Strategic Management Framework for Navigating Complexity and Driving Innovation for Catalyzing Sustainable Success

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Abstract:- This study encapsulates the intersection of sustainability, innovation, digital transformation, and globalization within the realm of strategic management. It emphasizes the importance of integrating environmental and social responsibility with cutting-edge technological advancements and the challenges posed by a rapidly interconnected global landscape. The synthesis suggests a holistic approach to strategic management that embraces sustainability as a driver of innovation and resilience, leveraging digital tools and strategies to create value in a globalized world. To thrive in this dynamic environment and achieve sustainable success, organizations must adopt a strategic management framework that enables them to navigate complexity effectively and drive innovation. This abstract presents key insights and recommendations derived from a comprehensive study on catalyzing sustainable success through strategic management. The study explores essential components of the strategic management framework, including agility, innovation, customer-centricity, ecosystem collaboration, regulatory compliance, and sustainability. Drawing upon real world examples and case studies, the study highlights practical strategies and best practices for organizations seeking to navigate complexity, drive innovation, and achieve long-term viability. By embracing agility, fostering a culture of innovation, prioritizing customer-centricity, forging strategic partnerships, proactively addressing regulatory compliance, and integrating sustainability into business practices, organizations can position themselves for sustainable success in today's competitive marketplace. This abstract offers valuable insights into the practical application of strategic management principles and their implications for organizations striving to thrive in an increasingly interconnected and uncertain world.

Keywords: Strategic Management Framework; Complexity Navigation; Innovation Driving; Catalyzing Sustainable Success.

1. Introduction

In an era of unparalleled technological developments and increased interconnectedness, organisations throughout the world are wrestling with the complexities of navigating digital transformation and globalisation while also addressing significant environmental and social concerns. The integration of sustainability and innovation has emerged as a strategic requirement for organisations looking to flourish in this quickly changing market (Inigo et al., 2019). The goal of sustainability requires resolving environmental, social, and governance issues while promoting long-term value creation and resilience. Innovation acts as a fuel for organisational growth, competitiveness, and adaptation in a rapidly changing environment. Organisations can have significant societal effect by incorporating sustainability concepts into innovation strategy and exploiting technical breakthroughs (Aljawarneh et al., 2020).

Digital change and globalisation highlight the significance of integrating sustainability and innovation into strategic management processes. Digital technologies provide unparalleled potential for improving efficiency, transparency, and collaboration, allowing organisations to handle sustainability concerns and capitalise on future opportunities (Feroz et al., 2021). Furthermore, globalisation broadens markets, supply chains, and networks, creating both possibilities and problems for organisations seeking to match sustainability goals with global

business imperatives (Dabic et al., 2021). This introduction establishes the groundwork for investigating a strategic approach to combining sustainability and innovation in the context of digital revolution and globalisation. Organisations may manage the difficulties of today's interconnected world by using a holistic approach that incorporates environmental, social, and economic factors into innovation initiatives and business models. This study intends to give actionable assistance for organisations aiming to utilise sustainability and innovation as key drivers of strategic advantage in the digital age by analyzing best practices, and strategic insights.

In today's corporate context, characterised by fast digital transformation and globalisation, organisations face the issue of effectively integrating sustainability and innovation into their strategic management strategy (Calabrese et al., 2019). While sustainability principles emphasise the necessity of tackling environmental and social issues, innovation acts as a fuel for growth and competitiveness. However, organisations frequently struggle to incorporate sustainability objectives into their innovation plans, as well as traverse the challenges of digital transformation and globalisation while remaining focused on sustainability (Villena et al., 2020). Many organisations struggle to successfully incorporate sustainability factors into their innovation processes and strategic decision-making. This creates a gap between sustainability objectives and innovation initiatives, impeding the organization's capacity to make real progress towards its sustainability goals. Digital transformation creates new problems and opportunities for organisations which includes Concerns about data privacy, cybersecurity dangers, and the growth of new technology are all factors to consider. Organisations must manage these complications while ensuring that digital activities are consistent with sustainability standards and contribute to positive environmental and social results (Saarikko et al., 2020).

Globalisation broadens market prospects and supply chains while simultaneously increasing competitiveness and regulatory complexity. Organisations operating in a globalised framework must strike a balance between pursuing sustainability and remaining competitive and compliant in varied regional markets with varying environmental and social circumstances (Sudirjo, 2023). Organisations may find it difficult to establish an innovative culture and the requisite competences to drive long-term innovation efforts. This includes overcoming opposition to change, encouraging cross-functional collaboration, and investing in the advancement of sustainable innovation methods and technology (Pisano, 2019). Effective measurement and reporting on sustainability performance is critical for proving responsibility, transparency, and progress towards sustainability objectives. However, organisations frequently struggle to define relevant sustainability measures, collect accurate data, and communicate their sustainability activities to stakeholders in a meaningful and transparent way (Schaltegger, 2019).

