. The scholar used a qualitative case study here for gathering reliable data and the findings suggested that the perceived legitimacy of HR such as the development of their activities and behaviours helps to keep employees satisfied enough. As an impact, it is possible to retain talented employees in the long term and build a productive workforce. A study by Bhimani and Willcocks (2014) has addressed that Human Resource Management enables organisations to obtain digital technology in their HR practices. This scholar has used qualitative research methods to address the importance of digital technologies and their results on organisational agility. This article has also addressed the DTM or

Digital Transformation Management to focus on its transformative potential and develop agile capabilities.

However, Abrahams, (2015) has argued that HR while giving personalised training and development scope to the dispersed workforce has faced core challenges due to a lack of digital advancements. Additionally, Abrahams, (2015) has criticised the lack of awareness of talent management in corporate boards. Therefore, different Irish organisations felt reluctant to provide training to the entire workforce.

Digitalisation develops the scope of HR and talent management effectively as it helps HR professionals identify skill gaps, improve workforce productivity, and conduct relevant predictions regarding the needs of future talents (Bhimani and Willcocks, 2014). Abrahams, (2015) addressed that a "cloud-based Learning Management System" (LMS) and building "personalised learning paths" through data analytics, was possible to do so. It helped to improve skill areas of the workforce and improvement in the performance area was also equally observed. Therefore, it is possible to retain talented employees in the long term and build a productive workforce. Therefore, it can be stated that digitalisation develops the scope of HR and talent management effectively as it helps HR professionals identify skill gaps, improve workforce productivity, and conduct relevant predictions regarding the needs of future talents. However, the research by Wiblen and Marler (2021) argued that digitalisation in talent management is essential although organisations still need to recognise the people's factors. The people factor such as the key stakeholders or human elements such as behaviours, attitudes, and others shape digitised talent management.

As per the statement of Dahlbom *et al.*, (2020), the integration of the HRA (Human Resource Analytics) within HR functions of the organisations of Ireland is effective in reducing technical and human obstacles quite effectively. The primary data collection method was taken into focus here where qualitative interviews were conducted with 9 companies. The result highlighted that rather than HRA, adopting big data can be more relevant for HR professionals to conduct effective decision-making and improve HR practices. It would be relevant to facilitate employee engagement and retain the talented workforce as well. Therefore, there is no doubt that HR digitalisation has a strong positive impact on HRM (Human Resource Management) and talent management. In this regard, Hassanein and Özgit (2022) have argued that in the digital era where organisations are facing high competition, adopting technology is crucial to finding skilled employees. The study has used the primary method to mention the importance of digitalisation in

HR management to focus on the strategies for retaining top performers (Hassanein and Özgit 2022). This study by Hassanein and Özgit (2022) has also addressed that skilled employees are crucial for achieving organisational success and in this case, generic engagement tactics do not align in the digital era.

Based on the perception of Singh *et al.*, (2023), digitalisation plays an essential role in supporting HR practices by exploring the perceptions and needs to integrate digital advancements within the workplace for retaining a talented workforce. The scholar used the systematic study of the "bibliographic search" to analyse the benefits gained through HRM digitalisation in Ireland. However, the research by Eftimov and Kitanovikj (2023) has argued that digitalisation in organisations requires a high cost for implementing digital technology and a lack of financial strategy can cause less profit. The study has used primary survey analyses to mention higher maintenance costs (Eftimov and Kitanovikj, 2023). Moreover, the study has also addressed how automation can be used to increase the process of talent management in the organisation. It has been found that HRM digitalisation in different areas of Irish organisations such as recruitment, selection, and performance management helps to retain the workforce for the long term. In this regard, it is clear enough that HRM digitalisation is mostly essential for HR management and retaining the talented workforce by handling the workforce operations properly.

Based on the above context, it has been easily understood that digitalisation is responsible for strongly influencing the perceptions of HR practices and talent management. Integration of digital advancements within HR also helps to ensure effective workforce management for which it can be possible to gain positive outcomes such as an increase in productivity, high employee satisfaction, high retention, and others. Therefore, **digitalisation** has been identified here as the independent variable whereas **HR and talent management** have been considered as the dependent variables.

# 2.3 Addressing different factors associated with improving HR and talent management in the digital era

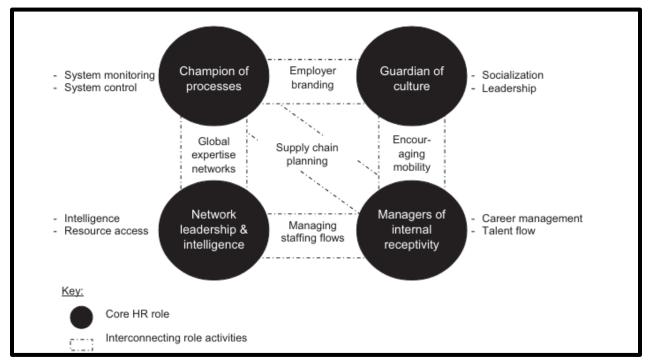
The digital era has developed a dynamic landscape for talent and HR management. Regarding this, a study by Elias and Scarbrough (2004) stated that a rapid pace of technological evolution has developed a demand for re-skilling or up-skilling employees and going beyond the traditional skill set as well. The research by Elias and Scarbrough (2004) used a case study analysis method and gathered data over six months to address the growing demand for technological involvement in

HR and talent management. The study by Elias and Scarbrough (2004) also discussed that without longitudinal research the importance of HR and talent management cannot be addressed. The study by Whelan et al., (2010) has addressed that different organisations have spent 20% of their time to search talented employees and other organisations have spent more than 50% of their time on talent management. This scholar has used case study analysis to address the importance of talent management for the knowledge transfer process to achieve competitive success. As opined by Roche et al., (2011) the employee satisfaction can cause a high retention level that increases products or services' scalability. The study also discussed strategic partnership and cost-cutting in Human Resource Management are crucial to managing crucial times like recessions. The research scholar has used interview analysis to address that efficiency in HR practices has maintained an equilibrium in organisations, resulting in high employee satisfaction and productivity (Roche et al., 2011). However, Cooke et al., (2014) have argued that employee experiences play an essential role in improving HR and talent management. The study has also addressed that 20% of stateowned firms and private-owned firms focused on employees with experience, expertise, and networks. This scholar has used a quantitative approach, where 137 respondents were interviewed about the need for employees' expertise in improving HR and talent management in the digital era (Cooke et al., 2014).

Albrecht *et al.*, (2015) stated that employee satisfaction is increased if the employees are engaged in the workplace by providing high services and productivity and being consistent in the workplace, which helps to provide superior products and services to consumers. This scholar has used the interview method and addressed that expert employees in help organisations were able to pay the freezes, complete deals, and redundancies, and engage in alternative cost savings or productivity measures. As stated by Albrecht *et al.*, (2015) the digital transformation impacts the management of HR and talent management in different organisations. Therefore, it can be addressed that **employee experience and satisfaction** are identified as an independent variable and **HR and Talent management** as a dependent variable.

Regarding this, a study by Farndale *et al.*, (2018) has reported that 73% of organisations from the working population face skill gaps and regarding this, the spread of the decision transformation. Di Gregorio *et al.*, (2019) criticised the employees for having different skills necessary for an organisation although gaps in employees' skills and market requirements in the changing market need HR and talent management. The awareness of the digital transformation in the organisation

has been able to provide needed skills through also considering systematically developed employees' innate abilities as well. Here, it can be addressed that **digital transformation** is identified as an independent variable and **HR and Talent management** as a dependent variable. The figure below addresses the key aspects of corporate HR roles in terms of achieving talented employees, which consists of different processes such as systematic monitoring, controlling, intelligent resource access, employee branding, encouraging mobility, and so on.



#### Figure 2.2: HR roles in attracting talent

(Source: Farndale et al., 2018)

In addition to this, cross-functional management and cooperation are also other factors that are related to HR and talent management. Jansson and Persson (2020) emphasized that cross-functional cooperation can be addressed through the knowledge transfer process in the research and development department in terms of improving services and product development and improving sales strategy. This study has used survey analysis to compare the importance of cross-functional collaboration between team members and managers (Jansson and Persson 2020). A study by Lindblom and Martins (2022) argued that HR and talent management are phenomenal aspects of improving cross-functional collaboration, communication, and cross-training. Lindblom and Martins (2022) addressed that cross-functional collaboration helps to extend knowledge-sharing as well as drives organisations to address the knowledge-sharing process for

increasing its benefits in an organisation. In this regard, it can be addressed that **cross-functional management** is identified as an independent variable and **HR and Talent management** as a dependent variable.

**2.4 Evaluation of the challenges faced by organisations for managing talent in the digital era** Integration of digitalisation is relevant enough to manage talent within Irish organisations whereas there are certain challenges as well that are illustrated below in detail:

High global competition for searching for the required talent: As per the statement of Chakraborty and Santra (2019), the presence of digital changes within the organisational settings and economy is responsible for raising the need of employers to search for better talent. Moreover, to deal with the present scenario, most of the workers engage themselves with the digital upgrade perception that increases the competition level for recruiters. By using the cross-sectional design within the research, it has been observed that the existence of the liquid workforce in most of the business firms of Ireland raised tough competition. It seems difficult for HR professionals to recognise the talent of the vast workforce and hence, recruitment of ineffective workers can lead to business loss. Groenewald et al., (2024) argued that the rapid changes of the market within firms and the broader economy require more than having only talented employees. The study used a primary data collection method by surveying different HRMs in organisations and stated that rapid changes in the market expose the challenges of traditional human resources practices to foster a continuous adaptability and learning environment in work (Groenewald et al., 2024). On the other hand, the study of Zhang and Chen, (2023) highlighted that digitalisation ensures customercentric HRM management to meet internal consumer expectations from the organisational functions. Moreover, the impact of the digital revolution is about giving organisations competitive edging to change business priorities and improve human resource management effectively. To fulfil the VUCA (Voluntary, Uncertainty, complexity and ambiguity) era HRM technological advancement is expected for industrial changes as well as accelerate the mode of digital economies. In the field of HRM, voluntary indicates an increasing frequency of talent mobility. It can be assessed that companies experience a high turnover of talent in Ireland as well as in the global landscape. In this regard, awareness of talent becomes the changing factor for organisations, thus technological advancement is significantly essential. Uncertainty indicates uncertainty in acquiring talent such as changes in digital talent standards, environmental uncertainty and others. Complexity refers to managing the environment for talent that can be possible through cultural

value improvement, technological integration, economic structure growth and others. Moreover, ambiguity refers to recruiting process-based factors for digital talent. Consequently, digital workplace application is possible through the effective arrangement of training and learning sessions that also require technological advancement to systematically accelerate the process. From the above discussion, it has been identified that technology-driven changes in HR and talent management are highly impacted by the rise of the digital skills landscape. Hence, the **digital skills landscape**, **and digital skills gap** have been considered here as the independent variable, and technology-driven changes in HR and talent management have been considered as the dependent variable.

