

EDUCATION STRATEGY FOR GENERATING A TECHNOLOGY-BASED ENTREPRENEURIAL GENERATION

Yulian Purnama^{1*}

¹UIN SAIZU Purwokerto

E-mail : yulianpurnama@uinsaizu.ac.id¹

ABSTRACT

The rapid growth in information and communication technology (ICT) has fundamentally transformed the business landscape, leading to the emergence of new business models and accelerating the pace of change. In this context, it is essential to prepare the next generation with the appropriate skills to face challenges and leverage opportunities offered by the technology revolution. The purpose of this research is to examine education strategies to produce a technology-based entrepreneurial generation. This study is a qualitative literature review aiming to investigate various approaches in academic literature related to the research topic. Data for this research will be retrieved from Google Scholar with a range of years from 2018 to 2023. The study findings indicate that education strategies to produce a technology-based entrepreneurial generation must be comprehensive, holistic, and sustainable. Education should prioritize the development of technical skills, creative thinking, and entrepreneurial attitudes in an inclusive and sustainable learning environment. Additionally, education should integrate project-based learning and real-world experiences, as well as strengthen soft skills essential for success in business.

Keywords: Education, Entrepreneurial Generation, Technology

STRATEGI PENDIDIKAN UNTUK MENGGUNAKAN GENERASI WIRAUSAHA BERBASIS TEKNOLOGI

ABSTRAK

Pertumbuhan pesat dalam teknologi informasi dan komunikasi (TIK) telah mengubah lanskap bisnis secara fundamental, mendorong munculnya model bisnis baru, dan mempercepat laju perubahan. Dalam konteks ini, penting untuk mempersiapkan generasi mendatang dengan keterampilan yang sesuai untuk menghadapi tantangan dan memanfaatkan peluang yang ditawarkan oleh revolusi teknologi. Tujuan penelitian ini untuk menelaah strategi pendidikan untuk menghasilkan generasi wirausaha berbasis teknologi. Penelitian ini merupakan tinjauan pustaka kualitatif yang bertujuan untuk menyelidiki berbagai pendekatan dalam literatur akademik terkait topik penelitian. Data untuk penelitian ini akan diambil dari Google Scholar dengan rentang tahun 2018 hingga 2023. Hasil studi menunjukkan bahwa strategi pendidikan untuk menghasilkan generasi wirausaha berbasis teknologi haruslah komprehensif, holistik, dan berkelanjutan. Pendidikan harus memprioritaskan pengembangan keterampilan teknis, pemikiran kreatif, dan sikap kewirausahaan dalam lingkungan pembelajaran yang inklusif dan berkelanjutan. Selain itu, pendidikan juga harus mengintegrasikan pembelajaran berbasis proyek dan pengalaman nyata, serta memperkuat soft skill yang penting bagi keberhasilan dalam bisnis.

Kata kunci: Pendidikan, Generasi Wirausaha, Teknologi

INTRODUCTION

Rapid advancements in technology, particularly in the field of information and communication technology (ICT), have transformed the way we work, interact, and conduct business (Wahyoedi et al., 2023). The digital revolution has opened doors to new innovations and previously unimaginable business models, accelerating the pace of global economic change (Sudirjo et al., 2023). In this context, it is imperative to recognize that the future of the economy will be greatly influenced by the ability of the next generation to master and wisely leverage technology. Therefore, education strategies focusing on the development of technological skills and entrepreneurship are becoming increasingly important in preparing adaptive and innovative generations.

Across the globe, there is an urgent need to revamp education to be more responsive to the demands of the times (Raharjo et al., 2023). Education must transition from traditional paradigms focused on factual knowledge towards more interactive, collaborative, and skill-based approaches. The upcoming generation must be equipped with the ability to solve problems, think critically, collaborate, and, of course, possess a strong entrepreneurial spirit. This places education in a crucial role in shaping the future of the economy and society.

However, educational transformation is not without its challenges. Various obstacles must be overcome, ranging from outdated curricula to a lack of training for educators in implementing innovative approaches. Additionally, infrastructure challenges and access to technology can also pose barriers to the implementation of technology-oriented education strategies (Afzal et al., 2023). Therefore, concerted efforts from various stakeholders, including governments, schools, industries, and communities, are needed to address these barriers and create an educational environment conducive to growth and innovation.

One critical aspect of the education strategy for generating a technology-based entrepreneurial generation is the emphasis on practical learning and real-world experiences (Haleem et al., 2022). Students need to be given

opportunities to develop technology projects relevant to everyday life or existing social issues. This will not only enhance their technological skills but also help them understand how technology can be used to solve real-world problems in society.

