

**DISRUPTIVE TECHNOLOGY: FOUNDATIONS OF HUMAN RESOURCE  
TRANSFORMATION AND ITS IMPACT ON TECHNOPRENEURSHIP PRACTICES**

**Moh Muklis Sulaeman<sup>1\*</sup>, Sandi Nasrudin Wibowo<sup>2</sup>**

<sup>1</sup>Universitas Islam Lamongan

<sup>2</sup>Universitas Swadaya Gunung Jati

E-mail : [mohmuklis@unisla.ac.id](mailto:mohmuklis@unisla.ac.id)<sup>1</sup>, [sandi.nwibowo@ugj.ac.id](mailto:sandi.nwibowo@ugj.ac.id)<sup>4</sup>

**ABSTRACT**

*The background of this research is based on the significant phenomenon in the current digital era where technology has become a major driver of change in various aspects of life, including the business world and entrepreneurship. Disruptive technology, defined as technology that disrupts existing business models, has fundamentally changed the business landscape. The aim of this research is to examine how disruptive technology affects the transformation of human resources and its impact on technopreneurship practices. This research method involves a qualitative literature review using data sources from Google Scholar spanning from 2019 to 2023. The results of the study indicate that in the rapidly evolving technological era, the presence of disruptive technology has become a major driver in the transformation of human resources and technopreneurship practices. Disruptive technology fundamentally alters the way we work, interact, and create value in society. This transformation includes changes in workforce needs and how entrepreneurs leverage innovation to create value.*

*Keywords: Disruptive Technology, Human Resources, Technopreneurship*

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**TEKNOLOGI DISRUPTIF: LANDASAN TRANSFORMASI SUMBER DAYA MANUSIA  
DAN DAMPAKNYA TERHADAP PRAKTIK TECHNOPRENEURSHIP**

**ABSTRAK**

Latar belakang penelitian ini didasarkan pada fenomena signifikan dalam era digital saat ini di mana teknologi telah menjadi pendorong utama perubahan dalam berbagai aspek kehidupan, termasuk dunia bisnis dan kewirausahaan. Teknologi disruptif, yang didefinisikan sebagai teknologi yang mengganggu model bisnis yang ada, telah mengubah lanskap bisnis secara fundamental. Tujuan penelitian ini untuk menelaah bagaimana teknologi disruptif memengaruhi transformasi SDM dan bagaimana dampaknya terhadap praktik technopreneurship. Metode penelitian ini merupakan tinjauan pustaka kualitatif yang menggunakan sumber data dari Google Scholar dari periode 2019 hingga 2023. Hasil studi menunjukkan bahwa dalam era teknologi yang terus berkembang pesat, kehadiran teknologi disruptif telah menjadi pendorong utama dalam transformasi sumber daya manusia dan praktik technopreneurship. Teknologi disruptif mengubah fundamental cara kita bekerja, berinteraksi, dan menciptakan nilai dalam masyarakat. Transformasi ini mencakup perubahan dalam kebutuhan tenaga kerja dan cara pengusaha memanfaatkan inovasi untuk menciptakan nilai.

Kata kunci: Teknologi Disruptif, Sumber Daya Manusia, Technopreneurship

## INTRODUCTION

This research is rooted in the significant phenomena occurring in the current digital era, where technology plays a central role in transforming various aspects of life, including the business and entrepreneurial sectors. Disruptive technology, referring to innovative technologies that disrupt existing business models, has brought about fundamental changes in the structure and dynamics of the business landscape as a whole (Kivimaa et al., 2021).

The influence of transformative disruptive technology has extended to various human resource (HR) lines in diverse industry sectors. Technological advancements such as Artificial Intelligence (AI), the Internet of Things (IoT), cloud computing, and blockchain technology have fundamentally altered the way individuals interact, collaborate, and access information in the workplace (Ahmed et al., 2022). Consequently, significant challenges arise for HR in adapting to rapidly evolving and sustained changes, demonstrating the need for updated approaches and skills to meet increasingly complex future demands.

Furthermore, technological transformation also presents significant new opportunities for entrepreneurial practices, particularly through the concept known as "technopreneurship" or technology-based entrepreneurship. The concept of technopreneurship focuses on leveraging innovative technology to create new market value or enhance efficiency within existing markets (Patnaik, 2023). This approach not only enables entrepreneurs to create technologically superior products and services but also opens doors to broader market penetration and enables the development of solutions that are more adaptive to dynamic business environments. Technopreneurship is not merely a response to technological transformation but also a proactive effort to harness the potential of technological innovation in achieving sustainable competitive advantages.

