

Research Proposal

Building a Competency Framework for Organizations Using Generative AI – AIDA

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Subject: Industrial/Organizational Psychology

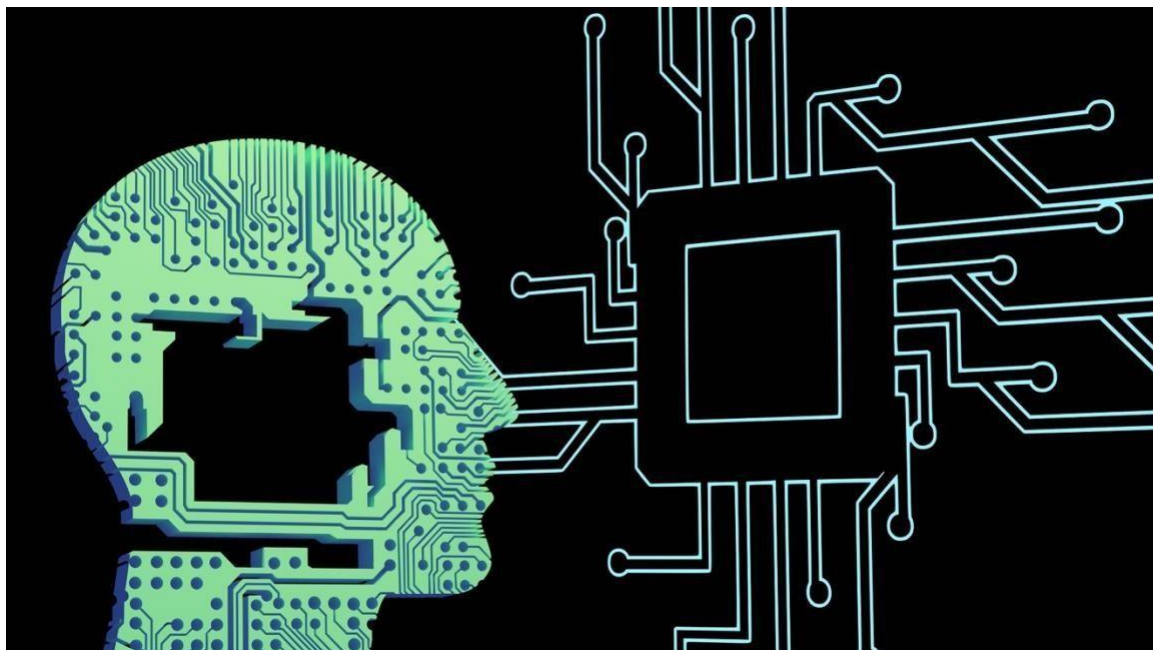


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Abstract

This research proposal aims to outline a study for building an effective and dynamic competency framework for organizations using Generative AI. The research will consider multiple organizational settings, to assess and establish fundamental competencies needed for employees to work synergistically with AI technologies. The study's objective is to understand, define, and map competencies, while creating an AI-driven model to anticipate future competency needs and tailor training and development programs accordingly.

This research proposal embarks on an explorative journey into the realm of human resource development (HRD) and artificial intelligence (AI), specifically focusing on building a dynamic competency framework for organizations using Generative AI. The surging wave of AI innovation is set to redefine organizational operations. As a consequence, it necessitates a thorough understanding and preparation of competencies required by employees to navigate the AI-driven landscape.

The objective of this research is to:

- Analyse existing competency frameworks across various organizations and understand the influence of AI integration on them.
- Explore the potential of Generative AI to identify patterns and generate novel insights into competency requirements.
- Develop an AI-driven model for competency mapping capable of predicting future competency needs, allowing organizations to proactively design their training and development programs.
- Evaluate the effectiveness of the proposed model by testing it within a selected organization.

This research will adopt a mixed-methods approach. A quantitative analysis of secondary data on existing competency frameworks and the skills required in various AI-integrated organizations will be conducted. Generative AI models will be utilized to analyse this data and generate new competency models. Complementing this, a qualitative analysis will be performed involving semi-structured interviews and focus group discussions with HR professionals, employees, and managers across multiple industries. This will provide insights into the practical needs, barriers, and opportunities in integrating AI in the competency framework.