Existence of a generational gap between present and future generations of HR employees: Based on the viewpoint of Cismaru and Iunius (2019), the presence of the generational gap between the present and future generation employees of human resource within the hospitality industry in Ireland is responsible to create barriers for adopting technology-driven changes. The use of the case study analysis within this research was relevant to highlight the fact that to deal with the ongoing changes in HR practices such as in recruiting and talent management approaches along with practices, it is essential to facilitate innovation through technology. Sánchez-Hernández et al., (2019) have argued that different organisations have distinct experiences, which shape their expectation and values, however, a lack of work-life balance, and flexibility can reduce the potential to attract skilled employees. Additionally, the study has also addressed that the presence of technological fluency in the younger generation than the older generation has created a gap in their skills. The scholar has used a descriptive analysis of and has stated the direct relationship between Best Places for Work or BPW and WLB or Work-Life balance (Sánchez-Hernández et al., 2019). The study by Sánchez-Hernández et al., (2019) also stated that 76% of the organisations have considered working in an organisation that prioritises employees' work-life balance. However, employees with a traditional mind-set and lack of motivation to adopt technical changes

are responsible for developing the generational gap as they are not capable of coping with the new business practices. It can affect the business operations in the upcoming days.



# Figure 2.3: Overview of the digital skills landscape

(Source: Feijao et al., 2021)

It has been observed from the above figure that the digital skills landscape consists of rapid digitalisation, the seeking of employers of digitally skilled employees, the requirement of soft skills, and others (Feijao *et al.*, 2021). However, the lack of required digital skills among HR professionals causes strong barriers to accustom with certain changes.



# Figure 2.4: Factors that drive the digital skill gap

(Source: Feijao et al., 2021)

The above figure evaluated the core factors that drive the "digital skill gap" such as digital and social inequalities, high demand for digital skills, traditional modes of training, and others. It is essential to reduce the gap area as early as possible to manage the future workforce. Blanka *et al.*, (2022) have argued that the digital skill gap has hindered organisations from attracting talented employees with demanding skills, which also hindered the organisation's ability to achieve

competitive advantage. The research has also provided information that traditional HR failed to access digital competency leads which resulted in hiring employees, who lack the required skill sets.

Lack of hard and soft skills among the existing workforce of human resource: As stated by Doherty and Stephens (2023), technology-driven changes within the HR practices and business operations of Irish organisations are responsible for facilitating the need to have a proper skill set for both hard and soft skills among workers. To gather data, the scholar conducted 2 structured interviews with the 28 employers whose organisations are based in Ireland. It has been found that to handle digitalisation or technical changes within business operations to ensure proper employee or workforce management, it is essential to have a higher level of hard and soft skills. Kallmuenzer *et al.*, (2024) argued employees, who lack in having efficient digital skills, face obstacles to performing their work effectively, therefore this hinders innovation and productivity. The scholar has used a primary survey to obtain information about the need for digital skills and minimise the gap related to it (Kallmuenzer *et al.*, 2024). However, within the organisations of Ireland, a skill shortage is observed among HR professionals for which they are not able to use digitalisation to understand employee perceptions, preferences, and expectations adequately. Apart from that, gaps in digital skills and capabilities are also responsible for affecting digital transformation.

# 2.5 Identification of best practices to optimise HR and talent management strategies related to digitalisation in Ireland

To deal with the above-mentioned challenges, it is essential to keep focus on some specific strategies that are listed below:

Arrangement of training programs to mitigate digital skill gaps through technical advancements To resolve the skill gap issues among HR professionals, it is essential to engage them with the required training programs to upgrade their skills, digital literacy, and capabilities eventually. Moreover, the incorporation of "digitally inclusive initiatives" and programs can be fruitful for developing the hard and soft skills of HR professionals to ensure that they can handle the changing market needs due to digitalisation in the HR arena and talent management (Feijao *et al.*, 2021). They can also be able to hire a talented workforce as well as manage and retain them for the long term through digitalisation. To collect relevant data, a secondary data collection method was used here and a review of the literature was done as well.

To improve HR practices in Ireland, different organisation authorities adopted some practices such as hybrid working patterns, establishing a culture of inclusion and diversity, digital transformation for the growth of automated HR initiatives and others (CIPD, 2024). In this context, it can be addressed that the importance of leadership in digital transformation for HRM improvement purposes refers to continuous improvement in human talent through organising training and learning procedures. Focusing on skill gaps the leaders can incorporate different technology to improve the skill level of the employees and fulfil their requirements to achieve organisational goals in Irish companies. Moreover, the perspectives related to skill matching on talent management developed by strategic agility (Jooss et al., 2023). Strategic agility helps the organisation authorities to allow a changing environment promptly. Thus, improvement of human resource management can be possible through shifting the focus on job and skill development initiatives. Based on the findings, it has been found that the arrangement of training programs can be most effective in reducing digital skill gaps and generational gaps as well.

**Development of talent pool through AI to attract and recognise rare talents:** The use of AI (Artificial Intelligence) enabled recruiting can be effective in facilitating human capital to a greater extent (Black and van Esch, 2021). The use of the secondary data collection method in this research helped to demonstrate that to identify the rare talents from the vast workforce, HR professionals can use "AI-enabled recruiting tools" such as Skillset. It can be beneficial to help employers conduct recruitment strategically and more efficiently through data analytics to identify the most eligible candidates and it also saves time in the hiring process.



Figure 2.5: Addressing digital skill gaps through effective strategies

(Source: Feijao et al., 2021)

Based on the above figure, it has been identified that integration of the "skill-based hiring practices" and development of a "common skill framework" to measure the existing skill level of an individual with the required skill set for the particular job role are effective to hire rare talents (Feijao et al., 2021). Additionally, offering the "lifelong learning approach" by the HR professionals can be fruitful for Irish organisations to attract rare talents quite easily as talented workers prefer the scope of personal and professional development above all. It will be helpful to build a skilled workforce who can be able to adapt and integrate the changing market needs quite easily and ensure highly competitive benefits. Dalahmeh (2020) claimed that talent management decision-making also plays a pivotal role in improving HR practices by higher business authorities. Leaders also need to focus on the requirements of Irish organisations and calculate the overall estimation for appropriate technological integration in the organisational areas. Identification of skill gaps among employees and key areas to combine traditional and technology-driven modern HRM initiatives could be done by the involvement of conscious leaders of the organisation. In this regard, a leadership role is also essential to improve HRM practices where leaders also need to upskill their knowledge level. For instance, agile human resource management ensures self-organised teams, collaborative team working opportunities, and adaptability to regulatory changes (Moh'd et al., 2024). Meanwhile, agile human resource management is significant for modern organisational growth to stay competitive in the Irish business market and foster a changing environment for Irish organisations.

Hence, from the overall context, it has been observed that changing market needs are mostly responsible for influencing HR professionals as well as other employers to incorporate digital advancements within HR practices and talent management. Therefore, **changing market needs** have been identified here as the independent variable whereas **digital advancements within HR practices and talent management** have been identified as the dependent one.

#### 2.6 Theoretical analysis

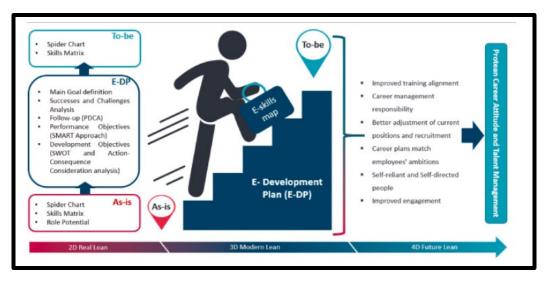
#### Strategic Negotiations: The Theory of Change in Labour-Management

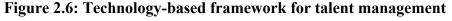
The theory about strategic negotiation of the change in labour management addresses the fundamental approach of negotiating strategies that can be used in labour management relations. According to Kaufman *et al.*, (2022), the first approach is force, which involves employees accepting unwanted activities while reducing the influence of unions in the workplace. This

contrasts to the second strategy which is developing a significance about finding solutions to real trust and common problems.

The third aspect is escaping, which entails withdrawing from the negotiating situation and using negotiation with employees and employers in terms of achieving talented and skilled employees in a competitive market to reduce the damage to the brand's reputation, Moreover, it also poses strong aspects about employee's engagement which can lead to higher innovation and productivity in current-day digital workplaces. Cohen (2023) addressed that strategic negotiation outlines the problem-solving and fostering aspects which emphasises solving several challenges caused by digital transformation and developing a collaborative environment that can help employees feel valued.

According to Salvadorinho, Ferreira and Teixeira (2024) lean in human resource management and help to understand everyday behaviour of the employees and continue to improve the process for labour management purposes. Changes in the labour management process refer to the involvement of an agile coach or manager's role to follow up consistency in the performance development initiatives adopted by the employees in the situation of a changing environment. Initially, labour management through cultivating employee confidence level in decision-making considered empowering the leadership capabilities as well as career development initiatives. Human resource development and talent management in industrial settings depend on digital technologies in modern times thus changes in the environment and leadership capabilities are required. Initially, the theory of labour management with the key perspectives of decision-making by the leaders plays an essential role. Meanwhile, technologies related to improving talent management are associated with improved employee engagement, follow-up and analysis of performance level through skill matrix details, improvement of training alignment and others involved (*Refer to figure 2.6*).





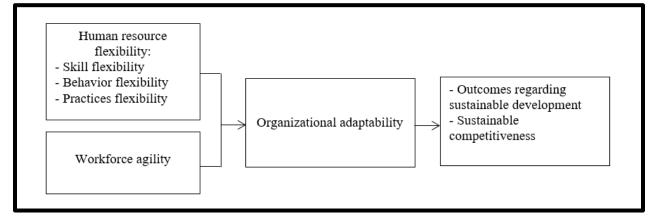
(Source: Salvadorinho, Ferreira and Teixeira, 2024)

#### **Resource-based view theory**

The theory of the resource view addresses the impacts of recruitment strategies and related practices on organisational performance and employees. This theory addresses the internal resources or capabilities in terms of fulfilling consumer needs and achieving competitive advantages (Jøranli, 2018). Jamil, *et al.*, (2023) the RBV theory is crucial for understanding the recruitment process in terms of assuming talented employees, developing the talent pool, increasing strong branding, and fostering efficient recruitment channels as well. Moreover, this theory also addresses the rarity of value propositions among employers which demonstrate that a talented employee is a rare resource (Jøranli, 2018). Therefore, this theory addresses the importance of achieving HR and talent management to attract talented employees in terms of assuming competitive advantages.

According to Karman (2019), the modern human resource management system hypotheses different dimensions such as employee behaviour flexibility, employee skill flexibility and HR practice flexibility through agile adaptability. In this regard, the perspectives of RBV theory refer to providing competitive advantages by the human resource. HR management includes two dimensions of agility such as workforce scalability and human resource configuration. Moreover, workforce agility enhances organisational adaptability and the outcome refers to sustainable competitiveness and development in the initial stage. The application of RBV in business perspectives also refers to improving strategic value for the human capital as well as talent as the

core asset for the organisation. RBV framework also indicates human capital as the source of creativity and innovative decision maker thus agility promotes cross-functional collaborative culture easily and contributes enough for organisational growth. It also helps to build a talent pipeline and it ensures the employee is capable enough to face challenging factors positively. Lastly, agile HRM practices incorporate flexible goal-setting initiatives to achieve organisational goals and it creates a working environment, which encourages learning innovation, and experimentation and ensures employee efforts to contribute enough for organisational innovation.

