

CHALLENGES AND THE FUTURE OF BUSINESS MANAGEMENT TECHNOLOGY

Risanty Marisca

Institut Teknologi dan Bisnis Indragiri, Indonesia

Email: risanty.marisca030388@gmail.com

Abstract

The challenges and future of technology in business management is a very interesting and important topic. Technology continues to develop rapidly and plays an increasingly large role in the way businesses are run and managed. The following are some of the challenges faced as well as future developments in business management technology, namely leadership and cultural transformation, data usefulness, cyber security, artificial intelligence and automation, digital customer experience, and work flexibility and mobility. In facing technological challenges in business management, there are several strategies that can be implemented to remain relevant and competitive in an ever-changing market. The future of technology in business management will continue to offer new opportunities and challenges that need to be overcome. Businesses that are able to adopt and utilize technology well will have a significant competitive advantage in an increasingly connected and rapidly changing market. By understanding these challenges and trends, business leaders can be better prepared to face change and leverage technology to achieve competitive advantage in an increasingly complex business environment. This research in-depth investigates the challenges and future of business management technology using a literature review approach. This research discusses the challenges and future of business management technology, the challenges of modern business management with innovative software, strategies for overcoming technological challenges in business, and the implementation of technology for business success.

Keywords: challenges, future, technology, business management

INTRODUCTION

According to Wamba, S. F., & Queiroz, M. M. (2020) management, business and digital technology are three things that are related in today's business world. The use of digital technology is growing rapidly, so management and business must be able to keep up with developments in this technology. In this article, I will discuss the role of management and companies in facing digital challenges that are increasingly fiercely competitive. In the digital era, management plays an important role in managing the resources

owned by the company. Management must utilize digital technology effectively to achieve the expected benefits and maintain the company's competitiveness in the market. The right business strategy can also help businesses produce products and services more efficiently.

Companies also have an important role in facing digital challenges. Businesses must be able to utilize digital technology to increase profits and compete in the market. Businesses need to utilize digital technology to expand market reach. Facing digital technology challenges, management and business must work together to ensure that businesses can use digital technology effectively (Sanka et al., 2021). Management must ensure that the company has an adequate security system to protect customer data and sensitive company information. Businesses need to utilize digital technology to increase profits and win market competition. In short, companies must be able to apply digital technology effectively to remain competitive in the market. Management must play an important role in managing company resources (Kraus et al., 2022).

In today's digital era, technological innovation has become the main key to business success. Technological developments such as artificial intelligence (AI), data analytics, and the Internet of Things (IoT) have changed the way we do business. Successful companies are those that are able to adopt and utilize this technology intelligently. In facing this trend, it is important to always follow the latest technological developments and integrate them into business strategies (Demirkan et al., 2020).

The management paradigm that has existed for decades is also changing. Today, management is not just about giving instructions and monitoring employee performance. More than that, management must also be able to empower employees, encourage collaboration, and make decisions based on data. This change requires leaders who are adaptive, open to change, and able to motivate teams in new ways (Nižetić et al., 2020). In the competitive world of business, technical skills alone are no longer enough. The development of soft skills, such as communication abilities, leadership and creativity, is increasingly important. The ability to adapt quickly, collaborate and think critically are also highly valued factors. Investing in soft skills development will help and team stay relevant and successful in the ever-changing business world.

In this digital age, customers have many choices, and they increasingly prioritize good experiences. Therefore, companies must focus on superior customer experience. This involves deeply understanding customer needs and preferences, providing personalized service, and creating memorable moments in every interaction. By prioritizing customer experience, strong long-term

relationships can be built with them. Sustainability and social responsibility are important trends in business management today. Consumers are increasingly concerned about environmental and social issues, and they expect companies to act responsibly. Integrating sustainable business practices and contributing to society is key to building a positive corporate image. More than just financial benefits, companies must also consider social and environmental impacts in every business decision (Kumar, A., Liu, R., & Shan, 2020).

According to Hutt, M. D., & Speh, T. W. (2021) current trends in business management include technological innovation, paradigm change, soft skills development, focus on customer experience, and sustainability. To stay relevant and successful, businesspeople need to adopt and follow these trends closely. Be an adaptive leader, invest in skill development, and focus on customer needs. Apart from that, don't forget about social and environmental responsibility in every business decision. By following the latest trends, you can face future challenges with confidence. Businesses need to utilize digital technology to increase profits and win market competition. By working together, management and business can use digital technology effectively to achieve business goals and face future challenges.

Mosteanu, N. R., & Faccia, A. (2020) stated that by utilizing technology, companies can achieve higher operational efficiency, increase employee engagement, and make more informed decisions, creating a strong foundation for long-term success. Digital transformation is not just about adopting new technologies, but also changing the way we think and operate. In the context of business performance management, technology integration allows companies to achieve higher operational efficiency, increase employee engagement, and make more data-driven decisions. By taking these steps, companies can build a solid foundation for long-term success in an ever-changing digital era.