Overall, the study addresses the necessity for organisations to establish a strategy that integrates sustainability and innovation in order to successfully traverse digital transition and globalisation. Addressing these fundamental concerns allows organisations to create new possibilities, reduce risks, and promote positive societal impact while preserving a competitive advantage in the digital age.

2. Literature Review

A. Concept of Strategic Management Framework for Navigating Complexity and Driving Innovation For Catalyzing Sustainable Success

In contemporary's dynamic and interconnected world, organisations face a variety of issues arising from technical breakthroughs, globalisation, and environmental and social concerns. The concept of catalysing sustainable success refers to a strategic management framework that enables organisations to effectively navigate complexity while generating innovation and promoting long-term sustainability. Sustainability goes beyond environmental preservation to include social equality and economic viability. It entails balancing the requirements of present and future while also protecting core values. A comprehensive understanding of sustainability is critical to the catalysing sustainable success paradigm (Bibri et al., 2024).

Recognising the delicate interplay of many aspects impacting the business landscape, such as technological, economic, social, and environmental dimensions, is critical. Embracing complexity means taking a comprehensive approach and acknowledging the interdependence of various systems and stakeholders. The catalysing sustainable success framework incorporates sustainability ideas into essential business strategy and decision-making

processes (Van Holt et al., 2020). It entails establishing defined goals and objectives that are in line with sustainability objectives, as well as taking into account the broader societal impact of corporate actions. To successfully navigate complexity, organisations must acquire agility and resilience (Miceli et al., 2021). This includes anticipating and responding to new trends, disruptions, and hazards. Fostering a culture of innovation, cooperation, and constant learning is critical for adapting to changing conditions and seizing new opportunities.

Innovation is critical in addressing sustainability concerns and creating new paths to success. Organisations may boost innovation by encouraging creativity, experimentation, and cross-disciplinary collaboration (Friedman et al., 2022). Leveraging technology and strategic alliances makes it easier to create long-term solutions. Engagement with stakeholders, including as employees, customers, suppliers, communities, and investors, is critical. Understanding multiple perspectives, establishing trust, and co-creating value are critical. Attention to stakeholder comments, addressing issues, and displaying responsibility and openness are critical. Establishing strong metrics and indicators to track progress towards sustainability targets and assess the impact of company actions is critical, quantifying environmental, social, and economic performance and disseminating the results to stakeholders promotes responsibility and ongoing improvement (Hristov et al., 2019).

Embedding sustainability concepts into organisational culture and values encourages employees to see sustainability as an essential component of their duties and responsibilities. Strong leadership, good communication, and the alignment of incentives and rewards with sustainability goals are critical for achieving cultural change (Pham et al., 2019). Collaborating with external partners, such as governments, NGOs, academics, and industry peers, is critical for solving common sustainability concerns and promoting collective action. Partnerships make it easier to share expertise, pool resources, and solve problems together, allowing organisations to have a greater effect.

Adopting a mindset of constant improvement and learning is essential. Adapting plans and procedures in response to feedback and changing conditions ensures that organisations be agile and responsive. Iterating on the strategic management framework enables businesses to keep ahead of new trends and difficulties. Catalysing sustainable success is a comprehensive approach to strategic management that enables organisations to overcome complexity, stimulate innovation, and promote long-term viability (Filser et al., 2019). By incorporating sustainability concepts into fundamental business strategy, involving stakeholders, creating cultural change, and embracing continuous improvement, organisations can position themselves for success in an increasingly dynamic and interconnected world.

B. Empirical Review on Strategic Management Framework for Navigating Complexity and Driving Innovation

Pietrewicz (2019) delved into the dynamics of technology, business structures, and competitive advantage in the era of Industry 4.0. The study aimed to scrutinize the interplay between Business Models (BMs) and Business Model Innovation (BMI) concerning technological innovation and its impact on defining enterprises' competitive advantage during this era.

Shah et al. (2022) explored the potential, risks, and compliance considerations associated with cloud computing in the healthcare sector. Drawing from an extensive analysis of existing research and case studies, the study provided insights into the advantages and drawbacks of adopting cloud computing in healthcare. It also offered practical recommendations for healthcare organizations seeking to leverage cloud technology effectively. Additionally, the study highlighted how cloud-based analytics and machine learning algorithms facilitate personalized patient care and predictive analytics for disease management. However, it cautioned about the inherent risks and challenges of cloud computing, emphasizing the importance of comprehensive risk management, regulatory compliance, and robust security practices in healthcare organizations.

Shah (2020) investigated recent advancements and applications of reinforcement learning (RL) across various fields, emphasizing its transformative potential and existing limitations. The study revealed significant breakthroughs in autonomous decision-making enabled by recent developments in RL algorithms, particularly deep reinforcement learning (DRL). RL algorithms, including DRL, have found applications in robotics,

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autonomous vehicles, finance, and healthcare, facilitating tasks such as personalized treatment planning and medical image analysis.