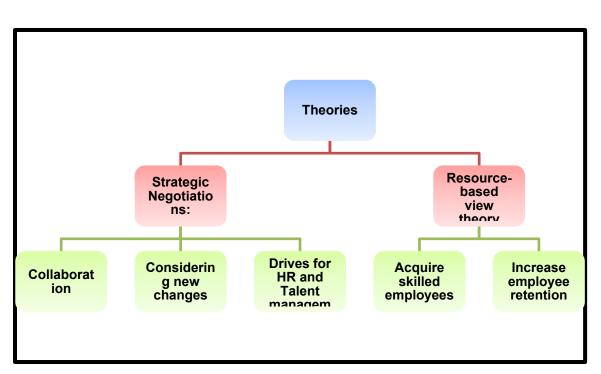


# Figure 2.7: Perspectives related to RBV theoretical application in agile HR and talent management

(Source: Self-developed)

#### Key approaches for considering both of these theories

The theory of strategic negotiation is crucial as it helps to focus on collaboration, considering new changes in the organisation which can be done with the help of HR and talent management in terms of achieving competitive advantages in the digital environment. The figure below addresses the key aspects of considering these theories for this research.

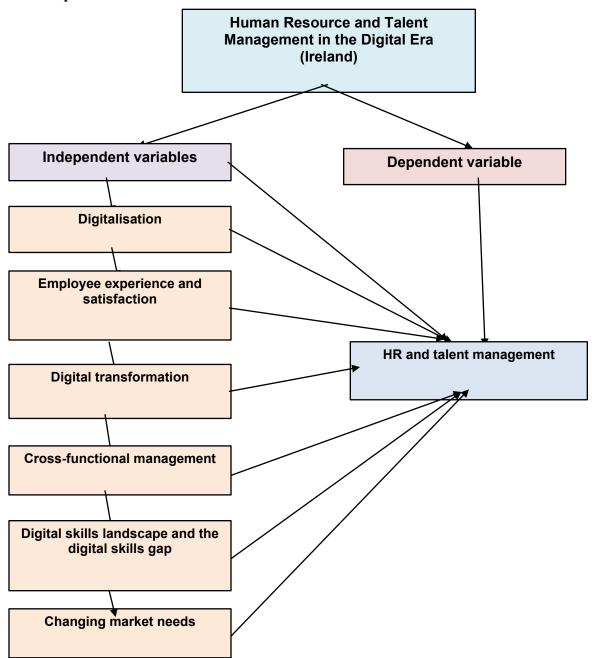


# Figure 2.8: Key approaches of these theories

(Source: Developed by the researcher)

In addition to this, a theory like RBV is also efficient which focuses on internal resource management and attracting talented resources which also drives the importance of HR and talent management in a business nowadays.

# 2.7 Conceptual framework



# Figure 2.9: Conceptual framework

(Source: Self-developed)

# 2.8 Summary

It can be summarised from the overall chapter that digitalisation is essential for better management of talent and the development of HR practices. However, certain challenges have been observed here which are responsible for creating barriers to integrating digitalisation into the HR practices of Irish organisations. Evaluation of the significant strategies can be fruitful to deal with these issues properly. The use of the theoretical context helped to evaluate the research concept in more detail.

# **Chapter 3: Methodology**

# **3.1 Introduction**

The methodology underlines the research of human resource and talent management in the digital era in Ireland, which has been discussed in this chapter. An extensive explanation of this research's method has been considered by covering the research philosophy, design, approach, data collection and analysis process, sampling technique, and ethical considerations to meet research objectives. This chapter aims to give this research legitimacy or a scientifically sound result by providing a detailed plan for this research. This chapter aims to provide a detailed plan, which can help to track research progress in a manageable and effective way.

# 3.2 Research Philosophy

Research philosophy consists of such beliefs to collect, evaluate, and use relevant information related to the research context. Based on the statement of Khatri (2020), research philosophy is mainly associated with core assumptions along with nature and knowledge of the research context. It is essential to select the appropriate research philosophy for this particular research. In this research, the positivism philosophy has been taken into focus and the justification has been provided below through the figure:



# Figure 3.1: Justification for Considering Positivism Research Philosophy

(Source: Developed by the researcher)

The positivism philosophy is viewed as only providing factual information that can be gained through observation and quantitative information. Tamminen and Poucher (2020) stated that positivism philosophy focuses on a viewpoint objectively and this philosophy is suitable for understanding current phenomena. In this regard, through the help of the positivism philosophy, it has been able to identify the importance of human resource management and talent retention by considering factual knowledge acquired from measurement and observation (Tamminen and Poucher, 2020). Additionally, positivism has allowed the researchers to achieve a systematic analysis and facilitate the connection between talent management and HR technology. Moreover, the positivism philosophy has helped researchers to understand the importance of HR technologies for accurately measuring employees' engagement performance. Henceforth, such information is retained through a survey analysis process and considering positivism philosophy, it has been used to provide information about the necessary technologies for developing a talent pool within an organization (Tamminen and Poucher, 2020).

Additionally, the positivism philosophy depends on quantifiable observations and statistical analysis. Hayre *et al.*, (2021) stated that positivism is related to the empiricist view and it gathered knowledge from human experiences. This research has considered acquiring data with the help of survey analysis, which is why it is crucial to pertain to the positivism philosophy over others. According to Park *et al.*, (2020), positivism philosophy helps to predict the outcome based upon explained and previously observed realities. Therefore, with the help of the positivism philosophy impact of digitalisation, factors related to HR and talent management in the digital era have been measured quantitatively. Moreover, the predictive quality and objectivity essence of positivism can help future trends in HR and talent management among Irish organisations. Other philosophies such as interpretivism and realism have not been considered, as these focus on the subjectivity of a context over objectivity. Additionally, interpretivism and realism are not suitable for a quantitative study. This is why, the study of human resource and talent management in the digital era in Ireland has been considered with the positivism research philosophy.

#### 3.3 Research approach

The research approach is considered the core procedure that is selected by the researcher for collecting, analysing, and interpreting collected data based on a particular research context (Pandey and Pandey, 2021).

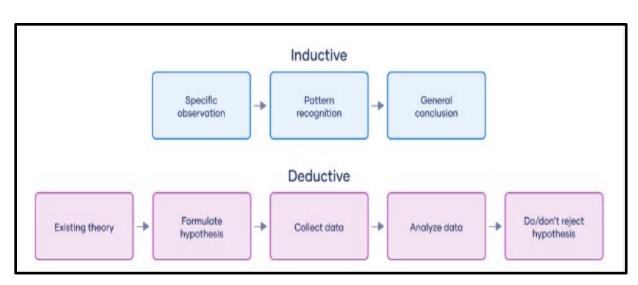


Figure 3.2: Inductive vs deductive approach

(Source: Developed by the researcher)

From the above figure, it has been observed that two types of approaches are mainly used within research such as inductive and deductive approaches. In this research, the deductive approach has been taken into focus as it helps to clearly articulate the causal relationships between variables. About the research context, the use of the deductive approach is quite useful for analysing the effect of digitalisation on HR and talent management in Irish organisations by examining both positive and negative perceptions related to it.

As stated by Proudfoot (2023), the deductive approach helps to use real-world observations for testing hypotheses before stating particular facts. Hence, based on real-world perceptions, it has been observed that digitalisation is capable of improving business operations and HR practices effectively. It is also beneficial for HR professionals to manage their responsibilities properly and identify rare talents from a diverse range of work pools. Hence, it has proved the H1 (alternative hypothesis) mainly which indicates that digitalisation has a strong positive impact on HR and talent management. Based on the research of Pandya (2019), a competency framework is highly required for HR professionals in this virtual age, and use of the AI is going to be most relevant here. The scholar used a deductive approach here for analysing the HR competencies using the PRISMA model. Through this approach, it has been possible to meet the main research objective which was related to the identification of competencies required by an HR professional at present. It has been found out from the research that competencies such as the existence of greater attributes, proper skills, and traits along with capabilities are essential for HR professionals to deal with the present circumstances. Hence, it is quite clear that through the deductive approach, the research objective

has been well addressed in this research and thus, for this research, this approach has been taken into focus as well. Based on the perception of Hassanein and Özgit (2022), the adoption of technology within HR practices is crucial for finding skilled workers based on whom Irish firms can gain long-term benefits. Therefore, research objective 1 above must try to test and apply this variable in different sectors of the Irish marketplace to evaluate its benefits in the present context.

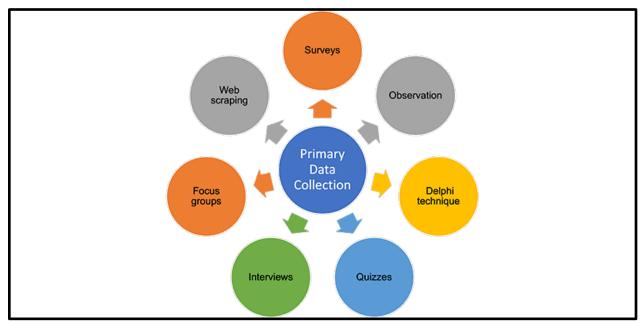
### 3.4 Research design

Research design is the common strategy used within research for answering the research questions logically. Based on the statement of Sharma *et al.*, (2023), research design consists of relevant methods and techniques selected by the researcher for conducting a particular study. The quantitative research design has been used here to collect data related to the research context systematically and examine numerical information related to HR and talent management in the digital era. The use of this design is relevant here as it helped to reveal insights regarding broader groups through which it is possible to identify to what extent Irish organisations are capable of adopting digitalisation within HR practices and talent management for getting positive outcomes. One of the main goals of the quantitative design is to classify significant features of the research topic and construct different statistical models to explain the observations (Bauer *et al.*, 2021).

Therefore, using this design within the research helped to analyse the effective features related to digitalisation within HR and talent management such as the development of HR activities, enhancement of employee satisfaction, integration of agile capabilities, and others. These are beneficial for improving the working environment and retaining the employees for the long term as the betterment of HR practices can influence employee motives and perceptions easily. From the viewpoint of Whelan *et al.*, (2010), the best possible benefit that can be gained after integrating digitalisation within HR management is to hire rare talent by saving time and achieving competitive success. It has been observed that most Irish organisations spend a lot of time such as more than 50% searching for rare talents whereas it is not easy enough to do so. Hence, the adoption of digital advancements can be fruitful here and, in this way, the second research objective can attempt to incorporate digital transformation to a higher extent within the Irish organisations. Apart from that, it can be possible to maintain the perceptions of cross-cultural management through digitalisation to handle a cross-cultural workforce.

# 3.5 Data collection method

Data collection is the most crucial stage within research as through this, it is possible to gather reliable information based on the research context through which further elaboration will be done. As per the viewpoint of Paradis *et al.*, (2016), data can be collected through surveys, interviews, experiments, focus groups, and others and then these are analysed and used for supporting research hypotheses. Mainly three types of data collection methods are used for gathering data such as primary method, secondary method, and mixed (both primary and secondary) methods.



# Figure 3.3: Different types of primary data collection

## (Source: Developed by the researcher)

However, in this research, the primary data collection method has been taken into focus as through this, it is possible to gather real-time information that facilitates study quality suitably. Within the primary method, the survey has been conducted here via online with a diverse range of participants such as business executives, HR professionals, and employees from different sectors in Ireland. Based on the statement of Maharana *et al.*, (2022), collecting primary data is essential for gathering information directly from the source which ensures reliability. As an impact, it has been possible to demonstrate the key issues that are faced by Irish organisations in the present day for managing talent by surveying 100-200 respondents. Moreover, significant strategies have been evaluated as well for dealing with these challenges to make sure that HR professionals can get the best possible outcomes after implementing digitalisation. Therefore, research objectives 3 and 4 can attempt to apply the relevant strategies in the business sector to gain certain benefits.