In facing increasingly complex business challenges, companies must view technology as a strategic ally to achieve efficiency, drive innovation and maintain competitive advantage. Smart business management will continue to follow technological developments and ensure that their implementation is in line with the company's strategic goals. By optimally exploiting technological potential, companies can open new opportunities, increase competitiveness, and build a solid foundation for long-term growth (Ivanov et al., 2021).

RESEARCH METHOD

This research in-depth investigates the challenges and future of business management technology using a literature review approach. The results include a comprehensive understanding of the challenges, the future of business management technology, strategies in overcoming business management technology challenges, and the implementation of technology for business success. Literature analysis involves an in-depth review of literature related to challenges, the future of business management technology as well as an exploration of key concepts and theories that support the understanding of business management technology. With a strong conceptual foundation, this research makes an important contribution to enriching the discussion regarding the challenges and future of technology in business in this article.

RESULT AND DISCUSSION

The challenges and future of technology in business management is a very important and ever-evolving topic. The following are some of the challenges faced by technology in business management as well as some future trends that can be anticipated according to Nicholas, J. M., & Steyn, H. (2020):

1. **System Integration:** One of the main challenges is complex system integration. Businesses often use a variety of software and platforms to manage their operations. Integrating all these systems to efficiently communicate and share data is a priority.
2. **Data Security:** With increasing cyber attacks and increasingly stringent data protection regulations such as GDPR in Europe, data security is becoming a major challenge in business management. Businesses must ensure that their data is properly protected from internal and external threats.
3. **Big Data Analysis:** With the amount of data continuing to increase, the biggest challenge is how to manage, analyze and make decisions based on that data. Big data analysis technologies such as machine learning and artificial intelligence (AI) are the key to extracting valuable insights from existing data.
4. **Adoption of New Technology:** Getting organizations to accept and adapt to new technology is often a major challenge. Business leaders must ensure that their employees are well trained and ready to adopt new technologies to maximize their potential.
5. **Increased Productivity:** One of the main objectives of technology in business management is to increase productivity and efficiency. The challenge is to

ensure that the technology implemented truly supports these goals without sacrificing quality or security.

According to Ancillai, C., Sabatini, A., Gatti, M., & Perna, A. (2023) the future of technology in business management promises greater breakthroughs and is more adapted to developing business needs. Here are some predictions about how technology will influence business management in the future:

1. Artificial Intelligence (AI) and Data Analytics: AI will continue to change the way businesses collect, analyze and use data. Increasingly sophisticated AI algorithms will enable more accurate forecasting, better personalization, and more timely decision making.
2. Internet of Things (IoT): IoT will increasingly permeate various aspects of business, from supply chains to manufacturing and services. The use of connected sensors will enable real-time monitoring, maintenance predictions and greater operational efficiency.
3. Edge Computing: With the growth of the Internet of Things (IoT), edge computing will become more important. This will enable data processing at the edge of the network, reducing latency and increasing system responsiveness.
4. Blockchain: Blockchain technology will continue to change the way businesses conduct transactions, track assets, and keep data secure. The potential to increase transparency, speed up processes, and reduce administrative costs makes it an attractive solution for a variety of industries.
5. Digital Convenience: Advancements in technologies such as augmented reality (AR), virtual reality (VR), and voice recognition will bring more immersive and intuitive digital experiences for customers. This will allow businesses to create more engaging experiences and expand their customer base.
6. Sustainable Use of Resources: Technology will play a key role in helping businesses move towards more sustainable practices. This includes more efficient energy use, better waste management, and the use of environmentally friendly materials.
7. Better Risk Management: Technology will help businesses better manage risk through more sophisticated data analysis, predictive modeling and better early warning systems.
8. Hybrid Working and Flexibility: As communication and collaboration technology continues to develop, hybrid working between the office and

home will become more common. Collaboration software and virtual work platforms will continue to evolve to support this work model.

9. Enhanced Data Safety and Privacy: Amid growing concerns about data security and privacy, technology will continue to evolve to provide more reliable and secure solutions, including strong encryption, identity protection, and more advanced security systems.
10. Platform-Based Business Development: Platform-based business models will continue to develop, with businesses using technology to build broader ecosystems and integrate their services and products with those of third parties.

The future of technology in business management will continue to offer new opportunities and challenges that need to be overcome. Businesses that are able to adopt and utilize technology well will have a significant competitive advantage in an increasingly connected and rapidly changing market. By understanding these challenges and trends, business leaders can be better prepared to face change and leverage technology to achieve competitive advantage in an increasingly complex business environment (Pal et al., 2021).