Lupova-Henry et al. (2019) conducted a literature review on governance techniques promoting sustainable innovation, focusing on the principal actors, governance approaches, and conceptualizations of sustainable innovation. The analysis highlighted a shift towards collaborative governance solutions and underscored the importance of focusing on governance approaches rather than the actors involved. The study identified various governance initiatives by both public and private sector entities aimed at fostering innovation aligned with sustainable development goals.

Allioui et al. (2023) investigated the integration of artificial intelligence (AI) into businesses, highlighting its potential to enhance digital reliability, optimize supply chain processes, and provide real-time access to critical data and analytics. The study outlined the benefits and challenges of AI integration and provided recommendations for businesses to leverage AI effectively in their operations.

Varela (2024) explored the implications of the convergence of diplomacy and AI, examining how AI technologies are reshaping traditional diplomatic practices and decision-making processes among nation-states. The study discussed the ethical implications and governance frameworks necessary to navigate this evolving landscape and highlighted opportunities for improving diplomatic efforts through AI.

Judijanto et al. (2023) investigated strategic Human Capital Planning (SHCP) in the Asian Digital Economy, emphasizing the alignment of workforce development with corporate objectives. The study outlined strategies for skill mapping, continuous learning, leadership development, and talent acquisition tailored to the dynamic digital sector in Asia.

Gardeazabal et al. (2023) evaluated Knowledge Management (KM) applications in Agricultural Information Systems (AIS) and proposed a new framework, Agricultural Knowledge Management for Innovation (AKM4I), to address existing inadequacies. The framework aims to facilitate more equitable and actionable knowledge generation and management for innovation and transformation in agriculture.

Čirjevskis (2019) explored the role of dynamic skills in shaping the business models of acquirer companies during mergers and acquisitions of technologically innovative firms. The study investigated the effect of dynamic capacities on changes in operationalized components of acquirers' business models, offering insights for researchers and practitioners in dynamic capabilities and business model innovation.

Brown et al. (2021) researched the collaborative processes involved in planning and implementing circular innovation initiatives within businesses. The study combined insights from strategic management literature with empirical analysis to develop a process model for collaborative circular innovation, offering theoretical and managerial contributions to the field.

3. Methods

The study adopts a case-based methodology to comprehensively illustrate the significance of digital ecosystems in facilitating innovation and transformation. It employs three diverse case studies which are Tesla Inc in the automobile sector, Alibaba Group in retail, and Ant Financial and Alipay in finance to demonstrate the versatility and impact of leveraging digital ecosystems for sustainable success. These cases were selected to provide varied perspectives on how organizations utilize digital ecosystems to drive innovation, enhance competitiveness, and navigate industry disruptions. The methodology involves a thorough examination of these cases, including their strategies, collaborative processes, and accomplishments achieved through digital ecosystem utilization. By analyzing these cases in depth, the research aims to offer valuable insights into the intricate dynamics of strategic management frameworks and their role in shaping the strategic direction of organizations across different industries.

4. Results

Case Study 1: Navigating Complexity and Driving Innovation in the Electric Vehicle Industry Using Tesla Inc

Tesla Inc. is a renowned American electric vehicle (EV) and clean energy company founded by Elon Musk in 2003. With a vision to accelerate the world's transition to sustainable energy, Tesla has revolutionized the automotive industry by producing high-performance electric vehicles and renewable energy solutions. The company's strategic management framework focuses on navigating complexity and driving innovation to achieve sustainable success in the rapidly evolving EV market.

Tesla's strategic management framework revolves around innovation as a core driver for catalyzing sustainable success. Tesla is renowned for its groundbreaking advancements in EV technology, including high-performance electric drivetrains, long-range battery packs, and autonomous driving features. By continuously innovating in these areas, Tesla not only improves the performance and range of its vehicles but also accelerates the adoption of sustainable transportation. Tesla's innovation extends beyond EVs to energy storage solutions such as Powerwall and Powerpack. These products leverage advanced battery technology to store renewable energy generated from sources like solar panels, enabling homeowners and businesses to reduce their reliance on fossil fuels and transition to clean energy. Through its acquisition of SolarCity and the development of solar roof tiles, Tesla innovates in the solar energy sector. The company integrates solar energy generation with its energy storage solutions, offering customers a comprehensive renewable energy ecosystem that reduces dependence on the grid and lowers carbon emissions.

Tesla innovates in manufacturing processes to improve efficiency, reduce costs, and increase production capacity. The company's use of automation, robotics, and advanced manufacturing techniques enables it to scale production rapidly while maintaining high product quality and safety standards. Tesla's vehicles are equipped with advanced software and connectivity features that enable over-the-air updates, real-time data monitoring, and remote diagnostics. These innovations not only enhance the driving experience for customers but also enable Tesla to collect valuable data for continuous improvement and innovation. Tesla innovates in its customer experience by offering direct sales, personalized service, and a seamless purchasing process. The company's focus on customer feedback and satisfaction drives continuous improvement and innovation in product design, features, and services. Tesla collaborates with various stakeholders, including suppliers, technology partners, and government agencies, to foster innovation and drive sustainable solutions. Partnerships with battery suppliers, research institutions, and regulatory bodies enable Tesla to access new technologies, resources, and markets to further its innovation agenda.