From the viewpoint of Murugesan *et al.*, (2023), Industry 4.0 delivers a strong scope for ensuring human resource digitalisation by enhancing efficiency, flexibility, and precision. Here, the scholar used a primary method where 271 questionnaires were identified as eligible for analysis along with a 200-sample size. With the help of this method, the researcher was able to gather real-time information related to the research context and as an impact, the ultimate objective has been fulfilled. The main objective was to identify the impact of AI on human resource digitalisation in Industry 4.0 and it has been found out that, through AI, it can be possible for HR professionals to ensure well-being and safety improvement within the business. The capability of the primary method to meet the research objective has influenced the researcher to use this for this research as well.

To conduct the survey, the researcher made contacts professionals working in business, IT hospitality and health sectors in Ireland. After getting the permission, communications were conducted with executives, employees, and HR professionals to inform them regarding the research context. Then, consent forms were provided to them along. After a certain time, those forms were collected by the researcher, and after analysis, a total of 151 participants were finally selected. Survey questionnaires were prepared after that and it was sent to them through their email addresses. They were responsible for distributing these forms among participants and a total of 7 days was provided to fill these survey forms and submit them. After 7 days, these forms were collected through emails, and responses were manually put into the dataset to conduct the analysis. Mainly open-ended questions were developed for the survey to get a broader and deeper perspective on the quantitative analysis and understand participants' perceptions.

### 3.6 Data analysis method

Data analysis is the systematic process of applying statistical or logical techniques within the research for illustrating and evaluating information (Misra *et al.*, 2021). For this research, the primary quantitative data analysis method has been used here in the form of a graphical analysis. To do so, Microsoft Excel has been used here. From the viewpoint of Biliavska *et al.*, (2022), artificial intelligence is effective enough for enhancing the practice areas of HR professionals in a smooth way to get the best possible outcomes. The use of the primary quantitative method here helped to demonstrate the fact that AI-based HR apps are useful to boost employee productivity effectively and assist HR personnel to be educated advisors by enhancing knowledge areas. Hence,

the use of this method helped to identify real-time facts quite properly, and therefore, this method has been used here as well.

Based on the perception of Akhtar (2024), Microsoft Excel is capable of managing large datasets and helps to conduct statistical analysis through which proper interpretation of data can be conducted. Hence, it can be possible to understand if digitalisation has a strong connection with effective HR and talent management in Irish organisations or not. In this case, by using Microsoft Excel, the researcher has conducted a normality test, validity, and reliability test along with correlation, multiple regression as well as hypothesis tests here. All of the test results have been interpreted properly to develop concluding statements and to understand the connection between independent and dependent variables. With the help of quantitative analysis, it has been possible to identify the trends and associates related to the large dataset.

#### **3.7 Research sample**

The research has used the purposive sampling method here as it helped to select the research participants quite carefully who are capable of delivering detailed information regarding the influence of digitalisation on HR and talent management (Campbell *et al.*, 2020). Employees, HR professionals, and business executives from different sectors in Ireland have been selected here and a total of 151 participants were finally selected. Moreover, a total of 20 close-ended questions have been developed here of which, 5 are demographic questions and 18 the contextual questions (1 question regarding the consent of the participants).

### **3.8 Research instrument**

In the case of research instruments, the researcher has used the survey questionnaire as the primary instrument for collecting reliable information related to the research context. Question type mainly and data has been analysed with the help of Microsoft Excel. Selection of the effective research instruments helped to gather reliable information quite easily.

### **3.9 Ethical Consideration**

To maintain ethical perceptions, voluntary agreements have been made between the researcher and participants with the help of informed consent. Apart from that, the researcher has maintained transparency throughout the research by communicating clearly with the participants. Apart from that, confidential information has been protected with the help of the "Data Protection Act 2018" (Legislation.gov.uk, 2018). Collecting and storing data, anonymizing data, and limiting access have been maintained throughout the research.

## 3.10 Limitations of the Study

The main limitation of this research is associated with the selection of a small sample size for which bias can be raised regarding the research findings. The presence of a small sample size can be responsible for generating misleading findings and it is going to affect the research quality most. Time limitations are also there, so the researcher has not been able to consider a large sample size. Apart from that, cost constraints have been observed, and the researcher has to complete the research in a hurry.

# 3.11 Timeline

Actions	Week	Week	Week	Week	Week	Week	Week
	1-	2-week	4-week	6-	10-	12-	14-
	Wee2	4	6	Week	Week	week	Week
				10	12	14	15
Selection of the Topic							
Revision of the proposal							
Selection of aim and							
objectives							
Analysis of research							
background							
Studying relevant existing							
literature							
Selection of appropriate data							
collection methods							
Analysing data and interpret							
the findings							
Preparation of conclusions							
Closure with proper revision							

### Figure 3.4: Research timeline

(Source: Developed by the researcher)

# 3.12 Chapter Summary

This chapter summarizes the overall methodological framework of this research about the importance of HRM and talent management in the digital era in Ireland. This article has addressed the justification of considering positivism research philosophy, deductive approach, quantitative design, and purposive sampling to address the importance of HRM in talent management in the digital era. Moreover, ethical considerations have also been addressed.

# **Chapter 4: Findings and Analysis**

## 4.1 Introduction

The findings and analysis of this study on using AI (Artificial Intelligence) and HRIS (Human Resource Information System) within HR (Human resources) and managing talent in Irish organisations. Moreover, the findings of this research are analysed in the light of research objectives and the literature review. Here, a graphical representation has been shown and for this Microsoft Excel as a data analysis tool has been considered. The analysis of the survey has been done by following the questionnaire under the headings of (i) AI and HRIS in managing human resources and talent (ii) AI and HRIS on impacting employee engagement and experience and (iii) building a highly effective workplace through managing talent with the help of AI and HRIS. The findings have been analysed through the help of survey analysis, where 151 participants from different countries have participanted. The participants shared their responses through Google form (which was sent to the participants via mail) within 2-3 days. Here the analysis of the findings of the survey has been described.

#### 4.2 Analysis of the Primary Findings

The analysis of the contextual aspects has helped to determine the cause (the independent variable) and effect (the dependent variable) of a particular phenomenon. Here, the independent variables (such as AI tools, employee experiences and others) have provided the key impact on the dependent variables (that is 'HR and talent management'). Therefore, with the help of careful analysis, the research has sought to analyse the importance of HRIS and AI in influencing talent acquisition and retention strategies.

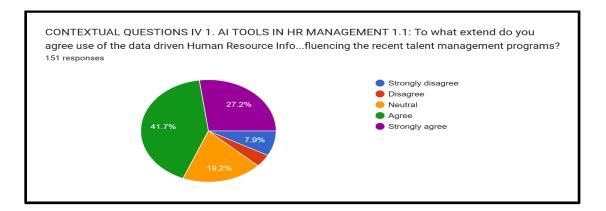
### 4.2.1 Contextual

This section of the research is devoted to setting out the results of the statistical analysis under the three themes of (i) AI and HRIS in managing human resources and talent (ii) AI and HRIS in impacting employee engagement and experience and (iii) building a high-effective workplace with the help of AI and HRIS. Here a series of graphical illustrations has helped to explain different variables (both independent variables and dependable variables). Moreover, it can also observe

that the research population of 151 has been considered as sufficient for responding to the research questions and aligning them with research objectives.

### (i) AI and HRIS in managing human resources and talent

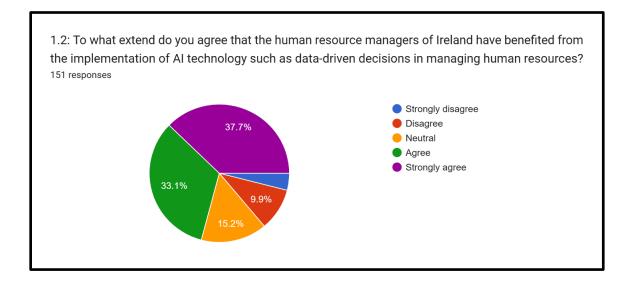
The first question in the contextual sections reflected on respondents' perception of using Human Resource Information Systems to influence talent management programs. The results have set out to showcase that HRIS has revolutionised talent management programs among business organisations. As can be seen from the responses, among 151 participants the majority of them, nearly 41.7%, have agreed and about 27.2% of participants have strongly agreed on using HR in the talent management system (figure 4.6). Not only does this finding relate to anecdotal practice on the extent of use of HRIS technology within the talent management program but it also indicates that HRIS improves operations. That is HRIS helps company managers to make informed decisions, predictive analytics and to manage talent and human resources within organisations. Regarding this, Nocker and Sena (2019) have found that with the help of HRIS, the recruitment process has been automated, which leads to high retention of talented employees. A study by Sancoko *et al.*, (2022) has found that HRIS have provided technological advances and supported operational efficiency, which helps managers to acquire talented and skilled employees. Although 19.2% of the neutral responses suggest poor awareness about the benefits of data-driven HRIS that indicates an urgency for training initiatives within the organisation (Figure 4.6).

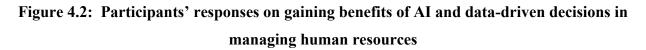


# Figure 4.1: Participants' responses on data-driven HRIS on influencing the talent management program

(Source: Excel Sheet)

The next question mentioned that data-driven decision-making in an organisation helps to align HR strategies with organisational goals. Here, the survey analysis has assessed that about 37.7% of participants have chosen "Strongly Agree" on AI and data-driven decision-making can manage human resources. Therefore, it can be considered that the majority of the participants have considered that implementation of AI technology, for example data-driven in managing human resources among Irish companies is essential. Alabdali *et al.*, (2024) have found that a positive relationship exists between HR strategic decision-making and algorithmic HRM. The researcher also found that firms use AI and similar technology to predict the future performances of employees and manage current human resources. That is based on the work projections through technology organisations can choose to work with such employees who are skilled and efficient. However, 9.9% of participants chose "strongly disagree" which translates that implementation of AI within an organisation may face resistance warranting investigation (figure 4.7).

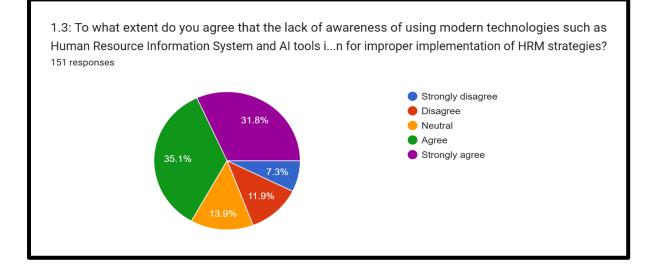




### (Source: Excel Sheet)

The next survey question found that the majority of the participants, about 31.8% of the participants, strongly agreed on the fact that limited awareness of technological adaptation can result in poor implementation of HRM strategies. The high degree of agreement focuses on the need of managers and HR professionals to improve their skills and knowledge in adapting modern

technologies. A similar result was also found in the study by Wang *et al.*, (2022), as the researcher explained that digital HRM increases organisational innovation, saves time while hiring employees and increases data-based decision-making. The key findings from this survey question are about using AI digital HR systems for organisational betterment that can be done through acquiring technical advancements. However, 11.9% of the participants chose "strongly disagree" which indicates a limited consensus on the technological awareness in implementing HRM strategy (figure 4.8). It has been also found out that if board members or leaders are not aware enough about using AI and HRIS technology, they may face challenges in recognizing potential benefits and it can lead to inadequate investment, integration and support.