Challenges of Modern Business Management with Innovative Software

Ihnatenko et al., (2020) stated that business management is a field that continues to develop rapidly, especially with technological advances. In this digital era, the use of innovative software has become an important requirement in running and optimizing business. However, although innovative software offers various benefits, there are several challenges that modern business management must face in implementing it.

First, the biggest challenge is the need to adapt quickly to technological developments. Innovative software often undergoes constant changes and updates. Business management must ensure that they stay up-to-date with these developments and are ready to deal with them. This requires proper investment of time, resources, and knowledge in managing and implementing innovative software. Apart from that, another challenge is the complex integration between different software. In modern businesses, several different software are often needed to manage various operational aspects, such as finance, human resources, marketing, etc. Ensuring seamless integration between these software can be a complex challenge. It requires a good strategy, selecting the right software, and effective teamwork to achieve successful integration (Tidd, J., & Bessant, 2020).

Furthermore, data security is also a critical challenge in the use of innovative software. Modern businesses rely on data as a valuable asset to make informed decisions. However, with the presence of innovative software, data security risks also increase. Business management must ensure that there is a strong security system to protect business data from cyber attacks and other threats. Security must be a top priority in implementing innovative software (Huang et al., 2022).

According to Mendling, J., Pentland, B. T., & Recker, J. (2020) other challenges are cultural changes and changes in the way of working. Innovative software often changes ways of working that have been established for years. This requires business management to take a proactive approach in changing the company culture and provide the necessary training to employees. These changes can trigger initial discomfort and resistance, so management must understand these challenges and manage them wisely. In facing the challenges of modern business management with innovative software, it is important for business management to have a clear vision and mature strategy. They must understand their business goals and how innovative software can help them achieve those goals. Additionally, strong collaboration between the management team, IT department, and employees is also needed to overcome challenges.

In conclusion, the use of innovative software in modern business management offers many benefits, but also presents significant challenges. In facing these challenges, business management must be ready to adapt, integrate different software, prioritize data security, and manage cultural change. With the right approach and mature strategy, business management can exploit the full potential of innovative software to achieve sustainable business success in this digital era (Akpan et al., 2021).

Strategies for Overcoming Technology Challenges in Business

In today's digital era, businesses face many new challenges that require adjustments to remain relevant and competitive. Some of the common challenges faced by businesses in the digital era include increasingly fierce competition, changes in consumer behavior, rapid technological change, and the need to always update business strategies (Volberda et al., 2021).

According to Naradda et al., (2020) one way to overcome business challenges in the digital era is to utilize available technology, such as cloud computing technology, big data, and e-commerce. By utilizing this technology, businesses can increase efficiency, improve product or service quality, and

expand market reach. Additionally, it is important to continuously monitor and understand changes in consumer behavior and evolving market trends. Businesses can leverage market data and analysis to gain deeper insights into consumer preferences and needs.

Another challenge that businesses need to overcome in the digital era is increasingly fierce competition. To overcome this competition, businesses must have the right marketing strategy, create added value for consumers, and maintain product or service quality. In overcoming business challenges in the digital era, it is also important to strengthen business branding and build a good reputation in the eyes of consumers. Businesses can utilize social media and content marketing to increase brand visibility and awareness (Masucci, M., Brusoni, S., & Cennamo, 2020).

In facing technological challenges in business, there are several strategies that can be implemented to remain relevant and competitive in an ever-changing market (Mathivathanan et al., 2021). The following are some effective strategies to overcome these problems:

1. Adaptation to Technological Changes

The first challenge that needs to be faced is the need to adapt to rapid technological changes. New innovations are really needed in the business world, especially for companies operating in the food, beverage or community service sectors. However, this demand for rapid innovation is sometimes not matched by the quality of technology and human resources that a company has

2. Implement an Overall Digital Strategy

When a company decides to enter the digital era, all aspects of the business must also be changed to make it more practical and efficient. Digital business requires good planning to overcome problems that occur. Therefore, implementing an overall digital strategy can help in facing these challenges

3. Have the Right Knowledge and Business Strategy

Lack of knowledge and appropriate business strategies can be a challenge in managing a business in the digital era. Preparing your business carefully and having knowledge in business is very important to avoid losses. The key is to create a strategy that is able to answer the needs of target consumers, so that products and services are always relevant and needed

4. Utilizing Technology in Business Strategy

In the digital era, utilizing technology in business strategy has become mandatory. Using applications that can help manage a business, marketing

via the internet, and using computers for bookkeeping are steps that can help businesses remain competitive in the digital era.

5. HR Training to Improve Business Digitalization Skills

Strategies that are able to overcome technological problems through HR training to improve business digitalization skills are also an important key in facing technological challenges. Having human resources who are skilled in business digitalization can help businesses to remain relevant and competitive in the digital era.