By integrating innovation into its strategic management framework, Tesla navigates complexity and drives sustainable success in the automotive and clean energy industries. The company's relentless pursuit of innovation not only propels its own growth but also contributes to the broader transition towards a more sustainable and renewable energy future. By implementing the strategic management framework for navigating complexity and driving innovation, Tesla achieves sustainable success in the EV and clean energy market by establishing itself as a market leader in the EV industry, with a dominant market share and a strong brand reputation for innovation and sustainability. The company experiences rapid revenue growth and profitability, driven by strong demand for its EVs, energy products, and innovative technologies. Tesla's focus on sustainability and renewable energy solutions contributes to reducing carbon emissions and mitigating climate change, aligning with its mission to accelerate the world's transition to sustainable energy. Tesla creates significant value for shareholders, employees, customers, and society at large, demonstrating the potential for business success while addressing global environmental challenges. Tesla's strategic management framework exemplifies how navigating complexity and driving innovation can catalyze sustainable success in the EV and clean energy industry, paving the way for a more sustainable and electrified future.

Case Study 2: Navigating Complexity and Driving Innovation in the retail industry Using Alibaba Group

Alibaba Group is a global technology company headquartered in China, with a diverse portfolio of businesses spanning e-commerce, cloud computing, digital entertainment, and financial services. Founded by Jack Ma in

1999, Alibaba has grown into one of the world's largest and most innovative companies, disrupting traditional retail models and reshaping the digital economy.

Alibaba Group demonstrates agility and adaptability in responding to changing market conditions, technological advancements, and consumer preferences. The company's ability to pivot quickly, experiment with new ideas, and iterate on existing business models has been critical to its sustained growth and competitiveness in the retail industry. Alibaba prioritizes customer-centric innovation, leveraging data analytics, artificial intelligence, and digital technologies to understand and anticipate consumer needs. By offering personalized shopping experiences, tailored recommendations, and innovative products and services, Alibaba enhances customer satisfaction and loyalty, driving long-term success. Alibaba has built a vast digital ecosystem encompassing e-commerce platforms, logistics networks, payment services, and cloud infrastructure. The company fosters collaboration within this ecosystem, partnering with merchants, brands, and other stakeholders to create value for all participants. By facilitating seamless transactions, supply chain integration, and cross-platform connectivity, Alibaba enhances efficiency, fosters innovation, and drives ecosystem growth.

Alibaba strategically invests in and partners with companies across various industries to expand its ecosystem, access new markets, and leverage emerging technologies. Through strategic acquisitions, investments, and joint ventures, Alibaba strengthens its competitive position, drives innovation, and accelerates growth in key strategic areas. Alibaba embraces corporate social responsibility and sustainability as integral components of its strategic management approach. The company invests in environmental initiatives, social welfare programs, and community development projects, demonstrating its commitment to making a positive impact on society while achieving business success.

Alibaba Group's success in the retail industry serves as a compelling case study of the strategic management framework outlined above. By embracing agility, customer-centric innovation, ecosystem collaboration, strategic partnerships, and corporate social responsibility, Alibaba has navigated complexity, driven innovation, and achieved sustainable success in a highly competitive market landscape.

The strategic management framework for catalyzing sustainable success offers a comprehensive approach for organizations to navigate complexity, drive innovation, and achieve long-term viability. Through a case study analysis of Alibaba Group in the retail industry, we can glean valuable insights into the practical application of this framework and its effectiveness in driving strategic success in today's dynamic business environment.

Case Study 3: Navigating Complexity and Driving Innovation in the Finance Sector Using Ant Financial and Alipay

Ant Financial, an affiliate of Alibaba Group, is a leading technology company in the finance sector, providing a wide range of digital financial services. Founded in 2014, Ant Financial has rapidly expanded its offerings and global presence, disrupting traditional financial models and reshaping the digital finance landscape. Alipay, a subsidiary of Ant Financial, is a leading mobile and online payment platform in China, offering a comprehensive suite of financial services, including payments, banking, wealth management, and insurance. With over a billion users worldwide, Alipay has transformed the way people transact, save, and invest, driving financial inclusion and innovation. Ant Financial and Alipay prioritize technological innovation, leveraging cutting-edge technologies such as artificial intelligence, blockchain, and cloud computing to develop innovative financial products and services. By embracing emerging technologies, Ant Financial and Alipay enhance operational efficiency, improve customer experiences, and drive continuous innovation. Ant Financial and Alipay adopt a customer-centric approach to product design and development, focusing on understanding customer needs, preferences, and behaviors. By offering personalized financial solutions, intuitive user interfaces, and seamless digital experiences, Ant Financial and Alipay enhance customer satisfaction and loyalty, driving long-term success. Ant Financial and Alipay have built extensive digital ecosystems encompassing financial services, ecommerce platforms, merchant networks, and consumer lifestyle apps. The integration of these ecosystems enables seamless transactions, cross-platform connectivity, and value-added services, fostering ecosystem growth and driving strategic partnerships. Ant Financial and Alipay prioritize regulatory compliance and risk management to ensure the integrity, security, and stability of their financial services platforms. By implementing robust