The insights derived from both the quantitative and qualitative research will then feed into the development of a prototype AI-driven competency framework, I now also propose a name for this model through this proposal and in extension for my research paper. The name for this AI-driven competency framework will be **AIDA**, expanded as **generative AI powered organizational Development Architecture**. This prototype will be trialled in an organization for a defined period, with pre- and post-evaluations undertaken to gauge its effectiveness using performance metrics and user feedback.

Successful implementation of this research would herald a significant advancement in the field of HRD. By designing a dynamic, AI-driven competency framework, organizations can better equip themselves for the evolving AI era. This will lead to proactive rather than reactive adjustment to technology-driven changes, thus, enhancing overall organizational efficiency and adaptability.

Moreover, such a competency framework could provide a foundation for educational institutions, enabling them to tailor their curricula to future workplace demands. This research, therefore, holds potential implications not only for business organizations but also for the broader educational landscape and future workforce preparation.

Introduction

The era of AI brings significant changes to the way organizations operate and the skills their employees need to succeed. This development necessitates a competency framework that considers AI tools and their integration in organizational settings. Generative AI, which can generate new data based on patterns learned from existing data, holds promise to identify, predict, and manage the skills and competencies an organization needs to thrive.

Yet, there is still a lack of comprehensive understanding about how AI technologies can assist in mapping out an organization's competency framework effectively. This research aims to bridge this gap and contribute to the flourishing field of AI in Human Resources Development (HRD), focusing on the development of an AI-driven competency framework.

What is AI?

Artificial Intelligence (AI) has been hailed as the engine of the fourth industrial revolution. Its growth and impact have been exponential, emerging from the realm of theoretical computer science to become a universal force reshaping numerous sectors globally.

The Rise of AI

The concept of AI was first introduced by John McCarthy at a conference at Dartmouth College in 1956. However, it wasn't until the last two decades that AI started gaining significant traction, largely due to the convergence of increased computational power, advancements in machine learning algorithms, and the availability of large data sets.

AI encompasses a range of technologies, including natural language processing (NLP), machine learning (ML), deep learning (DL), and robotics. These technologies enable machines to simulate human intelligence processes, such as learning, reasoning, problem-solving, perception, and language understanding.

AI in Industries

Today, AI finds application across diverse industries:

- **Healthcare:** AI assists in disease diagnosis, drug discovery, patient care, and health record management. For instance, AI algorithms can analyse medical images to detect anomalies, aiding early disease diagnosis.
- **Finance:** AI supports automated trading, risk management, fraud detection, and customer service. Robo-advisors, for example, use AI to provide financial advice or portfolio management online with minimal human intervention.
- **Retail:** AI powers personalized marketing, demand forecasting, inventory management, and customer service. Personalization algorithms help in providing individualized recommendations, enhancing customer engagement.
- **Manufacturing:** AI is used in predictive maintenance, quality control, demand forecasting, and supply chain optimization. Industrial robots equipped with AI can

perform complex tasks and adapt to changing environments.

- **Transportation:** AI is at the heart of autonomous vehicles. It also aids in traffic management, route optimization, and predictive maintenance in aviation, shipping, and rail transport.

AI and the Future of Work

AI's implications for the future of work are immense. It is set to transform the nature of jobs, skills required, and organizational structures.

- **Nature of Jobs:** While fears of job displacement by AI are widespread, many experts suggest that AI is more likely to change the nature of jobs rather than eliminate them. Routine and repetitive tasks are likely to be automated, while jobs requiring creativity, critical thinking, and emotional intelligence will continue to be in high demand.
- **Skills Required:** As AI technologies continue to evolve, there is a growing demand for AI literacy across job roles. Even non-technical roles will require an understanding of AI capabilities and limitations. In parallel, 'human' skills such as creativity, empathy, and leadership will become increasingly valuable.
- **Organizational Structures:** AI could lead to more flattened, flexible, and dynamic organizational structures. Decision-making may become more data-driven, and virtual collaborations could become commonplace.