By implementing the strategies above, businesses can overcome the technological challenges faced in today's digital era and remain competitive in an ever-changing market.

Technology Implementation for Business Success

The modern business world is experiencing a shift in values in all aspects, which is triggered by technological developments. This condition makes the implementation of technology something that cannot be avoided by companies. The implementation of communication technology can also encourage companies to continue to adapt and develop. The application of technology in business is now a solution to answer business challenges in the digital era. Starting from customer service to business operations, companies must now be able to integrate technology in all business activities (Pozzi et al., 2023).

Technology implementation in a business context is the steps and processes undertaken to introduce, adopt, or improve new technology in a business environment. This implementation includes the implementation of aspects such as hardware, software, or other IT infrastructure that have specific functions and purposes. The implementation process carried out is not only limited to introducing technology, but also planning, testing, and thorough evaluation. An effective technology implementation process also pays attention to other aspects such as adapting technology to company goals, processes and strategies, then conducting employee training, restructuring work flows, and ensuring smooth integration (Ghobakhloo, 2020). In the modern business landscape, technology has a role as a trigger for innovation, efficiency and competitiveness. Companies all over the world have implemented technology, Indonesia is one of them. Rapid technological developments can influence market dynamics and business competition. Companies that are able to adopt and optimize the application of technology will be ahead of the competition and can respond more quickly to market

changes. This is because the application of technology allows companies to automate tasks, simplify business procedures, and be able to compete in the global market.

According to Reim, W., Åström, J., & Eriksson, O. (2020) business processes run with automation can reduce the time required to complete routine tasks, while increasing accuracy. Technology implementation has a very important role in business success in the digital era. Various technical and strategic aspects need to be considered to ensure that technology truly supports sustainable growth. Some key points to consider in implementing technology for business success include:

1. Choosing the Right Technology Platform

Choosing the right technology platform is an important step in implementing technical aspects in a business feasibility study. This ensures that the technology used is in line with business needs and can support sustainable growth

2. Data Security

Attention to data security is an important factor ensuring successful technology implementation. In the context of a Software Management System, a deep understanding of business needs, integration with existing systems, and attention to data security are important factors that ensure successful implementation.

3. Information Based Decision Making

Implementing technology can help the process of making decisions based on information that will have a positive impact on the organization. Technology can help analyze HR performance, identify HR who are struggling, or showing poor performance, thereby guiding the HR department to hire competent HR or find ways to increase HR confidence to be more proactive and productive

4. Transformation of Traditional Business Models

The rapid development of digital technology has provided new opportunities for companies to change their traditional business models, so they can bring innovation and achieve greater success. Through the implementation of the right digital solutions, businesses can create various opportunities to remain relevant and competitive so they can increase profits

5. Prioritize the Development and Implementation of the IT Master Plan

Company leaders, IT management and related stakeholders must prioritize the development and implementation of an IT Master Plan. By adopting an

effective IT Master Plan, companies will be able to optimize the use of information technology, reduce risks, and encourage business success amidst increasingly fierce competition.

By paying attention to the above aspects, businesses can face technical challenges with more confidence and leverage technology for sustainable growth.

The application of technology is now a strategic choice that can differentiate successful businesses from others. The implementation of technology has crucial benefits for business, here is the explanation: Companies that have adopted technology to help business operations can reduce workload, increase efficiency, and increase employee productivity. This can be done by automating daily tasks, allowing employees to focus more on more important tasks. Task automation can also reduce the possibility of human error (Becker, W., & Schmid, 2020). Technology can help companies to obtain analysis results or data needed for consideration for future decision making. The analytical tools used can provide deep insights from data, helping identify patterns, trends, opportunities and risks. Making decisions based on accurate and real-time data is one of the keys to business success. Customers are the most important aspect of a business. Therefore, implementing technology in customer service areas can significantly improve customer interaction, experience and satisfaction.

CONCLUSION

Technology has a very important role in the business world, and the challenges and future of business management technology are an interesting topic to discuss. The following are several important points related to the challenges and future of business management technology, namely business transformation through technology, business challenges in the digital era, remote work and business sustainability, challenges in the development of information and communication technology, the use of technology in human resource management, and its importance. understand technology trends

In facing technological challenges in business management, there are several strategies that can be implemented to remain relevant and competitive in an ever-changing market. The following are several effective strategies to overcome these problems, namely adapting to technological changes, implementing an overall digital strategy, having the right knowledge and business strategy, utilizing technology in business strategy, and training human resources to improve business digitalization skills.

The future of technology in business management will continue to offer new opportunities and challenges that need to be overcome. Businesses that are able to adopt and utilize technology well will have a significant competitive advantage in an increasingly connected and rapidly changing market. By understanding these challenges and trends, business leaders can be better prepared to face change and leverage technology to achieve competitive advantage in an increasingly complex business environment.

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