Despite the new opportunities available, it cannot be overlooked that technological transformation also brings significant new challenges for technopreneurship practices. Increasing

competition in the market, the demand for higher technical skills, and the risk of failure are some aspects that must be seriously considered by technopreneurs (Koe et al., 2021). The rapid growth in the technology-driven business environment demands that technopreneurs have a high sensitivity to market changes, technological excellence, and the ability to manage risks wisely. It is important for technopreneurs to develop solid and flexible strategies to overcome obstacles that arise with the unpredictable dynamics of change.

Therefore, the background of this research highlights the need to gain a profound understanding of the impact of disruptive technology on human resources and its implications for technopreneurship practices. Through this approach, the research aims to provide deep and holistic insights for practitioners, academics, and policymakers in preparing themselves to face the challenges presented by the era of disruptive technology. By carefully analyzing how disruptive technology is changing the HR landscape and the dynamics of technology-based entrepreneurial practices, this research is expected to make a significant contribution to strengthening the adaptive and innovative capacities of those involved in the ever-changing business ecosystem.

## LITERATURE REVIEW

### Disruptive Technology

Disruptive technology refers to technological innovations that significantly disrupt or overhaul existing business models in the market (Yang et al., 2022). In other words, these technologies don't just provide incremental improvements or evolutions in how we do things, but they fundamentally change the way we interact, work, and access services. Examples include the emergence of the internet, which changed how we communicate and shop, and blockchain technology, which altered how we store and transfer data without intermediaries. Disruptive technologies often shake up established industries, forcing players within them to adapt or even completely overhaul their business models to remain relevant (Zighan, 2022). Thus, disruptive technology isn't just about creating new

products or services but also about radically reshaping how we view and operate within business and social environments.

### **Human Resources (HR)**

Human Resources (HR) refers to all the potential, skills, knowledge, and expertise possessed by individuals or groups within an organization or society that can be utilized to achieve specific goals (Diawati et al., 2023; Gadzali et al., 2023; Sutrisno et al., 2023). HR encompasses not only quantitative aspects like the number of employees in a company but also qualitative aspects such as their abilities, motivations, and commitments to their work. In the organizational context, HR includes recruitment, training, development, motivation, and employee retention (Rustiawan et al., 2023). Meanwhile, in the societal context, HR encompasses education, skills, and knowledge possessed by individuals to contribute to economic, social, and cultural development (Susantinah et al., 2023). Thus, HR plays a key role in the success and competitiveness of an organization or country because they are the most valuable resource in generating added value and innovation.

### **Technopreneurship**

Technopreneurship refers to entrepreneurial practices that focus on the development and application of innovative technology to create new market value or enhance efficiency in existing markets. In the context of technopreneurship, business actors or entrepreneurs aim not only to create financial profits but also to create solutions that have a positive impact on society through technology utilization (Rathnayake & Roca, 2022). Technopreneurship involves the development of technology-based products or services that solve specific problems or meet existing market needs with an innovative approach (Rafiana, 2023). Technopreneurs often combine technical skills with strong business insights to design, develop, and market their technology products or services. Thus, technopreneurship serves not only as a means to create economic value but also to

drive technological development and provide positive impacts in this digital era.

### **RESEARCH METHODOLOGY**

This research method involves a qualitative literature review using data sources from Google Scholar spanning from 2019 to 2023. The study will collect, analyze, and synthesize various scholarly articles, journals, books, and academic publications related to the topic "Disruptive Technology: Foundations of Human Resource Transformation and its Impact on Technopreneurship Practices." Qualitative approach is chosen to deeply understand and analyze concepts, theories, and recent findings in literature relevant to the research topic. Data collection process will involve searching and extracting relevant articles or scholarly publications using appropriate keywords related to the research focus. Subsequently, data will be organized and analyzed to identify main themes, trends, and key findings emerging from the literature. Qualitative approach also allows researchers to explore and understand the context and complexity of the researched topic, including variability in perspectives, approaches, and research methodologies used in existing literature. Moreover, the use of Google Scholar as the data source enables access to various recent scholarly articles and academic publications that have undergone peer-review process. Data extracted from Google Scholar will be carefully selected to ensure its relevance and credibility in supporting the objectives and conceptual framework of this research. Thus, the qualitative literature review method with data retrieval from Google Scholar is expected to provide comprehensive and in-depth understanding of the researched topic.

### **RESULTS AND DISCUSSION**

In an era of rapid technological advancement, the emergence of disruptive technology has become a primary driver in transforming human resources and technopreneurship practices. The concept of disruptive technology refers to innovations that fundamentally change how we work, interact, and create value in society (Qiu et al., 2023). In this context, an exploration will be undertaken

to uncover the primary impacts of disruptive technology on the shift away from traditional paradigms in human resource management, as well as how these impacts permeate into technopreneurship practices.