AI's rise signifies a transformative shift in the workplace. It presents immense opportunities, along with challenges that need to be navigated. Businesses that understand and leverage AI's potential will likely lead in the new era of work. For this, building AI-driven competency frameworks for organizations becomes a compelling necessity, a challenge that this research aims to address through **AIDA**.

What Problem does this Research Aim to Tackle?

There is growing acknowledgment of the potential of AI to enhance various HR functions, such as recruitment, performance management, and training. However, a critical area that has not received equal attention is the development of AI-enabled competency frameworks.

What is a Competency framework?

A competency framework is a structured system that defines and categorizes the knowledge, skills, and attributes needed for individuals to perform effectively within an organization. Traditionally, these frameworks have been static, failing to adapt swiftly to evolving job requirements, particularly those caused by technological advancements. Given the speed at which AI is reshaping the workplace, there is a pressing need for dynamic competency frameworks that can keep pace.

While some studies have explored AI's role in improving competency assessment, there's a noticeable gap in how AI, especially generative AI, can aid in creating and updating competency frameworks. Generative AI, capable of learning from patterns in data and generating new data, could potentially offer novel insights into current competencies and predict future competency requirements.

In practice, several organizations have begun using AI for tasks like talent acquisition and employee engagement, yet few have integrated AI into their competency mapping. The lack of

research and practical guidance on AI-enabled competency frameworks may contribute to this limited adoption. Also, the potential challenges, such as data privacy concerns, algorithmic bias, and employees' apprehension towards AI, may be deterring organizations.

Given this context, this research aims to bridge the gap between the rapidly advancing field of AI and the critical HRD function of competency mapping. By developing AIDA as an AI-driven competency framework, I hope to contribute to a more dynamic, future-oriented approach to talent management. My research will also provide insights into navigating the potential challenges in implementing such a framework, thus, offering valuable guidance for practitioners in the field.

Research Aim

The primary aim of this research is to conceptualize, develop, and test an effective and dynamic competency framework for organizations using Generative AI. This research aims to leverage AI's predictive capabilities to help organizations anticipate future competency needs and proactively tailor their training and development initiatives.

Research Objectives

To achieve this aim, the research is structured around the following key objectives:

- **Analyse existing competency frameworks:** Conduct a comprehensive review and analysis of existing competency frameworks across a diverse range of industries. Understand how these frameworks are currently established, how they adapt to changes, and how AI technologies are being incorporated, if at all.
- **Explore generative AI capabilities:** Investigate the potential of Generative AI in learning from patterns in existing competency data and generating predictive insights. Understand how these insights could be used to anticipate future competency needs.
- **Develop an AI-Driven competency framework:** Drawing on the insights from existing competency frameworks combined with the capabilities of generative AI, I propose to create **AIDA** first as a prototype of a dynamic, AI-driven competency framework. This model should be capable of continually updating competencies based on changing job requirements.
- **Test AIDA/generative AI powered organizational Development Architecture:** Implement prototype **AIDA** within a selected organization and monitor its effectiveness over a defined period and evaluate whether the framework can accurately identify current competencies, highlight skills gaps, and predict future competency needs.
- **Understand and address implementation challenges:** Identify potential barriers to implementing **AIDA** and suggest strategies to mitigate them. Consider technical challenges such as data privacy and algorithmic bias, as well as human factors such as user acceptance and understanding of AI.
- **Contribute to theory and practice:** Enhance academic understanding of AI's role in competency mapping and provide practical guidance for organizations looking to adopt **AIDA** or other AI-driven competency frameworks. Establish a foundation for future research in this growing field.

By pursuing these objectives, this research hopes to pioneer a path in using Generative AI to develop dynamic, responsive, and predictive competency frameworks, thereby aiding organizations to proactively adapt to the evolving AI era.

Theoretical Background

Competency Theory

Competency theory has been central to the field of HRD for several decades. Competencies are defined as a combination of knowledge, skills, abilities, and behaviours (KSABs) that are essential for effective performance in a particular job role or task.