# Figure 4.3: Participants' responses on acknowledging the importance of increasing awareness of technological adaptation

# (Source: Excel Sheet)

It can be concluded from the above findings that HRIS and AI technology have revolutionized talent management, enhanced recruitment and also improved operational efficiency. Here datadriven insights made with AI and HRIS have helped organisations to align organizational goals, increase the hiring process and manage talent. A gap in the usage of these technologies not only shows poor awareness of AI and HRIS benefits but also indicates a demand for training and investing in applying these technologies.

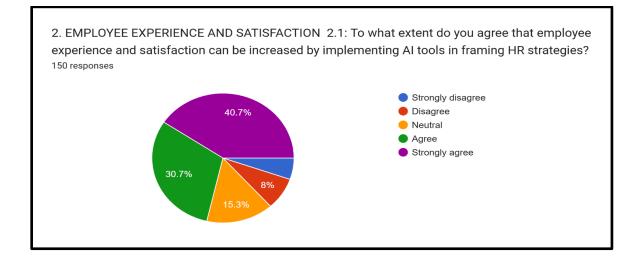
#### (ii) AI and HRIS on impacting employee engagement and experience

The questionnaire was designed to assess the importance of AI and HRIS in impacting employee engagement and experience. The key reason for developing the questions set is to show whether AI and HRIS can increase employee engagement and experiences or not. Moreover, it was necessary to assess the different reasons to apply AI and HRIS in an organisation to improve employee engagement. This can be set out as follows:

- 1. **Higher technological evolution**: This creates an urgency for up-skilling and reskilling than traditional skills.
- 2. **Talent management**: This is crucial for gaining business success in a competitive world and to transfer knowledge.
- 3. Employee satisfaction: Increases productivity, and service quality and boosts retention.
- 4. **Digital transformation**: enhances hr and talent management.

It has been established that there is a relationship between AI and HRIS on impacting employee engagement and experience. This section has conducted an analysis to see the impact of these technologies among organisations. The survey assessed whether AI is crucial for improving employees' experience and satisfaction. Here, a majority of the participants have expressed a positive approach toward the AI tool for increasing employee's working experiences and satisfaction. That is about 40.7% of the participants have chosen to "strongly agree" (figure 4.9). The positive response of the fact is that AI have a strong influence on increasing employee experience and satisfaction which holds significance in modernising the workflow and managing work-related pressures. AI tools can develop customized plans or career paths to meet individual employees' preferences and needs and improve their experience (Huang et al., 2023). A study by Rožman et al., (2023) has found that by adopting AI in organisations, managers have been able to see a hike of 23% in profit and 42% returns of productivity. This is because AI helps to recognise potential challenges (burnout and dissatisfaction) before they arise, and allows proactive interventions to increase employee retention and work satisfaction. However, a limited number of participants (8%) have chosen to "disagree" on this fact (figure 4.9). This means that overdependence on technology such as AI and HRIS may cause depersonalising the workplace.

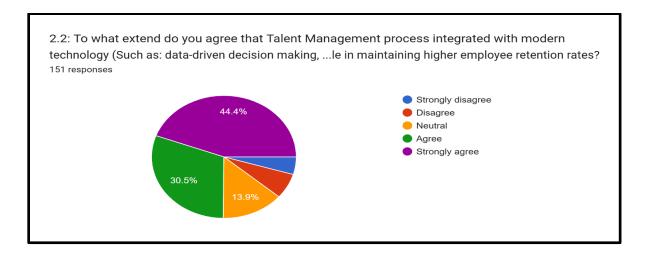
According to, Solnet *et al.*, (2019) AI reduces human-to-human interaction and in some cases fails to address employees' needs.

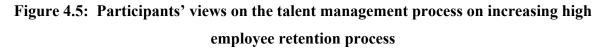


# Figure 4.4: Participants' views on improving employees' experience and satisfaction with the help of AI

### (Source: Excel Sheet)

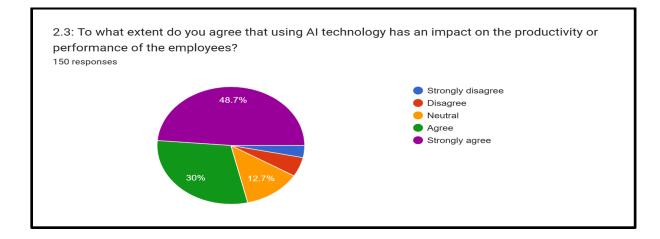
The next survey question has analysed that a high number of participants expressed their positive views which means that the talent management process can increase employee retention rate by integrating modern technology. Among 151 participants, 44.4% of them "strongly agree" on the importance of talent management in increasing employee retention. This survey analysis has identified the advantages of implementing modern technology in talent management and a promising future of technology in the employee retention process. Research by Lourens *et al.*, (2024) has found that about 75% to 46% of employees (from different countries such as Kuwait, and UAE) lack specialised talents which has resulted in talent shortages. Therefore, to minimise such challenges organisations have employed AI-based talent management programs (through AI and TM-based cloud apps) to identify skilled labourers and predict attrition. However, a combined 11.2% of the participants have chosen "strongly disagree and disagree". They also expressed their concerns about refining the current technology implementation process (figure 4.10). Sithambaram and Tajudeen (2023) argued that integrating technologies such as HRIS and AI requires planning and poor planning can lead to inefficient usage of these technologies. Thus, it can potentially cause retention issues within the workplace by creating excessive pressure on workers.





### (Source: Excel Sheet)

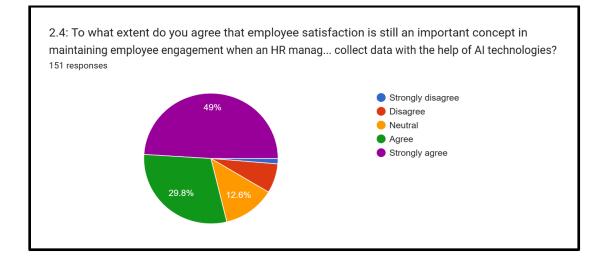
The next survey question has identified that 48.7% of the participants have expressed their positive approach to integrating AI to improve employee productivity. Only 8.6% of the participants (combining both Strongly Disagree and Disagree) expressed their negative views on the uses of AI in increasing productivity (figure 4.11). The key findings of the survey question indicate the importance of maintaining employee satisfaction and engagement. According to Saharan (2020), AI helps to automate time-consuming work that allows employees to prioritize creative and strategic activities. Although poorly implemented tools (such as AI) disrupt the workflows and lead to poor productivity than improvement.



### Figure 4.6: Participants' responses on using AI to impact employees' productivity

### (Source: Excel Sheet)

The survey analysis has found that the majority of participants, constituting about 49%, strongly agree on the fact that employee satisfaction along with their engagement is crucial for an organisation (figure 4.12). This demonstrates the importance of considering employee satisfaction and engagement within organisations. Vishwanath and Vaddepalli (2023) found that AI helps to streamline different HR functions, for example, performance management, employee engagement and recruitment. The survey has reflected that technologies such as HRIS and AI have been integrated by organisations. The technological application has led to high productivity and enables data-driven and efficient HR practices. Thus, the application of technology increases productivity and enhances employee satisfaction. However, based on the survey findings, less than 15% of participants stated that employee satisfaction is not an important concept in maintaining employee engagement when an HR manager can collect data with the help of AI technologies. As per Gawankar *et al.*, (2020) employees in an organisation perceive that AI data-driven approach can result in a transactional approach, therefore individual needs are overlooked in the performance indicators.



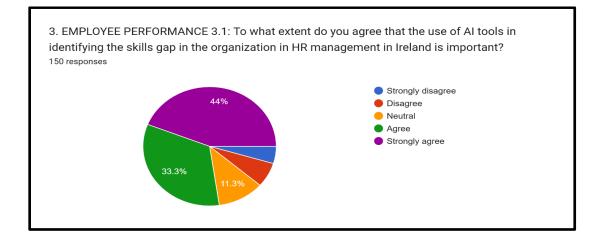
# Figure 4.7: Participants' responses on agreeing on employee satisfaction for increasing engagement

(Source: Excel Sheet)

The survey has highlighted the importance of HRIS and AI in increasing employee experience and engagement. It was also revealed that AI tools impact employee performance through modernising workflows concerning work-related pressures. However, some disbelief about AI's ability in organisations especially for increasing "employee satisfaction" was also addressed in this survey analysis. This requires an approach that can help organisations to integrate AI with human-based strategies, to ensure that technology improves the working system rather than diminishing employee's working capability.

# (iii) Building a highly effective workplace through managing talent with the help of AI and HRIS

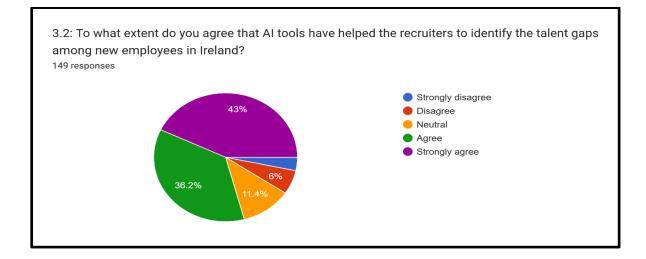
The next question sought to establish the most likely influencing factors for minimising the skill gap through AI. The survey analysis has found that about 44% of the participants have chosen "strongly agree" and 33.33% have chosen "agree" on the fact of using AI to detect skill gaps. Henceforth, such results assess the positive impact of using AI on reducing the skill gap and increasing operational efficiency (figure 4.13). The results have been analysed in a manner that AI highlights the skill gaps by knowing employees' needs as robotics and automation advance. Bobitan *et al.*, (2022) found that technological advancements, in services like automation, pose a risk to about 50% of jobs. Therefore, for increasing job concentration and exacerbating worker market polarization, high-skill labourers are in demand more than low-skilled labourers. The researcher highlighted that thriving in the dynamic career landscape, employees need to cultivate creative, social, and adaptable skills.

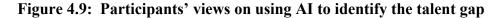


### Figure 4.8: Participants' views on using AI to minimise skill gap

(Source: Excel Sheet)

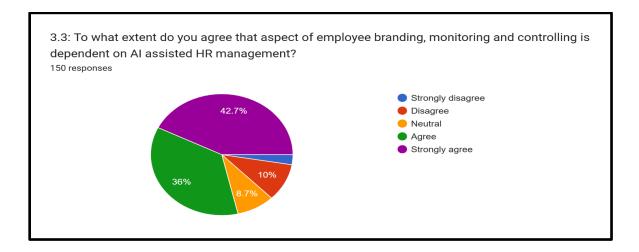
The next survey question addressed the relationship between using AI and identifying talent gaps. The strongest reason for using AI tools for identifying talent gaps is 43% (figure 4.14). However, only 6% have chosen "Disagree" (figure 4.14).