compliance frameworks, risk assessment processes, and security measures, Ant Financial and Alipay mitigate regulatory risks and safeguard customer assets, fostering trust and confidence among stakeholders. Ant Financial and Alipay are committed to driving positive social impact and promoting financial inclusion through their products and services. By offering inclusive financial solutions, empowering underserved communities, and supporting economic development initiatives, Ant Financial and Alipay contribute to sustainable development goals and societal well-being.

Ant Financial and Alipay's success in the finance sector serves as a compelling case study of the strategic management framework outlined above. By embracing technological innovation, customer-centric design, ecosystem integration, regulatory compliance, and social impact, Ant Financial and Alipay have navigated complexity, driven innovation, and achieved sustainable success in the highly regulated and competitive finance industry.

The strategic management framework for catalyzing sustainable success offers a comprehensive approach for organizations in the finance sector to navigate complexity, drive innovation, and achieve long-term viability. Through a case study analysis of Ant Financial and Alipay, we can glean valuable insights into the practical application of this framework and its effectiveness in driving strategic success in the rapidly evolving landscape of digital finance.

5. Discussion

The study emphasizes the importance of adopting a strategic management framework that enables organizations to navigate this complexity effectively. By embracing agility, adaptability, and ecosystem collaboration, organizations can respond swiftly to market dynamics, seize emerging opportunities, and mitigate potential risks. Innovation is central to driving sustainable success in today's competitive marketplace. The study highlights the role of innovation as a key driver of strategic differentiation and value creation. By fostering a culture of innovation, embracing technological advancements, and leveraging data-driven insights, organizations can develop innovative products, services, and business models that meet evolving customer needs and preferences. Furthermore, strategic partnerships, investments, and ecosystem integration can fuel collaborative innovation, enabling organizations to tap into diverse expertise and resources to drive breakthrough solutions. A customer-centric approach is fundamental to the strategic management framework outlined in the study. By prioritizing customer needs, preferences, and experiences, organizations can enhance customer satisfaction, foster loyalty, and drive long-term success. Personalization, customization, and seamless user experiences are key elements of a customer-centric strategy, enabling organizations to build meaningful relationships with customers and differentiate themselves in the market.

6. Conclusion and Recommendation

In conclusion, the study emphasizes the necessity of a strategic management framework that empowers organizations to navigate complexity, foster innovation, and attain sustainable success amidst today's rapidly changing business landscape. By embracing agility, innovation, customer-centricity, regulatory compliance, and sustainability, organizations can position themselves for long-term viability and competitiveness in an increasingly interconnected and uncertain world. This discussion offers valuable insights into the practical application of the strategic management framework outlined in the study and its implications for organizations striving to excel in the digital age.

To thrive in this environment, organizations should adopt agile practices to enhance flexibility, responsiveness, and adaptability in navigating complexity and driving innovation. Agile methodologies facilitate iterative development, rapid experimentation, and continuous improvement, enabling organizations to swiftly respond to evolving market dynamics and customer needs.

Fostering a culture of innovation is crucial for sustaining success. Organizations should promote creativity, curiosity, and experimentation among employees, empowering them to generate and implement innovative ideas. Providing resources, incentives, and recognition for innovation can nurture a culture of continuous learning and enhancement.

Investing in emerging technologies like artificial intelligence, blockchain, and the Internet of Things (IoT) can unlock new avenues for innovation and value creation. Organizations should explore how these technologies can streamline operations, enhance customer experiences, and open up new revenue streams.

Placing customers at the forefront of strategic decision-making is paramount for sustainable success. Organizations should invest in understanding customer needs, preferences, and pain points, tailoring products, services, and experiences accordingly. Regular feedback loops and customer engagement initiatives can help organizations stay aligned with evolving customer expectations. Collaborating with strategic partners can expedite innovation, extend market reach, and mitigate risks. Organizations should identify potential partners with complementary strengths and capabilities, exploring collaboration opportunities in areas like product development, distribution, and market expansion. Strategic alliances, joint ventures, and ecosystem partnerships can foster synergies and mutual growth.

Declaration of competing interest:

No conflicts declared.