Developed initially in the 1970s by the work of David McClelland, competency theory has since evolved significantly. Traditional competency frameworks focused largely on hard skills or technical competencies. However, over time, the recognition of the importance of soft skills or behavioural competencies has grown, leading to more holistic frameworks incorporating both technical and behavioural aspects.

In the context of the ongoing AI revolution, the competency theory is facing new challenges and opportunities. AI is not just altering the kind of competencies required but also the methods through which these competencies can be identified, assessed, and developed.

AI and HRD

The integration of AI into HRD is an emerging field of both practice and study. AI has the potential to automate routine HR tasks, provide predictive insights, and enhance decision-making.

For example, AI can streamline recruitment by automating resume screening, improving candidate matching, and enhancing the interview process. In performance management, AI can assist in monitoring performance indicators and providing real-time feedback. In the realm of learning and development, AI can personalize training programs based on individual needs and progress.

However, it cannot be discounted that along with these benefits, AI integration into HRD also raises challenges related to data privacy, algorithmic bias, and the need for HR professionals to develop new competencies to effectively utilize AI.

Generative AI

Generative AI, a subset of AI, encompasses algorithms capable of generating new data from existing data. These algorithms learn patterns from input data and then produce outputs that are entirely new and yet resemble the training data.

Technologies like Generative Adversarial Networks (GANs) and transformer-based models like GPT-3 are prime examples of generative AI. These technologies have been used to generate realistic images, compose music, write text, and even design drug molecules.

In the context of HRD, generative AI could potentially be harnessed to analyse existing competency data and generate novel insights into current and future competency requirements.

Integration of AI in Competency Framework

Integrating AI into competency frameworks is a relatively new concept. While AI has been used in competency assessments, for example, in analysing assessment data or conducting video interviews, its use in building competency frameworks has been limited.

AI integration into competency frameworks could take various forms. On the one hand, AI could be used to identify new competencies required for the AI era. On the other hand, AI, particularly generative AI, could be used to develop dynamic frameworks that continually update competencies based on changing job requirements, which **AIDA** aims to demonstrate.

However, leveraging AI in this way would require addressing several challenges, such as ensuring data privacy, mitigating algorithmic bias, and securing user acceptance. Theoretical and practical guidance on navigating these challenges remains scarce, a gap that this research aims to fill for developing **AIDA** as a prototype, testing it, and then publicizing it as **generative AI powered organizational Development Architecture**.

Overall, the theoretical background underscores the relevance of this research. It highlights the potential of AI, particularly generative AI, to enhance competency frameworks, and underlines the need for further research and guidance in this area.

AIDA's Capabilities

Description

Competency mapping is a crucial aspect of organizational development. As the needs of the industry change rapidly, identifying the competencies that the workforce currently possesses and predicting the skills they will need in the future is a daunting task. Our proposed AI-powered competency framework, **AIDA** represents a novel approach to competency management. It integrates Generative AI with traditional competency mapping, resulting in a tool that is capable of predicting future competency needs.

The framework will be structured around key job roles within an organization and the associated competencies required for those roles. However, unlike traditional frameworks, it will not be static. It will be updated in real-time based on data from multiple sources, including current job roles, industry trends, employee performance data, and feedback from training and development initiatives.

The AI model will analyse this data, learning from it and generating predictions about future competencies. These predictions will form the basis of the AI-powered competency framework, providing a forward-looking tool for workforce development.

AIDA has the potential to revolutionize this process, creating a dynamic, adaptive, and future-focussed approach to workforce competency mapping.

Proposed Architecture

Creating a Well-Informed Data Infrastructure

The foundation of an AI-powered competency mapping system is a robust data infrastructure. This infrastructure would encompass a wide range of data points, including current employee competencies, past performance appraisals, evolving job descriptions, and industry trends.

Integrating Generative AI Models

Generative AI models are trained on this comprehensive dataset. The models learn patterns from the existing competencies and performance data and then generates new data points. These new data points, informed by the patterns in the existing data and current industry trends, can predict future competency needs.