#### (Source: Excel Sheet)

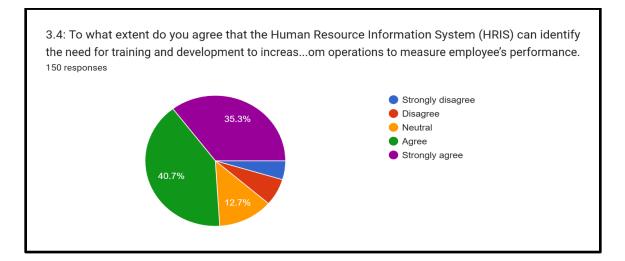
The survey analysis has found that the majority of the participants (nearly 42.7%) strongly agree on the fact that employee branding, monitoring and controlling are dependent on AI-based HR management (figure 4.15). Although a good amount of (10%) responses also include the challenges of using AI for employee branding, monitoring and controlling. As per, Vomberg and Klarmann (2021) AI-driven monitoring and branding can lack expertise and can result in heavy bias. The key analysis is that organisations may face biases and poor expertise, therefore it can result in impersonal or unfair outcomes, undermining the credibility and effectiveness of AI tools in managing talent and human resources. Singh *et al.*, (2024) mentioned that by implementing AI for monitoring purposes, employees have felt that their privacy is not only being compromised but it has led to discomfort and resistance. Hence, the analysis has explained the AI usage and drawbacks of this technology. Although it can be noted that as majority of the respondents have agreed to the fact that AI can positively impact branding or monitoring employees, therefore a relation between AI and its usage for employees' branding, monitoring and controlling can be established.



# Figure 4.10: Participants' responses on employee branding, monitoring and controlling depending on AI-based HR management

# (Source: Excel Sheet)

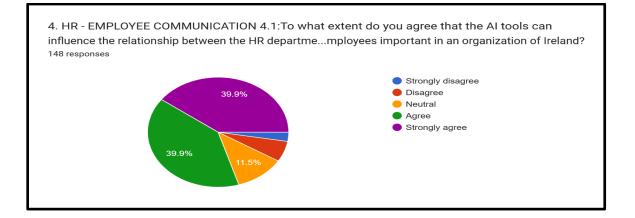
The survey analysis has found that nearly 40.7% of the participants have chosen "agree" about using HRIS to identify the need for training and development (figure 4.16). Hence the key analysis of the question is that HRIS helps to identify the need for training and development. Supporting this response, Ganeshan and Vethirajan (2022) mentioned that HRIS automates the use of training, user creation and access, enrolments, data synchronization and much more.



# Figure 4.11: Participants' responses on using HRIS to identify the need for training and development

## (Source: Excel Sheet)

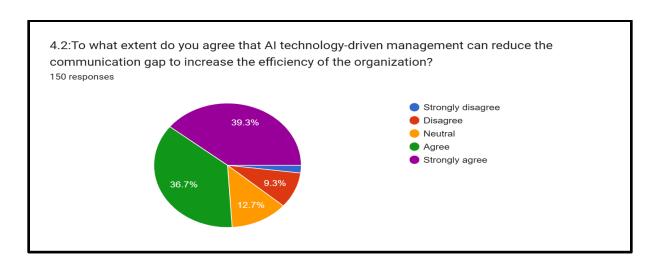
The survey analysis has found that nearly 39.9% of the respondents have agreed that AI tools help to influence the relationship between the HR departments (figure 4.17). The researcher by Nawaz *et al.*, (2024) has found that AI helps to automate time-consuming and repetitive tasks that help HR professionals focus on creating strategies. Therefore, the key analysis of this survey is that HR professionals can focus on improving the well-being of an employee which helps to build employer-employee relationships.



# Figure 4.12: Participants' views on using AI tools to influence relation between HR and employees

# (Source: Excel Sheet)

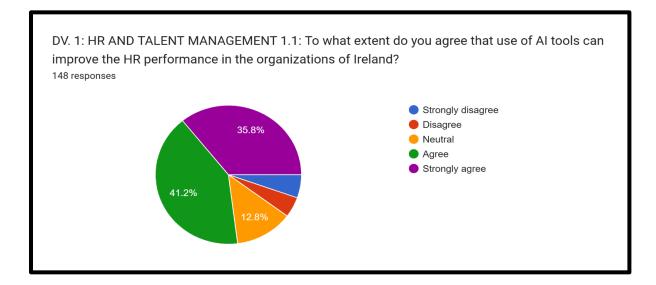
The survey analysis has found that 39.3% of the participants strongly agree that AI-driven technology helps to reduce the communication gap and increase organisational efficiency (figure 4.18). However, about 9.3% highlight the cons of AI not being able to rescue the communication gap for increasing efficiency in organisations. Rodgers *et al.*, (2023) argued that AI algorithms are complex systems that make it difficult for HR expert's professionals and employees to know how a decision is made. Bach *et al.*, (2024) criticised that AI-based communication tools fail to showcase empathy, which leads to misunderstandings and decreases effectiveness in resolving complex and interpersonal issues.

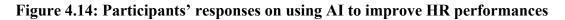




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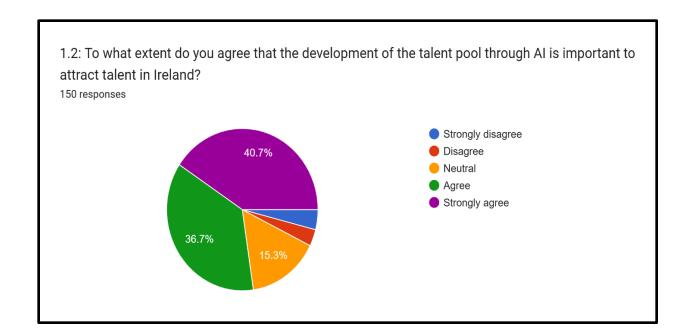
The survey analysis has found the majority of the participants, about 41.2% of the participants have agreed on the fact that using AI helps to improve HR performance (figure 4.19).





# (Source: Excel Sheet)

The survey found that 40.7% of the participants strongly agreed that using AI organisations can develop a talent pool and attract talented people to Irish companies (figure 4.20).



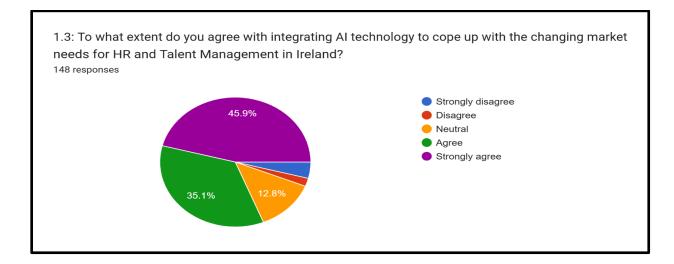
# Figure 4.15: Participants' responses on using AI on helping to develop a talent pool for attracting talent in Ireland

# (Source: Excel Sheet)

The research by Albaroudi *et al.*, (2024) has showcased that different organisations have used IBM's AI Fairness 360 and can detect or remove any bias during recruitment. Moreover, AI has been used to hire local talented people based on their skills and past work records despite the language barriers. The researcher also explained that along with CV (Curriculum Vitae) screening through automation and identifying talented employees through AI, organisations can reduce unwanted bias (language issues) and acquire talented employees.

The findings of the survey analysis also identified that a high number of the participants have agreed that AI technology helps to reduce the challenges of the changing market need and manage talent and human resources in the Irish organisation. In this primary finding, about 45.9% of the respondents strongly agreed with this fact about using AI to minimise changing market challenges (figure 4.21). Several researchers have found the HR industry is witnessing a dynamic shift supported by the advancement of technology such as Artificial Intelligence and algorithms that are poised to change the market needs and demand (Lim and Lee, 2024; Satornino *et al.*, 2024). Regarding this, Sullivan and Wamba (2024) have found organisations have adopted AI to identify

upcoming changes in the market and to minimise expenses. Therefore, organisations are also able to attract and retain talented employees to enhance the entire employee lifecycle.



# Figure 4.16: Participants' views on using AI to cope with changing market needs for HR and talent management

# (Source: Excel Sheet)

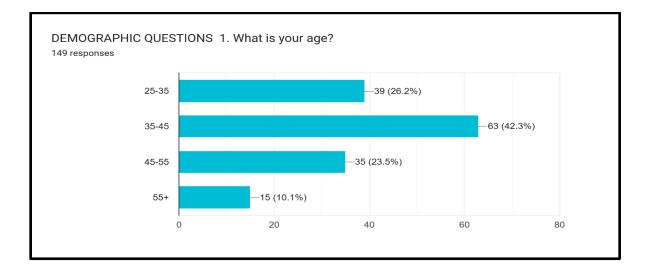
In conclusion, the main analysis of this survey is that AI helps to identify skill or talent gaps and helps organisations to increase talent identification process and HR functions. It was also observed that integration of AI in business operations can increase efficiency. Although, some concerns about biases, communication gaps, and expertise, also persist. While AI and HRIS can positively drive HR practices, these changes and limitations can underscore the urgency for careful implementation and evaluation to ensure fair and efficient outcomes.

### 4.2.2 Demographic

This section has explained the demographic analysis. As noted in the methodology chapter, about 151 participants have been selected although only 96.7% (nearly 146) of them have given informed consent before entering this research project.

**Age:** The age of the participants is an important demographic factor as it has helped to identify the target of the dominant age group for understanding the present working group among Irish organisations. The primary findings (figure 4.1) have shown that the 35 to 45 years age group (63

respondents out of 149, nearly 42.3%) constitute the dominant segment of the overall respondents. However, only a small number of participants are aged above 55 (10.1%).

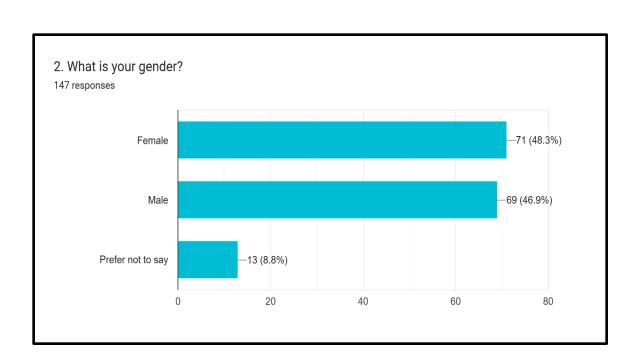


## Figure 4.17: Age of the participants

### (Source: Excel Sheet)

Here, considering such demographic analysis, it was able to know how this age group perceives or implements Artificial intelligence and HRIS to manage talent and HR functions. That is how different generations are inclined towards adopting AI and HRIS systems within HR and talent management was identified. Henceforth such analysis has contributed to identifying opportunities that Irish organisations have gained in managing talent in the digital era.

**Gender:** The gender analysis has helped to examine the gender-wise differences in adaptation of the AI and the HRIS within HR and talent management. Ideally research should have facilitated a survey through spilling the gender equally however, it was not possible due to the uneven gender distribution among Irish organisations. According to the survey, 71 participants out of 147 were females, which represents 48.3% of the population. Moreover, of about 69 participants that is 46.9% were male respondents and 13 participants that is 8.8% chose not to reveal their gender and opted for the "Prefer not to say" option (figure 4.2).



### Figure 4.18: Gender of the participants

### (Source: Excel Sheet)

Although the majority of the participants are female, the survey can be viewed as relatively balanced concerning gender representation. Therefore, considering such a crucial demographic (gender) variable, this study has provided accuracy and in-depth analysis in identifying the complex aspects of HR and talent management practices. These findings have indicated a progressive aspect towards gender equality within Irish organisations. Hence it has ensured an inclusive as well as equal representation of the workforce. As opined by O'Connor and Liu (2023) the analysis of gender-related data, the potential bias towards inclusion and diversity can be managed and organisations can promote gender equality. Therefore, through assessing gender-based data, this research can identify any biases in implementing AI and HRIS processes for improving HR functions which may disproportionately affect one gender.