References

- [1] Abdulwase, R., Ahmed, F., Nasr, F., Abdulwase, A., Alyousofi, A., & Yan, S. (2020). The role of business strategy to create a competitive advantage in the organization. *Open Access J Sci*, 4(4), 135-138.
- [2] Agustian, K., Mubarok, E. S., Zen, A., Wiwin, W., & Malik, A. J. (2023). The Impact of Digital Transformation on Business Models and Competitive Advantage. *Technology and Society Perspectives* (*TACIT*), *1*(2), 79-93.
- [3] Aharoni, Y. (2024). How small firms can achieve competitive advantage in an interdependent world. In *Standing on the Shoulders of International Business Giants* (pp. 263-274).
- [4] Ajah, I. A., & Nweke, H. F. (2019). Big data and business analytics: Trends, platforms, success factors and applications. *Big data and cognitive computing*, *3*(2), 32.
- [5] Aljawarneh, N. M., Sokiyna, M., Obeidat, A. M., Kader Alomari, K. A., Alradaideh, A. T., & Alomari, Z. S. (2020). The Role of Crm Fog Computing On Innovation And Customer Service Quality: An Empirical Study. *Marketing & Management of Innovations*, (2).
- [6] Allioui, H., & Mourdi, Y. (2023). Unleashing the potential of AI: Investigating cutting-edge technologies that are transforming businesses. *International Journal of Computer Engineering and Data Science* (*IJCEDS*), 3(2), 1-12.
- [7] Azeem, M., Ahmed, M., Haider, S., & Sajjad, M. (2021). Expanding competitive advantage through organizational culture, knowledge sharing and organizational innovation. *Technology in Society*, 66, 101635.
- [8] Azeem, M., Ahmed, M., Haider, S., & Sajjad, M. (2021). Expanding competitive advantage through organizational culture, knowledge sharing and organizational innovation. *Technology in Society*, 66, 101635.
- [9] Balaji, S., Nathani, K., & Santhakumar, R. (2019). IoT technology, applications and challenges: a contemporary survey. *Wireless personal communications*, 108, 363-388.
- [10] Bibri, S. E., Krogstie, J., Kaboli, A., & Alahi, A. (2024). Smarter eco-cities and their leading-edge artificial intelligence of things solutions for environmental sustainability: A comprehensive systematic review. *Environmental Science and Ecotechnology*, 19, 100330.
- [11] Broughel, J., & Thierer, A. D. (2019). Technological innovation and economic growth: A brief report on the evidence. *Mercatus Research Paper*.
- [12] Brown, P., Von Daniels, C., Bocken, N. M., & Balkenende, A. R. (2021). A process model for collaboration in circular oriented innovation. *Journal of Cleaner Production*, 286, 125499.
- [13] Calabrese, A., Costa, R., Levialdi, N., & Menichini, T. (2019). Integrating sustainability into strategic decision-making: A fuzzy AHP method for the selection of relevant sustainability issues. *Technological Forecasting and Social Change*, 139, 155-168.
- [14] Chatterjee, S., Moody, G., Lowry, P. B., Chakraborty, S., & Hardin, A. (2020). Information Technology and organizational innovation: Harmonious information technology affordance and courage-based actualization. *The Journal of Strategic Information Systems*, 29(1), 101596.

[15] Chirumalla, K. (2021). Building digitally-enabled process innovation in the process industries: A dynamic capabilities approach. *Technovation*, 105, 102256.