Architecting a Dynamic Competency Mapping Framework

The insights from the Generative AI models feed into a dynamic competency mapping framework. This framework is continuously updated based on the AI's predictions. It includes both current and anticipated future competencies, providing a comprehensive and forward-looking view of workforce skills.

Conducting Skill Gap Analysis

The dynamic competency mapping framework forms the basis for an ongoing skill gap analysis. This analysis identifies the gaps between the current competencies of the workforce and the predicted future competencies. It highlights the areas where training and development initiatives are needed to prepare the workforce for future demands.

Developing Personalized Training and Development Plans

The skill gap analysis informs the creation of personalized training and development plans. These plans aim to develop the future competencies identified by the Generative AI models. They can include various forms of training, from e-learning courses to on-the-job training, tailored to the needs of individual employees.

Implementing Feedback and Establishing Refinement Mechanism

Feedback from the training programs, updated competency data, and changes in job roles and industry trends are continuously fed back into the Generative AI models. This feedback loop allows the AI to learn and refine its predictions over time, ensuring that the competency mapping remains relevant and adaptive.

AIDA, therefore, offers a proactive, dynamic, and personalized approach to organizational development. It leverages AI's predictive capabilities to anticipate future competency needs and aligns training and development initiatives with these future needs. It ensures that the workforce is always ready to meet the evolving demands of the industry.

Dynamic and Personalized Nature of the Framework

A unique feature of our framework is its dynamic nature. It will continuously learn and update its predictions as new data becomes available. This will allow the framework to stay relevant

in the face of rapidly changing job roles and industry trends, aiding in proactive and strategic workforce planning.

The framework will also have a personalized component. The AI model will not only predict future competencies at an organizational level but also at an individual level. It will consider individual differences in skills, learning pace, and career development aspirations, allowing for personalized training and development plans.

This personalized approach is expected to enhance the effectiveness of training and development efforts, leading to improved job satisfaction and engagement. By integrating AI into competency mapping in this way, we aim to transform the traditional approach to competency management and pave the way for a more dynamic, personalized, and effective approach to workforce development.

Proposed Research Methodology

Research Design

This research will employ *explanatory sequential design*. The initial phase will involve a quantitative analysis of secondary data related to existing competency frameworks and AI integration in organizations. The latter phase will comprise qualitative research, involving interviews and focus group discussions with HR professionals, employees, and people leaders across different industries.

Data Collection

Quantitative Data: Secondary data will be collected from various sources including professional networks and industry surveys. These data will encompass information about existing competency frameworks and the state of AI adoption in different organizations.

Qualitative Data: The primary data will be collected through semi-structured interviews and focus groups. Participants will be selected using a purposive sampling method, ensuring a diverse mix of HR professionals, people leaders, and employees. Interviews and focus groups will be designed to gain in-depth insights into the practical needs, barriers, and opportunities in integrating AI into competency frameworks.

Data Analysis

Quantitative Analysis: Statistical analysis will be performed on the collected secondary data using software tools like SPSS and R. Generative AI models will be utilized to analyse patterns in the data and generate novel insights.

Qualitative Analysis: Interviews and focus group discussions will be transcribed verbatim and analysed using thematic analysis. Key themes related to the challenges and opportunities of AI integration into competency frameworks will be identified and interpreted.

Developing and Testing AIDA

Based on the insights derived from both the quantitative and qualitative research, a prototype version of **AIDA** will be developed. This prototype will be implemented within a selected

organization for a defined period. The organization will be chosen based on its readiness and openness to adopting an AI-driven approach to competency mapping.

The effectiveness of the prototype will be evaluated through pre- and post-implementation surveys, performance metrics, and user feedback. Both the process of implementation and the outcomes will be closely monitored to provide a comprehensive evaluation of the proposed model.

Ethical Considerations

The research will be conducted with full adherence to ethical guidelines. Informed consent will be obtained from all participants in the research, and their anonymity and confidentiality will be maintained. In handling and analysing data, especially using AI, care will be taken to comply with data privacy regulations and to avoid algorithmic bias.