**Education:** The survey analysis has exhibited a variety of educational levels that have enriched this research by giving insights from the professionals having different types of academic preparation. Among 150 respondents 42% of them hold a Bachelor's Degree, which is the largest group having such an educational background. And a small number of respondents have completed their PhD that is 12.7% of the 150 respondents (figure 4.3). Here, determining the educational

qualifications of the participants is crucial for understanding their knowledge of ever-changing labour markets. Higher educational backgrounds of participants enable a significant understanding of the use of AI and HRIS to manage HR and talent within Irish companies as well. Sancoko *et al.*, (2022) found that education plays a crucial role in adopting technology easily in the workplace and being accustomed to it. This assessed that the population has added further weight to this research.

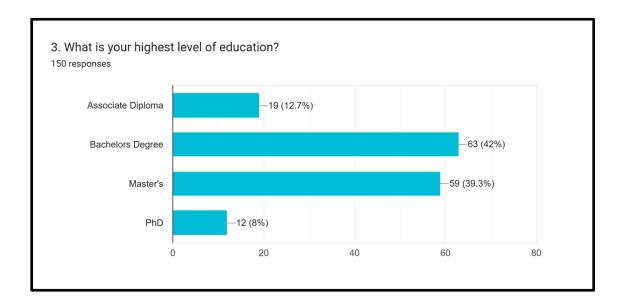


Figure 4.19: Educational qualification of the participants

### (Source: Excel Sheet)

**Work experiences:** Work experience correlates with the degree of expertise and level of proficiency in one's career. Here, identifying the work experiences of the respondents, the importance of the adaptation of AI and HRIS for talent management can be mentioned. Moreover, how such adoption differs within professionals having varying tenures can also be assessed. The primary findings from the survey analysis have stated that the majority of the participants, which is about 26.7% of the respondents, (40 out of 150 participants) have more than 9 years of working experience (figure 4.3). The work experience of the participants has impacted this research for analysing the need for adopting AI and HRIS. Working professionals based on their experiences, have provided key insights and perceptions, for technology acceptance in the workplace.

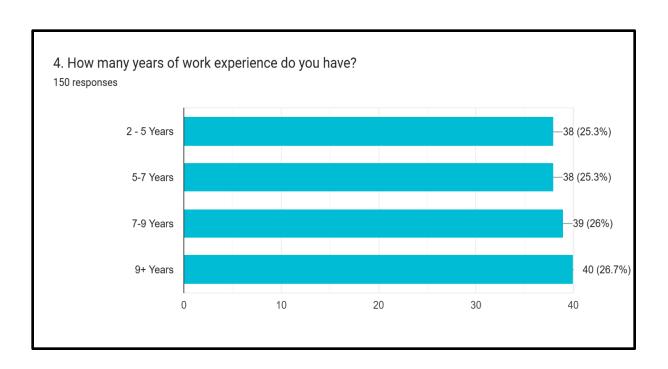


Figure 4.20: Work experiences of the participants

## (Source: Excel Sheet)

**Country of the participants:** India (18.9%) and Ireland (27.3%) together constitute the majority of participants which indicates a significant presence of respondents from these two countries. While the survey is dominated by Ireland and India it also consists of a wide range of respondents from Australia, China, Honduras, Italy, Myanmar, Pakistan, the USA, the United Kingdom, and so on (figure 4.5). The collection of the data has prioritised the inclusion of different countries. This also reflected the present global landscape and the relevance of the importance of technological implementation within HR and managing talent.

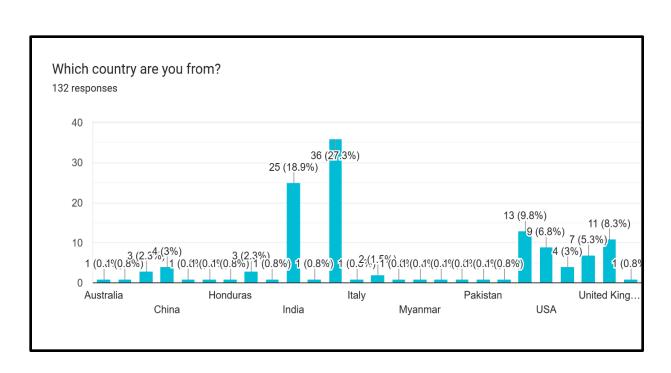


Figure 4.21: Place of residents of the participants, country-wise

(Source: Excel Sheet)

# 4.3 Implications and Recommendations

The results of the survey have indicated positive aspects of HRIS and artificial intelligence technologies among the participants. Here a majority of the participants have agreed that these technologies can increase talent management and human resource management systems. The key aspect of this finding is that this technology has efficiently revolutionized the talent regression and acquisition process. Another key impact of this survey analysis is that it has showcased that human resource information systems and artificial intelligence increase employees' experiences which can lead to a high retention rate and productivity.

These findings also led to the importance of technologies in identifying skill gaps and increasing employee-employer relations. Although a portion of participants have highlighted their concerns about the lack of awareness and poor implementation of AI and HRIS technologies. In this regard, recommendations can be applied. For instance, organisations by regularly conducting workshops and investing in training sessions can educate managers or HR professionals about the usage of AI and HRIS to retain talented employees (Albaroudi *et al.*, 2024). Therefore, it can help to increase

awareness and implementation of AI and HRIS technologies. Moreover, employee engagement and experience can also be increased if organisations implement AI-based tools (Satornino *et al.*, 2024). These technologies can be useful to increase employee satisfaction by providing personalized experiences, for example, the on boarding process, career development, and so on, which can increase higher satisfaction among employees.

### 4.4 Summary

This chapter has addressed the primary findings of this research underlying the use of artificial intelligence and human resource information systems in human resource and talent management in Ireland. Here, the key findings from the result of the survey analysis have been analysed, where it has been noted that HRIS and AI help to retain talented employees and improve communication and relations between employees and employers.

# **Chapter 5: Discussion**

This chapter is devoted to providing a discussion of the findings and analysis when set against the existing literature as discussed in chapter two. From the overall findings through survey analysis, it can be discussed in a broader sense that AI as part of digitalisation contributes enough to make error-free decisions for organisational growth. In Irish organisations, the situation is the same as found from the research that AI is essential to increase employee experience level by decreasing the work pressure and establishing modernised workflow. Digitalisation in the technological era helps to reduce the communication gap as it enables the organisation's employees to interact with each other through modern technologies. It has also been found that AI-based technological advancement reduces the burden of repetitive work pressure and makes the entire business functions less time-consuming. Hence, it is worth mentioning that AI is important to build good relationships among employees through uninterrupted communication through technological advancement. Moreover, with the utilisation of digitalisation methods and AI tool integration in organisational areas, personalised communication, automated content generation through chatbots and virtual assistance streamlined the routine of business tasks systematically.

The impact of digitalisation on talent and HR management in organisations revolves around the opportunities to provide personalised training sessions, effective decision-making abilities and managing crises with critically analysed organisational data. Digitalisation makes it possible to reduce human efforts to do repetitive tasks, attract more skilled talents and consciously transfer information to make serious decisions. Moreover, among Irish organisations data-driven initiatives help to arrange talent management programs to motivate the employees to fit into this new digital era and increase business profitability rate as much as possible. Therefore, digitalisation is important to gain competitive advantages through encouraging a changing environment as well as incorporating cross-functional initiatives to manage the HR departments and talent with the help of AI.

The findings from the survey analysis revolved around the fact that digitalisation or AI tools are essential for human resource management purposes in organisations. Regarding this fact, Nocker and Sena (2019) claimed that Artificial intelligence has improved recruitment initiatives by automating daily tasks as well as justification of data-driven analysis for human resource and talent management purposes. Similarly, the study by Sancoko *et al.*, (2022) stated that the concept of Human Resource Information Systems (HRIS) includes technological advancement that helps to

leverage operational efficiency levels to acquire more skilled employees for organisational growth. In this context, it can be stated that, in the modern digital era, to manage talent and increase the productivity level of the HR department technological advancement with ASI and information systems is required to maintain competitive advantages.

Moreover, similar information was also found in the literature review section, where Ali et al. (2023) highlighted that technology-enabled HR functions help to monitor and document the organisational activities to enhance the capabilities of the HR department. It has been also discovered from the information of the literary study of Wiblen and Marler (2021) that digitalisation is essential for talent management whereas organisation authorities are required to recognise human factors such as their attitude, behaviour, and capabilities to obtain new knowledge regarding digital technologies. It has been also found from the entire research findings that AI also creates a talent pool to attract more talented and skilled people for an organisation. Hence, it can be considered that these results validate the first research object which is related to the impact of HR and talent management

Different factors associated with the digitisation process to manage talent and HR departmental activities indicate the utilisation of business data to make effective decisions. In this context, employee performance data analysis through AI helps to understand who requires proper talent and who does not require any training or learning session. In Irish organisations, AI is important to identify skill gaps and improve communication gaps to build relationships among team members. Moreover, technology-driven changes include the incorporation of AI and HRIS and create a productive working culture in Ireland.

The findings of this particular research indicated that different factors such as data-driven decisionmaking, navigation of work-related pressure and employee performance level can be easily managed through digitalisation or AI-based information systems automatically. In this context, Alabdali *et al.*, (2024) highlighted that positive relationships are established through HR strategic decision-making and algorithmic HRM initiatives. Exact information is extracted through the literary part where Cooke *et al.*, (2014) have highlighted that employee experience level is essential for improving HR and talent management activities. It has been found from the findings that employee experience and satisfaction levels can be monitored through digitalisation by transferring information and providing them with a friendly working atmosphere to maintain good relationships. Furthermore, the information of Sánchez-Hernández *et al.*, (2019) from the literature review part also described that advanced technology is beneficial to recognise employee performance gaps and provide proper training collaboratively with the involvement of skilled leaders. The implications of research findings contain significant frequencies to the importance of modern technological integration is essential for HR strategic implementation for employee satisfaction, efficiency level improvement and making appropriate decisions in Irish organisations. Therefore, it can be considered that all these findings met the second research objective which includes factors such as employee satisfaction, decision-making, information sharing and others that are interrelated with HR and talent management in the digital era.

The process related to digitalisation and AI integration in managing HR and talent for Irish organisations creates difficulties in various ways. Lack of technology expertise and lack of awareness about using technologies. Thus, many organisations due to lack of strategic implementation cannot improve HR and talent management with the benefits of AI and digital technologies. Employee performance level, skills, and educational background are also essential factors associated with the proper utilisation of AI as well as information systems to monitor and control overall business procedures. Initially, the lack of focus of the Irish business authorities over the arrangement of training and development sessions for employees so that they can properly utilise technological advancement can be included as a challenging factor.

The findings of the research have provided in-depth information on key challenging factors faced by Irish organisations while managing talent in this digital era. It has been also found that a lack of awareness and training facilities makes it difficult for employees to understand digital technology-based initiatives. The study by Wang *et al.*, (2022) highlighted that digital HRM activities save time and facilitate data-driven decision-making where expertise is also required to understand the core functionalities. The literary work of Cismaru and Iunius (2019), highlighted that the skill gap creates difficulties in utilising technological advancement as well as AI integration in HR and talent management in Irish organisations. Thus, it can be considered that human resource information systems and technological integration require proper training and development to improve efficiency and productivity levels. Hence, it can be showcased that these findings can meet the third objective to analyse challenging aspects associated with HR and talent management initiatives in the digital era. Arrangement of training programs is an effective strategic approach to managing talent and HR departmental activities through the incorporation of AI and information systems. HR and talent management practice also includes the establishment of inclusion and diversity. In this context, the identification of skilled candidates is required so that AI-enabled recruiting tools effectively hire suitable candidates for Irish organisations. Theoretical perspectives of the Resource-Based View and its application in organisational functions effectively make the recruitment strategy beneficial for solving several challenges related to digital transformation.