First and foremost, let's examine how disruptive technology has painted a new canvas in the domain of human resources. Through the embrace of technologies such as artificial intelligence (AI), robotics, and automation, activities that were once the prerogative of humans are now encapsulated within the grasp of machines with increased efficiency and timeliness. This transformation marks a significant change in the archetype of workforce needs, depicting an increasingly solid foundation for technological skills, data analysis, and creativity (Alrasheedi et al., 2022). For instance, the industrial landscape has shifted from manual labor dominance towards exploration and adoption of AI-based technologies, emphasizing the urgency for human resources to adapt and master the ever-metamorphosing technological realm.

The effects of this transition on technopreneurship practices are significant. Technopreneurship, a concept referring to technology-based entrepreneurship, becomes increasingly essential in harnessing the potential of disruptive technology to generate added value and address challenges within the social context (Sutrisno, 2023). Technology-driven entrepreneurial entities not only require deep technological understanding but also skilled abilities in identifying emerging opportunities, designing innovative products or services, and understanding rapidly changing market dynamics. Additionally, the need for collaborative capabilities, careful risk management, and sensitivity to ethical aspects of technology use becomes crucial in solidifying the foundations of technopreneurial success in this ever-changing ecosystem.

A striking example of the implications of disruptive technology on technopreneurship practices can be found in the phenomenon of emerging digital platforms that transform the landscape of our daily activities, including but not limited to work, shopping, and interacting with services. Organizations such as Uber, Airbnb, and Amazon signify a significant transformation in the transportation,

accommodation, and retail sectors by leveraging digital technology availability to offer services that are not only more efficient and affordable but also cater to specific consumer needs (Wirtz et al., 2019). Through technology-based strategies, these platforms have created new business models that pave the way for economic empowerment and change how consumers interact with products and services, creating a new wave in previously established market dynamics.

However, despite the immense innovation potential and economic growth support brought by disruptive technology, challenges also accompany its flow. One of the major challenges faced is the skills gap, where not all individuals have access to or possess adequate skills to keep up with technological advancements. This gap can deepen the divide between those who can reap the benefits of new technological advances and those who are left behind. Therefore, it becomes imperative for governments, industries, and educational institutions to join hands in ensuring that human resource transformation involves all layers of society, making inclusion and equal access to technology core elements of development strategies. Collaborative steps are expected to reduce disparities and ensure that no one is left behind in the ever-advancing technological change.

Therefore, in investigating the implications of disruptive technology, it can be concluded that this technology has become a central foundation in changing human resource paradigms and in building technopreneurship practices. Through the adoption of new technologies, individuals can enhance their productivity and creativity, while technopreneurs can leverage technological innovations to create added value and address various societal issues. Nevertheless, amid various achievements, challenges such as the skills gap also require comprehensive solutions to ensure that the benefits of disruptive technology are evenly distributed across all layers of society. Through partnerships between government, industry, and educational institutions, strategic steps can be taken to address these gaps, strengthen inclusion, and build a solid foundation for a society capable of

adapting and thriving in an ever-changing technological era.

## CONCLUSION

In the rapidly evolving era of technology, the presence of disruptive technology has become a primary driver in the transformation of human resources and technopreneurship practices. Disruptive technology fundamentally alters how we work, interact, and create value in society. This transformation includes changes in workforce needs and how entrepreneurs leverage innovation to create value. Disruptive technologies such as artificial intelligence (AI), robotics, and automation have reshaped the human resources landscape by enhancing efficiency and timeliness across various jobs. This has spurred an increase in technology skills, data analysis, and creativity among the workforce. On the other hand, technopreneurship practices are becoming increasingly important in harnessing the potential of disruptive technology to create value and address societal issues. However, there are challenges to overcome, such as skill gaps, which can create a divide between those able to capitalize on new technology and those left behind. Therefore, collaboration between government, industry, and educational institutions is crucial to ensure that human resource transformation encompasses all segments of society. Recommendations resulting from this study include:

1. Investment in training and education: Governments and educational institutions should develop training programs that align with rapidly changing workforce demands. This includes the development of technology skills, data analysis, and creativity.
2. Promotion of technology-based entrepreneurship: Support should be provided to technology entrepreneurs to develop innovative products or services that can create added value for society. This can be done through tax incentives, access to capital, and facilitation of market access.
3. Enhanced access and inclusion: Efforts should be made to ensure that all segments of society have access and skills to benefit from disruptive technology. This may involve subsidy programs for technology, access to digital infrastructure, and skills training tailored to local needs.

By taking these steps, we can ensure that the transformation brought about by disruptive technology brings benefits to everyone while minimizing inequalities and strengthening innovation-based economies.

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