Overall, the proposed methodology ensures a robust, rigorous, and ethical approach to achieving the research objectives. By combining quantitative and qualitative methods, it allows for a comprehensive exploration of the research problem from both a statistical and experiential perspective. The testing of the prototype within a real-world context further ensures the practical relevance and applicability of the research.

Potential Implications

Beyond HRD theory and practice, this research also has potential wider societal implications.

- **Employee development and job satisfaction:** By providing more accurate and personalized competency development opportunities, the research could contribute to employee growth and job satisfaction. Employees could benefit from training programs tailored to their individual needs and future industry demands, enhancing their skills and career prospects.
- **Economic growth:** By helping organizations stay ahead of the competency curve, the research could indirectly contribute to economic growth. Organizations that can anticipate future competency needs are likely to be more competitive and innovative, leading to higher productivity and economic output.
- **Ethical considerations:** The research could also contribute to societal discussions around the ethical use of AI in the workplace. It could highlight the importance of data privacy, algorithmic fairness, and the need for governance structures to oversee the use of AI in HRD. These discussions could inform policymaking and regulations, ensuring that the use of AI in the workplace is both effective and ethical.
- **Predictive analysis in HRD:** Generative AI allows for more accurate predictive analysis in HRD. By providing HR professionals with the tools to foresee future trends in competencies, organizations can plan more effectively for their future needs. This has far-reaching implications, impacting strategic HR planning, succession planning, talent acquisition, and more.
- **Facilitating continuous learning:** The AI-driven competency framework can promote a culture of continuous learning within organizations. By continuously updating the required competencies and offering personalized training programs, employees are encouraged to continually update their skills and knowledge. This can foster a learning culture that benefits both the individual and the organization.
- **Employee retention:** Improved competency mapping and personalized training can lead to better job satisfaction, which can in turn increase employee retention. Employees who feel their organization is invested in their personal development and is preparing them for future trends are more likely to stay with the company.

- **Equality and diversity:** AI-driven competency mapping can help ensure that competency assessments and related HR decisions are based on objective data, reducing the potential for bias and discrimination. However, care must be taken to ensure the AI itself is not biased. If properly implemented, this could contribute to greater equality and diversity in the workplace.
- **Enhancing corporate reputation:** Organizations that are seen to be at the forefront of using AI in HRD, especially in an ethical manner, can enhance their reputation. This can make them more attractive to potential employees, clients, and investors.
- **Societal skill development:** On a societal level, the research can contribute to skill development. By identifying future competency trends, it can inform education and training providers about the skills they should be focusing on. This can help ensure that the workforce as a whole is prepared for future industry needs.
- **Informing Policy Development:** The research findings could inform the development of policies related to the use of AI in HRD. This includes both internal organizational policies and wider regulatory policies. By highlighting the opportunities and challenges of using AI for competency management, the research can provide valuable insights for policymakers.

Overall, the impact of the research is likely to be multifaceted, influencing not just HRD practice, but also wider societal dynamics. It emphasises the potential of AI to transform the way we understand and manage competencies, and also highlights the need for careful, ethical implementation of AI technologies. The potential impacts of this research are diverse and wide-ranging, reflecting the transformative potential of AI in HRD. It is important that these potential impacts are considered and explored in the research process, ensuring that the research contributes not only to academic knowledge, but also to practical application and societal development.

Potential Limitations and Steps to Overcome Them

Despite its significant potential, this research could face a number of limitations. Here are some potential challenges and plans to overcome them:

- **Data availability and quality:** One of the potential limitations could be the availability and quality of the secondary data for training the Generative AI models. To overcome this, we can use multiple sources to gather the necessary data and apply rigorous data cleaning techniques to ensure the data's reliability and validity. Additionally, we can also collaborate with organizations that can provide relevant data, while ensuring that all data privacy regulations are adhered to.
- **AI bias and accuracy:** Another potential issue could be bias in the AI algorithms, which could lead to unfair or inaccurate competency assessments. To address this, we will use a diverse dataset for training the AI models and implement techniques to mitigate algorithmic bias. We will also validate the AI's predictions using multiple sources and methods to ensure accuracy.
- **Acceptance and adoption of AI in HRD:** The acceptance and adoption of AI-driven competency frameworks in organizations might be a challenge. To overcome this, we will aim to involve HR professionals, managers, and employees in the development process to ensure that the framework meets their needs and concerns. We will also provide training and support to facilitate the adoption of the new system.