- [16] Čirjevskis, A. (2019). The role of dynamic capabilities as drivers of business model innovation in mergers and acquisitions of technology-advanced firms. *Journal of Open Innovation: Technology, Market, and Complexity*, 5(1), 12.
- [17] Crittenden, W. F., Biel, I. K., & Lovely III, W. A. (2019). Embracing digitalization: Student learning and new technologies. *Journal of marketing education*, 41(1), 5-14.
- [18] Dabic, M., Maley, J., & Novak, I. (2021). An analysis of globalisation in international business research 1993–2018: rise of the sceptics. *critical perspectives on international business*, 17(3), 444-462.
- [19] Distanont, A., & Khongmalai, O. (2020). The role of innovation in creating a competitive advantage. *Kasetsart Journal of Social Sciences*, 41(1), 15-21.
- [20] Elia, G., Margherita, A., & Passiante, G. (2020). Digital entrepreneurship ecosystem: How digital technologies and collective intelligence are reshaping the entrepreneurial process. *Technological forecasting and social change*, 150, 119791.
- [21] Fachrunnisa, O., Adhiatma, A., Lukman, N., & Ab Majid, M. N. (2020). Towards SMEs' digital transformation: The role of agile leadership and strategic flexibility. *Journal of Small Business Strategy*, 30(3), 65-85.
- [22] Farida, I., & Setiawan, D. (2022). Business strategies and competitive advantage: the role of performance and innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(3), 163.
- [23] Feroz, A. K., Zo, H., & Chiravuri, A. (2021). Digital transformation and environmental sustainability: A review and research agenda. *Sustainability*, *13*(3), 1530.
- [24] Filser, M., Kraus, S., Roig-Tierno, N., Kailer, N., & Fischer, U. (2019). Entrepreneurship as catalyst for sustainable development: Opening the black box. *Sustainability*, 11(16), 4503.
- [25] Flyverbom, M., Deibert, R., & Matten, D. (2019). The governance of digital technology, big data, and the internet: New roles and responsibilities for business. *Business & Society*, 58(1), 3-19.
- [26] Fontoura, P., & Coelho, A. (2022). More cooperative... more competitive? Improving competitiveness by sharing value through the supply chain. *Management Decision*, 60(3), 758-783.
- [27] Friedman, Nicola, and Jarrod Ormiston. "Blockchain as a sustainability-oriented innovation?: Opportunities for and resistance to Blockchain technology as a driver of sustainability in global food supply chains." *Technological Forecasting and Social Change* 175 (2022): 121403.
- [28] Gardeazabal, A., Lunt, T., Jahn, M. M., Verhulst, N., Hellin, J., & Govaerts, B. (2023). Knowledge management for innovation in agri-food systems: a conceptual framework. *Knowledge management research & practice*, 21(2), 303-315.
- [29] Gupta, S., Gallear, D., Rudd, J., & Foroudi, P. (2020). The impact of brand value on brand competitiveness. *Journal of Business Research*, 112, 210-222.
- [30] Hanelt, A., Bohnsack, R., Marz, D., & Antunes Marante, C. (2021). A systematic review of the literature on digital transformation: Insights and implications for strategy and organizational change. *Journal of management studies*, 58(5), 1159-1197.
- [31] Haseeb, M., Hussain, H. I., Kot, S., Androniceanu, A., & Jermsittiparsert, K. (2019). Role of social and technological challenges in achieving a sustainable competitive advantage and sustainable business performance. *Sustainability*, 11(14), 3811.
- [32] Hodder, A. (2020). New Technology, Work and Employment in the era of COVID-19: reflecting on legacies of research. *New technology, work and employment*, *35*(3), 262-275.
- [33] Hristov, I., & Chirico, A. (2019). The role of sustainability key performance indicators (KPIs) in implementing sustainable strategies. *Sustainability*, 11(20), 5742.
- [34] Humayun, M. (2021). Industrial revolution 5.0 and the role of cutting edge technologies. *International Journal of Advanced Computer Science and Applications*, 12(12).
- [35] Iglesias, O., Markovic, S., Singh, J. J., & Sierra, V. (2019). Do customer perceptions of corporate services brand ethicality improve brand equity? Considering the roles of brand heritage, brand image, and recognition benefits. *Journal of business ethics*, 154, 441-459.

[36] Inigo, E. A., & Albareda, L. (2019). Sustainability oriented innovation dynamics: Levels of dynamic