The findings of this current research significantly aligned with strategic intervention to manage talent and HR departmental practices with communication, training and development programs. In this context, the literature part also explained that the leadership role is essential to find areas of gap and improvement, and skill-matching initiatives for training session organisation. (Jooss et al., 2023). Strategic alignment is essential for changing the environment and encouraging employees to enhance their skills to fit into the digital era. Furthermore, Feijao et al. (2021), focused on digitally inclusive initiatives that helps to organise training and development sessions are required to be adopted by the Irish Organisation authorities where expertise plays an important role. Moreover, Karman (2019), highlighted that agile ability can increase flexibility and employee skill levels to incorporate strategic initiatives in business functionalities. Thus, it can be considered that strategic perspectives to maintain talent and HR management in Irish organisations revolve around training and development program organisation with the involvement of expertise, agile adaptability and leadership skills to identify gaps are essential aspects. Hence, it is worth mentioning that all these findings significantly meet the fourth objective of this current research.

### Acceptance or Rejection of Hypotheses

**H1:** There is a positive and strong relationship between AI tools in HR management (IV 1) and HR and talent management (DV). This hypothesis is accepted based on the responses in the survey to questions Q IV 1.1, IV 2.2 and DV 1.2

**H2:** There is a strong and dynamic relationship between employee experience and satisfaction (IV 2) and HR and Talent management (DV). The hypothesis is accepted based on the responses in the survey to questions Q IV 2.1, IV 2.2, IV 2.3 and IV 2.4.

**H3:** There is a positive and strong relationship between employee performance (IV 3) and HR and Talent management (DV) This is also accepted based on the responses to questions Q IV 1.1, IV 1.2, IV 1.3, IV 3.1, IV 3.2, IV 3.3 and IV 3.4.

**H4:** There is a strong and dynamic relationship between HR-employee communication (IV 4) and HR and Talent management (DV). The hypothesis is accepted based on the responses in the survey to questions Q IV 2.2, IV 2.4, IV 4.1 and IV 4.2.

In conclusion, it can be manifested that the overall findings chapter discussed the effectiveness of digital tools in managing talent and HR in the digital era. It has been found from the survey session that in Irish organisations AI integration sometimes becomes challenging though it provides beneficial aspects related to organisational growth. Hence, it can be stated that proper strategic initiatives to resolve digital transformation-based risk factors and experience the utmost benefits of AI and information systems for managing talent and HR.

# **Chapter 6: Conclusion and Recommendation**

### 6.1 Conclusion

The research is about the use of AI and the HRIS for managing human resources and talent management in Ireland. This research has revealed promising advancements in these technologies and notable challenges by aligning their objectives and aims. The study has bridged the gaps by supporting several pieces of literature and providing an in-depth analysis of digitalisation and its impact on managing HR and talent. Here, it has been found that employee experience, upskilling or reskilling, and cross-functional management are crucial to minimising challenges within an organisation. This is essential to deal with skill gaps, market competition, and generational differences to manage talent and HR (Feijao *et al.*, 2021; Alabdali *et al.*, 2024). Another crucial finding of this study is that organisations face challenges in managing talent and human resources. However, AI-driven recruitment, and training programmes, as well as AI and HRIS-driven hiring practices, have been implemented in different Irish companies to manage HR and talent (Wang *et al.*, 2022; Rožman *et al.*, 2023). A robust methodological choice has been to study the digitalisation process for managing HR and talent. With the help of positivist philosophy, quantitative design, and deductive approach, a survey analysis was conducted to address the current impact and challenges of using AI and HRIS in managing talent and human resources.

Building key insights from the findings and the literature review, it is quite clear that technologies offer several benefits, however, their implementation may require careful consideration. In this regard, the analysis of survey responses of 151 respondents elucidated key themes of AI and HRIS in managing human resources and talent, the impact of these technologies on increasing employee engagement and experience and building a highly effective workplace with the help of AI and HRIS. The study is evident in recognising the impact of technologies that have revolutionised the talent management system and enabled managers to make informed decisions. That is, the managers of Irish organisations can streamline the recruitment process through predictive analytics with the help of AI and HRIS and AI on increasing employee satisfaction and engagement was underscored. The participants have recognised the importance of AI-driven tools that help to personalise the working experiences of employees and automate mundane work. Henceforth, such advances in AI increase retention rates and productivity, foster communication, and improve organisational efficiency.

Based on findings, it has been observed that more than 41.7% of the respondents reported that AI and HRIS enhanced the recruitment process and 44.4% shared that employee satisfaction, reskilling and reducing the talent gap are crucial. A surprising fact that was also discovered through survey analysis is that AI and HRIS not only increase operational efficiency and talent management processes but also personalise employees' working experiences as well.

Despite the concerns of AI and HRIS depersonalising the overall workplace, the findings have revealed that tools like AI are perceived as an excellent technology for recognising human working aspects in contemporary firms (Huang *et al.*, 2023; Lourens *et al.*, 2024). That is, AI-based tools help to tailor employee satisfaction and engagement rather than reducing it. The survey analysis has provided efficient funding, however, using a mixed-methods data collection process can provide more nuanced and richer insights about the implementation of technology. For instance, considering primary quantitative and secondary qualitative research strategies can enrich the result and yield a more meticulous perspective.

### 6.2 Linking with Objectives

The research has been done by considering the research objectives and based on the findings, it can be mentioned that this research has met the objectives successfully. The first objective has been addressed by demonstrating the impact of AI and HRIS on enhancing HR practices. Similarly, the second objective was also explored by recognising several factors of employee engagement and satisfaction, along with reskilling them. This objective has been met in the research findings as the findings have revealed that upskilling employees and increasing employee satisfaction improve organisational productivity. Moreover, some challenges within Irish organisations were also addressed such as skill gaps or integrating AI and HRIS technology due to cost constraints that met the third objective. The strategies to mitigate the challenges such as personalised workers' experiences were also addressed which met the fourth objective.

### 6.3 Recommendations for further research

This research has provided insight into the impact of technologies for improving HR and talent management processes. Although rapid evolution of HRIS and AI has been conducted here, a deeper analysis of particular AI applications such as natural learning, and machine learning, within the HR process can be taken into focus in the future. Moreover, cross-cultural comparison can also take into focus for future research to examine the impact and adaptation of technologies in various

cultural settings. As an impact, it can be possible to enrich the understanding of talent management of employees of different cultural backgrounds.

# 6.4 Limitation

The study has solely focused on the technological impact of an HR process in one specific country, which limits the generalizability of key findings to the contexts of technological application. Additionally, this study has heavily relied on survey data, which may create biases in capturing the complexity of technological implementation.

# **6.5 Practical Implications**

Organisations should invest in ongoing training for HR professionals to enhance their understanding of the usage of AI and HRIS effectively. Here, the practical recommendations of this research have been discussed below.

Key audience	The implications of this research	
HR Professionals	The findings can enable HR professionals to look into current trends in	
	HR-based technology to manage talent and human resources.	
Organisational	The research can help inform them about how to make informed decisions	
Leaders	about improving their HR and talent management through investing in	
	technology and HR-based function optimisation.	
Policymakers	This research can help to develop policies that enable organisations to	
	adopt AI and HRIS to rescue the talent gap.	
Academic	This study can be explored as AI and HRIS intersection and provide key	
Researchers	insights about the study-related topic.	
Table 6.1: practical implementation of the research		

(Source: Developed by the researcher)

# 6.6 Recommendations

Here, with the help of suitable recommendations, Irish companies can improve their organisational efficiency and implement technology without facing any obstacles. These have been mentioned below:

- By investing in the technological implementation process to develop talent and human resources management strategies (Lourens *et al.*, 2024).
- Investment in HR-related infrastructure, such as employee training, data security, and personalising employee work can be done to develop the workforce even more (Vishwanath and Vaddepalli, 2023).

- By creating a supportive and regulatory environment to adopt AI and HRIS (Huang *et al.*, 2023).
- Through investing in learning development and research to address potential HR challenges. This can be done by developing human-based AI solutions in organisational contexts.

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# Appendices

### Questionnaire

### **Contextual Questions**

### IV 1: AI tools in HR management

IV 1.1: To what extend Do you agree that the use of the data driven Human Resource Information System is influencing the recent talent management programs?

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

IV 1.2: Do you feel that the human resource managers of Ireland have benefitted from the implementation of AI technology such as data-driven decisions in managing human resources?

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

IV 1.3: To what extent do you agree that the lack of awareness of using modern technologies such as Human Resource Information System and AI tools in corporate boards is a reason for improper implementation of HRM strategies?

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

### **IV2: Employee experience and satisfaction**

IV 2.1: To what extent do you agree that employee experience and satisfaction can be increased by implementing AI tools in framing HR strategies?

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

IV2.2: To what extend do you agree that Talent Management process integrated with modern technology (Such as: data-driven decision making, AI powered HR model, Human Resource Information System) play an important role in maintaining higher employee retention rates?

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

IV 2.3: To what extent do you agree that using AI technology has an impact on the productivity or performance of the employees?

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

IV 2.4: To what extent do you think that employee satisfaction is still an important concept in maintaining employee engagement when an HR manager can collect data with the help of AI technologies?

• Strongly Agree

- Agree
- Neutral
- Disagree
- Strongly Disagree

## **IV3: Employee Performance**

IV 3.1: To what extent do you believe the use of AI tools in identifying the skills gap in the organization in HR management in Ireland is important?

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

IV3.2: To what extent do you agree that AI tools have helped the recruiters to identify the talent gaps among new employees in Ireland?

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

IV3.3: To what extent do you believe that aspect of employee branding, monitoring and controlling is dependent on AI assisted HR management?

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

IV 3.4: To what extent do you agree that the Human Resource Information System (HRIS) can identify the need for training and development to increase the employee performance in Ireland?

Explanation: Human resource information system she is a modern technology used in human resource Management. It collects data from operations to measure employee's performance.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

### **IV4: HR-Employee Communication**

IV 4.1: To what extent do you agree that the AI tools can influence the relationship between the HR department and employees important in an organization of Ireland?

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

IV 4.2: To what extent do you agree that AI technology-driven management can reduce the communication gap to increase the efficiency of the organization?

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

### **DV: HR and Talent Management**

DV1.1: To what extent do you agree that use of AI tools can improve the HR performance in the organizations of Ireland?

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

DV1.2: To what extent do you agree that the development of the talent pool through AI is important to attract talent in Ireland?

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

DV1.3: To what extent do you agree with integrating AI technology to cope up with the changing market needs for HR and Talent Management in Ireland?

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

# **Demographic Questions**

1. What is your age?

• 25-35

- 35-45
- 45-55
- 55+

2. What is your gender?

- Male
- Female
- Others

3. What is your highest level of education?

- Diploma
- Associate Degree
- Master's
- PhD level

4. How many years of work experience do you have?

- 2-5 years
- 5-7 years
- 7-9 years
- 9 years+

5. Which country are you from?

- Ireland
- Your Country .....