Thus, research on education strategies for producing a technology-based entrepreneurial generation becomes crucial in guiding the transition towards more relevant and effective education. This research is expected to provide valuable insights for policymakers, educators, and other stakeholders in their efforts to create an educational environment that stimulates creativity, collaboration, and entrepreneurship in the future.

LITERATURE REVIEW

Education

Education is a systematic process designed to transfer knowledge, skills, values, and social norms from one generation to the next. It involves various methods, practices, and institutions aimed at shaping individuals' intellectual, emotional, social, and moral development (Azzaakiyyah et al., 2023). More than just teaching, education also encompasses a learning process that helps individuals understand their surrounding world, acquire the necessary skills to contribute to society, and develop their full potential. Education is not confined to formal environments such as schools and universities but can also occur in various contexts, including families, communities, and workplaces (Prastyaningtyas, Sutrisno, et al., 2023). It spans various levels, from preschool education to higher education and lifelong learning. The primary goal of education is to prepare individuals to become critical, creative, and positively contributing members of society, capable of adapting to the changes occurring in an increasingly complex and diverse world (Harahap et al., 2023).

Entrepreneurial Generation

The term entrepreneurial generation refers to a group of individuals actively engaged in creating, developing, and managing their own businesses or ventures (Lee et al., 2022). They possess a strong entrepreneurial spirit and are oriented towards innovation,

creativity, and the ability to identify opportunities in the market. This generation tends to have a proactive attitude towards risk, adaptability to change, and the courage to take necessary steps to achieve success in the business world. Young entrepreneurs are not limited by age or background (Shaw & Sørensen, 2022). They can come from various demographic groups and have diverse interests and goals in creating their ventures. However, they are often identified as individuals familiar with technology, possessing creative minds, and connected to extensive networks. The importance of the entrepreneurial generation lies in their contribution to economic growth, job creation, and innovation across various sectors (Al Alawi et al., 2023). They bring fresh ideas and solutions to existing problems, helping drive economic activity and playing a key role in building competitive societies. Therefore, fostering the development of the entrepreneurial generation is a critical focus in many economic and educational development strategies. Encouraging entrepreneurship within communities, providing support for the development of new businesses, and building ecosystems that support growth and innovation are some efforts undertaken to support the growth of a strong entrepreneurial generation.

Technology

Technology refers to the application of scientific knowledge and practical skills for specific purposes, particularly in the development of tools, machines, software, and processes that enable humans to perform tasks more efficiently or effectively (Prastyaningtyas, Ausat, et al., 2023). Generally, technology involves the use of tools, materials, energy, and procedures to create products or services that are useful. Technology encompasses various fields, including information and communication technology (ICT), medical technology, energy technology, transportation technology, and many more. It can range from something as simple as a knife or rope to something as complex as a global computer network or artificial intelligence-based transportation system. Technology has become an integral

part of human daily life and has transformed how we work, communicate, learn, and interact with our environment (Sutrisno et al., 2023). Technological innovation has made significant contributions to progress in various fields, enabling new discoveries, higher efficiency, and solutions to various human challenges. In the modern era, technology is often associated with developments in computer and information technology. Advances in this technology have brought us into the digital age, where computing and internet connectivity have accelerated the pace of change in almost every aspect of our lives (Kamar et al., 2022). Thus, technology is not just a tool or product but also encompasses the process of creation and application to improve human life and solve existing problems. The development of technology continues to evolve and play a significant role in shaping the future of humanity and society as a whole.

RESEARCH METHODOLOGY

This research is a qualitative literature review aiming to investigate various approaches in academic literature related to education strategies for generating a technology-based entrepreneurial generation. Data for this research will be retrieved from Google Scholar with a range of years from 2018 to 2023. After conducting searches using relevant terms related to the research topic, relevant articles will be selected based on certain criteria, such as relevance to the research topic and methodological quality. Data from the selected articles will be analyzed qualitatively, taking into account key findings, diverse perspectives, and patterns emerging in the literature. The results of the analysis will be used to formulate findings, patterns, and trends found in the literature, as well as to explore the implications of these findings in the context of developing effective education strategies. The validity and reliability of the findings will be ensured by referring to reliable sources, employing a rigorous analytical approach, and considering variations in perspectives and research methodologies presented in the literature. By using this method, this research is expected to provide in-depth insights into important issues

in the development of education strategies for generating a technology-based entrepreneurial generation.