- [36] Inigo, E. A., & Albareda, L. (2019). Sustainability oriented innovation dynamics: Levels of dynamic capabilities and their path-dependent and self-reinforcing logics. *Technological Forecasting and Social Change*, 139, 334-351.
- [37] Judijanto, L., Hendriana, T. I., Caroline, C., Muhammad, A. F., & Syaepudin, S. (2023). Strategic human capital planning in the asian digital economy: aligning workforce development with business objectives. *International journal of economic literature*, *1*(3), 344-360.
- [38] Juniarti, J., Simanjaya, C., Chandra, M., & Soesetyo, Z. E. (2021, March). Differentiation strategy and cost leadership strategy: Their contribution to achieving sustainable financial performance. In *International Conference on Business Excellence* (pp. 197-219). Cham: Springer International Publishing.
- [39] Li, K., Qiu, J., & Wang, J. (2019). Technology conglomeration, strategic alliances, and corporate innovation. *Management Science*, 65(11), 5065-5090.
- [40] Lupova-Henry, E., & Dotti, N. F. (2019). Governance of sustainable innovation: Moving beyond the hierarchy-market-network trichotomy? A systematic literature review using the 'who-how-what' framework. *Journal of cleaner production*, 210, 738-748.
- [41] Mangal, S. K., & Mangal, U. (2019). Essentials of educational technology. PHI Learning Pvt. Ltd.
- [42] Miceli, A., Hagen, B., Riccardi, M. P., Sotti, F., & Settembre-Blundo, D. (2021). Thriving, not just surviving in changing times: How sustainability, agility and digitalization intertwine with organizational resilience. *Sustainability*, *13*(4), 2052.
- [43] Miroshnychenko, I., Strobl, A., Matzler, K., & De Massis, A. (2021). Absorptive capacity, strategic flexibility, and business model innovation: Empirical evidence from Italian SMEs. *Journal of Business Research*, 130, 670-682.
- [44] Mukhopadhyay, S., & Bouwman, H. (2019). Orchestration and governance in digital platform ecosystems: a literature review and trends. *Digital Policy, Regulation and Governance*, 21(4), 329-351.
- [45] Nimfa, D. T., Uzir, M. U. H., Maimako, L. N., Eneizan, B., Latiff, A. S. A., & Wahab, S. A. (2021). The impact of innovation competitive advantage on product quality for sustainable growth among SMES: An empirical analysis. *International Journal of Business Science & Applied Management (IJBSAM)*, 16(3), 39-62.
- [46] Pham, H., & Kim, S. Y. (2019). The effects of sustainable practices and managers' leadership competences on sustainability performance of construction firms. *Sustainable Production and Consumption*, 20, 1-14.
- [47] Pietrewicz, L. (2019). Technology, business models and competitive advantage in the age of industry 4.0. *Problemy Zarządzania*, 17(2 (82)), 32-52.
- [48] Pisano, G. P. (2019). The hard truth about innovative. *Harvard Business Review*, 97(1), 62-71.
- [49] Prabowo, H., & Sinaga, O. (2021). The Effect of Information and Communication Technology on Competitive Advantage of International Business in Indonesia. *Croatian International Relations Review*, 27(88).
- [50] Ranta, V., Aarikka-Stenroos, L., & Väisänen, J. M. (2021). Digital technologies catalyzing business model innovation for circular economy—Multiple case study. *Resources, conservation and recycling*, 164, 105155.
- [51] Saarikko, T., Westergren, U. H., & Blomquist, T. (2020). Digital transformation: Five recommendations for the digitally conscious firm. *Business Horizons*, 63(6), 825-839.
- [52] Saeidi, P., Saeidi, S. P., Sofian, S., Saeidi, S. P., Nilashi, M., & Mardani, A. (2019). The impact of enterprise risk management on competitive advantage by moderating role of information technology. *Computer standards & interfaces*, 63, 67-82.
- [53] Sami, A. (2019). SCADA (Supervisory Control and Data Acquisition).
- [54] Schaltegger, S., Hörisch, J., & Freeman, R. E. (2019). Business cases for sustainability: A stakeholder theory perspective. *Organization & Environment*, *32*(3), 191-212.
- [55] Shah, T. R. (2022). Can big data analytics help organisations achieve sustainable competitive advantage? A developmental enquiry. *Technology in Society*, 68, 101801.
- [56] Shah, V. (2020). Reinforcement Learning for Autonomous Software Agents: Recent Advances and Applications. *Revista Espanola de Documentacion Científica*, 14(1), 56-71.

Tuijin Jishu/Journal of Propulsion Technology

ISSN: 1001-4055 Vol. 45 No. 2 (2024)

[57] Shah, V., & Konda, S. R. (2022). Cloud Computing in Healthcare: Opportunities, Risks, and Compliance. *Revista Espanola de Documentacion Cientifica*, 16(3), 50-71.

- [58] Singh, S., Sharma, P. K., Yoon, B., Shojafar, M., Cho, G. H., & Ra, I. H. (2020). Convergence of blockchain and artificial intelligence in IoT network for the sustainable smart city. *Sustainable cities and society*, *63*, 102364.
- [59] Sudirjo, F. (2023). Marketing Strategy in Improving Product Competitiveness in the Global Market. *Journal of Contemporary Administration and Management (ADMAN)*, 1(2), 63-69.
- [60] Tabesh, P., Mousavidin, E., & Hasani, S. (2019). Implementing big data strategies: A managerial perspective. *Business Horizons*, 62(3), 347-358.
- [61] Tawalbeh, L. A., Muheidat, F., Tawalbeh, M., & Quwaider, M. (2020). IoT Privacy and security: Challenges and solutions. *Applied Sciences*, *10*(12), 4102.
- [62] Teece, D. J., & Pisano, G. (1994). The dynamic capabilities of firms: An introduction. Industrial and Corporate Change, 3(3), 537–556. Google Scholar
- [63] Teece, D., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. Strategic Management Journal, 18(7), 509–533. Google Scholar
- [64] Tu, Y., & Wu, W. (2021). How does green innovation improve enterprises' competitive advantage? The role of organizational learning. *Sustainable Production and Consumption*, 26, 504-516.
- [65] Van Holt, T., Statler, M., Atz, U., Whelan, T., van Loggerenberg, M., & Cebulla, J. (2020). The cultural consensus of sustainability-driven innovation: Strategies for success. *Business Strategy and the Environment*, 29(8), 3399-3409.
- [66] Varela, D. T. (2024). Diplomacy in the Age of AI: Challenges and Opportunities. *Journal of Artificial Intelligence General Science (JAIGS) ISSN*:3006-4023, 2(1), 98-109.
- [67] Villena, V. H., & Gioia, D. A. (2020). A more sustainable supply chain. *Harvard Business Review*, 98(2), 84-93.
- [68] Warner, K. S., & Wäger, M. (2019). Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. *Long range planning*, 52(3), 326-349.
- [69] Zhou, S. S., Zhou, A. J., Feng, J., & Jiang, S. (2019). Dynamic capabilities and organizational performance: The mediating role of innovation. *Journal of management & organization*, 25(5), 731-747.