Ethical Implications and Maintenance of Ethical Standards

The use of AI, especially in HRD, involves several ethical considerations. Here's how we plan to address them:

- **Data privacy:** Protecting the privacy of individuals' data used in the study is paramount. We will follow all applicable data protection regulations and ethical guidelines. Informed consent will be obtained from participants, and all data will be anonymized and securely stored.
- **Algorithmic fairness:** We are aware of the potential for algorithmic bias and its ethical implications. We will take steps to mitigate this by using diverse datasets for training and by employing techniques for bias detection and mitigation in AI.
- **Transparency and explainability:** We will aim to make the AI models as transparent and explainable as possible. This is important both from an ethical perspective (people have the right to understand how decisions about them are made) and from a practical perspective (it can facilitate the adoption of the AI system).
- **Continuous monitoring:** We will set up a governance structure to oversee the AI system, including its ethical implications. This structure will be responsible for continuously monitoring the system and addressing any issues that arise.
- **Education and communication:** We will educate HR professionals, managers, and employees about the AI system and its ethical implications. Clear communication about how the AI works, its benefits, and its limitations can help build trust and ensure ethical use.

While there are potential limitations and ethical considerations in this research, we believe they can be effectively managed through careful planning, rigorous methodologies, and a strong commitment to ethical practices.

Conclusion

The proposed research aims to develop an innovative competency framework for organizations, **AIDA**, leveraging the predictive capabilities of Generative AI. This aligns with the evolving context of the Fourth Industrial Revolution, where AI and other advanced technologies are rapidly transforming industries and occupations.

The research will integrate AI with traditional HR practices, specifically in the realm of competency management. While AI is widely used in many areas of HR, its use in competency mapping is limited. This research will fill that gap, making a novel contribution to both HRD theory and practice.

The proposed methodology involves a multi-stage process, starting with an extensive literature review, followed by data collection, model development, and empirical testing. The literature review will cover existing theories and models in HRD and AI. Primary data will be collected from various sources, including HR professionals, employees, and AI experts. This will inform the development of Generative AI models that can predict future competency needs. These predictions will then be empirically tested in a real-world context.

A unique feature of the research is its dynamic approach to competency mapping. Traditional competency frameworks are largely static, based on current job roles and competencies. In contrast, the proposed AI-powered framework will be dynamic, continuously updating based on evolving job roles, industry trends, and feedback from training and development initiatives.

Another unique aspect is the personalized nature of the competency mapping. **AIDA** will not only predict future competencies at an organizational level, but also at an individual level. This

will allow for personalized training and development plans, enhancing the effectiveness of competency development efforts.

The potential impact of the research is significant. For HRD theory, it broadens our understanding of competency mapping in an AI-driven world and sparks innovative theoretical constructs. For HRD practice, it provides a novel tool for competency management and paves the way for a more strategic, proactive approach to HRD.

Societally, the research can contribute to job satisfaction, economic growth, and societal discussions around the ethical use of AI in the workplace. By highlighting future competency trends, it can inform education and training providers about the skills they should be focusing on, aiding societal skill development.

However, the research also has potential limitations, including data availability and quality, AI bias and accuracy, and acceptance and adoption of AI in HRD. These will be addressed through rigorous data management, bias mitigation techniques, and stakeholder involvement. Ethical considerations, including data privacy, algorithmic fairness, and transparency, will be integral to the research process.

In conclusion, this research represents a pioneering effort to integrate Generative AI into HRD, particularly in the field of competency management. Its novelty, relevance, and potential impact make it a valuable contribution to HRD theory and practice, with wider societal implications. Through this research, I hope to pave the way for more innovative, effective, and ethical use of AI in HRD.