RESULTS AND DISCUSSION

Education is the key to building an innovative and competitive society, especially in an era where technology is rapidly advancing and serves as a primary driver of economic transformation (Septianti et al., 2023; Tuhuteru et al., 2023). In facing these challenges, educational strategies prioritizing the development of technology-based entrepreneurial skills become crucial. This narrative discusses how education can be formulated to produce a technologically ready generation with strong entrepreneurial spirits.

To begin with, education should encourage the integration of technology into the curriculum. This encompasses not only teaching technical skills such as computer programming, data analysis, and artificial intelligence but also promoting creative, collaborative, and innovative thinking, which are at the core of entrepreneurship. Education focused on utilizing technology as a tool to solve real-world problems and create added value in various contexts will help produce individuals capable of competing in knowledge-based economies (Malik, 2018).

Furthermore, education should reinforce project-based learning and real-world experiences. Through projects relevant to the real world, students can directly learn how to apply their knowledge and skills in business and technology contexts (Guo et al., 2020). Collaboration with local industries and communities is also crucial to provide students with access to learning from experienced practitioners and entrepreneurs, as well as to facilitate internship opportunities and project collaborations.

In addition to technical aspects, education should also emphasize the development of soft skills essential for entrepreneurial success. Communication, leadership, time management, as well as mental and emotional resilience are highly valuable skills in running businesses and overcoming challenges that may arise along the entrepreneurial journey.

Equally important, education should promote inclusive and sustainable attitudes in technology entrepreneurship. This includes promoting gender equality, cultural diversity, as well as social and environmental responsibility in every business step taken (Leal Filho et al., 2023). Thus, the future generation of entrepreneurs will not only have the ability to achieve economic success but also become positive agents of change in their societies and environments.

Educational strategies to produce a technology-based entrepreneurial generation must be holistic and sustainable. This requires collaboration between governments, educational institutions, industries, and communities to create an environment supportive of the development of skills, knowledge, and attitudes needed for future entrepreneurs. In doing so, we can ensure that our society is ready to face challenges and seize opportunities in the ever-evolving digital era.

CONCLUSION

In conclusion, educational strategies to cultivate a technology-based entrepreneurial generation must be comprehensive, holistic, and sustainable. Education should prioritize the development of technical skills, creative thinking, and entrepreneurial attitudes within an inclusive and sustainable learning environment. Additionally, education should integrate project-based learning and real-world experiences, as well as strengthen important soft skills essential for success in business. Implementing educational strategies to foster a technology-based entrepreneurial generation requires concrete steps. Firstly, education must actively integrate technology into the curriculum with a focus on developing technical skills and creative thinking. Furthermore, strong partnerships between educational institutions, industries, and local communities must be enhanced to provide students with real learning experiences in business and technology contexts. Moreover, learning should emphasize the development of soft skills such as communication, leadership, and mental resilience. The entire educational process should promote inclusivity and sustainability by fostering gender equality, cultural diversity, as well as awareness of social

and environmental responsibilities. Thus, the implementation of these strategies will ensure that future generations have the skills, knowledge, and attitudes needed to succeed in the ever-evolving digital era.

REFERENCES

- Afzal, A., Khan, S., Daud, S., Ahmad, Z., & Butt, A. (2023). Addressing the Digital Divide: Access and Use of Technology in Education. *Journal of Social Sciences Review*, 3(2), 883–895. <https://doi.org/10.54183/jssr.v3i2.326>
- Al Alawi, A. M., Al Kindi, K., Al Shukaili, A., & Ahmed, E. R. (2023). Entrepreneurial activities, innovation, and job creation: the role of demographics and creativity as moderators. *International Journal of Innovation Science*. <https://doi.org/10.1108/IJIS-12-2022-0232>
- Azzaakiyyah, H. K., Wanof, M. I., Suherlan, S., & Fitri, W. S. (2023). Business Philosophy Education and Improving Critical Thinking Skills of Business Students. *Journal of Contemporary Administration and Management (ADMAN)*, 1(1), 1–4. <https://doi.org/10.61100/adman.v1i1.1>
- Guo, P., Saab, N., Post, L. S., & Admiraal, W. (2020). A review of project-based learning in higher education: Student outcomes and measures. *International Journal of Educational Research*, 102, 101586. <https://doi.org/10.1016/j.ijer.2020.101586>
- Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, 3, 275–285. <https://doi.org/10.1016/j.susoc.2022.05.004>
- Harahap, M. A. K., Suherlan, S., Rijal, S., & Ausat, A. M. A. (2023). Defining the Business Philosophy Foundation for Sustainable Business Education. *Journal on Education*, 5(4), 15776–15783. <https://doi.org/10.31004/joe.v5i4.2690>
- Kamar, K., Lewaherilla, N. C., Ausat, A. M. A., Ukari, K., & Gadzali, S. S. (2022). The Influence of Information Technology and Human Resource Management Capabilities on SMEs Performance. *International Journal of Artificial Intelligence Research*, 6(1.2), 1. <https://doi.org/https://doi.org/10.29099/ija.ir.v6i1.2.676>
- Leal Filho, W., Kovaleva, M., Tsani, S., Țircă, D.-M., Shiel, C., Dinis, M. A. P., Nicolau, M., Sima, M., Fritzen, B., Lange Salvia, A., Minhas, A., Kozlova, V., Doni, F., Spiteri, J., Gupta, T., Wakunuma, K., Sharma, M., Barbir, J., Shulla, K., ... Tripathi, S. (2023). Promoting gender equality across the sustainable development goals. *Environment, Development and Sustainability*, 25(12), 14177–14198. <https://doi.org/10.1007/s10668-022-02656-1>
- Lee, S., Kang, M.-J., & Kim, B.-K. (2022). Factors Influencing Entrepreneurial Intention: Focusing on Individuals' Knowledge Exploration and Exploitation Activities. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(3), 165. <https://doi.org/10.3390/joitmc8030165>
- Malik, R. S. (2018). EDUCATIONAL CHALLENGES IN 21ST CENTURY AND SUSTAINABLE DEVELOPMENT. *Journal of Sustainable Development Education and Research*, 2(1), 9–20.
- Prastyaningtyas, E. W., Ausat, A. M. A., Muhamad, L. F., Wanof, M. I., & Suherlan, S. (2023). The Role of Information Technology in Improving Human Resources Career Development. *Jurnal Teknologi Dan Sistem Informasi Bisnis*, 5(3), 266–275. <https://doi.org/https://doi.org/10.47233/jteksis.v5i3.870>
- Prastyaningtyas, E. W., Sutrisno, S., Soeprajitno, E. D., Ausat, A. M. A., & Suherlan, S. (2023). Analysing the Role of Mentors in Entrepreneurship Education: Effective Support and Assistance. *Journal on Education*, 5(4), 14571–14577. <https://doi.org/10.31004/joe.v5i4.2511>

- Raharjo, I. B., Ausat, A. M. A., Risdwiyanto, A., Gadzali, S. S., & Azzaakiyyah, H. K. (2023). Analysing the Relationship between Entrepreneurship Education, Self-Efficacy, and Entrepreneurial Performance. *Journal on Education*, 5(4), 11566–11574.
<https://doi.org/10.31004/joe.v5i4.2106>
- Septianti, R., Wahab, A., Hastuti, R., Purnama, Y., & Ausat, A. M. A. (2023). Re-examining the Impact of Covid-19 on Education. *Jurnal Pendidikan Tambusai*, 7(1), 3934–3940.
<https://jptam.org/index.php/jptam/article/view/5872>
- Shaw, K., & Sørensen, A. (2022). Coming of age: Watching young entrepreneurs become successful. *Labour Economics*, 77, 102033.
<https://doi.org/10.1016/j.labeco.2021.102033>
- Sudirjo, F., Ausat, A. M. A., Rijal, S., Riady, Y., & Suherlan, S. (2023). ChatGPT: Improving Communication Efficiency and Business Management of MSMEs in the Digital Age. *Innovative: Journal Of Social Science Research*, 3(2), 643–652.
<https://doi.org/https://doi.org/10.31004/innovative.v3i2.347>
- Sutrisno, S., Kuraesin, A. D., Siminto, S., Irawansyah, I., & Ausat, A. M. A. (2023). The Role of Information Technology in Driving Innovation and Entrepreneurial Business Growth. *Jurnal Minfo Polgan*, 12(2), 586–597.
<https://doi.org/https://doi.org/10.33395/jmp.v12i2.12463>
- Tuhuteru, L., Ausat, A. M. A., Pratiwi, E. Y. R., & Suherlan, S. (2023). The Role of Civic Education in Promoting Diversity and Tolerance in Schools. *Edumaspul: Jurnal Pendidikan*, 17(1), 275–280.
<https://doi.org/https://doi.org/10.33487/edumaspul.v7i1.5456>
- Wahyoedi, S., Suherlan, S., Rijal, S., Azzaakiyyah, H. K., & Ausat, A. M. A. (2023). Implementation of Information Technology in Human Resource Management. *Al-Buhuts*, 19(1), 300–318.
<https://doi.org/https://doi.org/10.30603/ab.v19i1.3407>