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**VIETNAM'S STRATEGIC MANAGEMENT AND ORGANISATIONAL
ADAPTATION TO TECHNOLOGICAL, GEOPOLITICAL
AND ENVIRONMENTAL CHALLENGES**

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ABSTRACT

This article examines Vietnam's strategic approach to managing global dynamics, focusing on organisational adaptation and strategic management amid complex technological, geopolitical, and environmental challenges. Applying complexity theory, landscape genetics, and strategic improvisation, this study provides insights into Vietnam's responses to geopolitical conflicts, climate change impacts, and cybersecurity threats. It highlights Vietnam's strategies in environmental conservation, such as combating sea level rise, and the role of technological integration, including artificial intelligence and digital transformation, in enhancing national resilience. Vietnam's partnerships in maritime security, especially concerning the South China Sea, illustrate its adaptive capabilities in securing territorial and economic interests. Additionally, this paper emphasises the significance of corporate entrepreneurship and talent management in fostering innovation and resilience. The findings underscore the necessity for flexible, collaborative strategies for sustainable development and national security, positioning Vietnam as a resilient actor within the Asia-Pacific region.

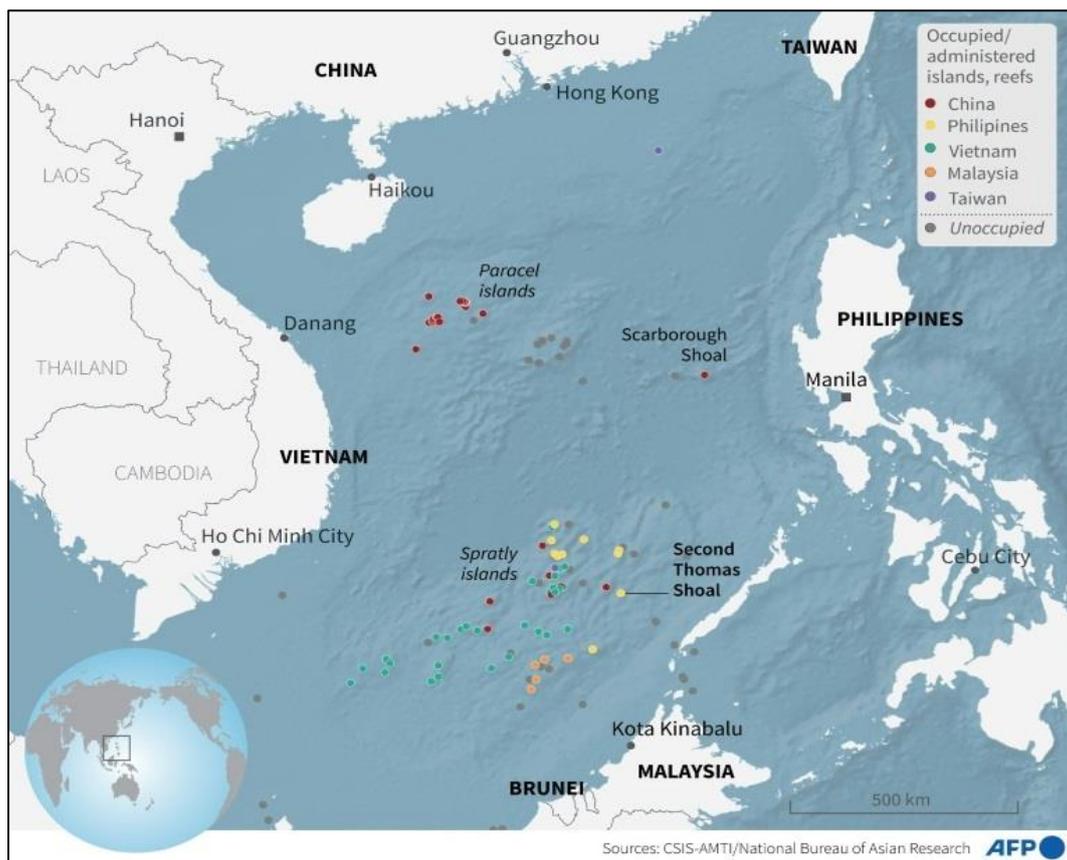
Keywords: Climate change, geopolitical strategy, strategic adaptation, technological innovation, Vietnam.

INTRODUCTION

The global landscape is rapidly evolving, shaped by geopolitical conflicts, technological advancements, and environmental challenges (Nguyen et al., 2024; Nguyen & Nguyen, 2024; Olajire, 2020; Osiichuk & Shepotylo, 2020; Sowers et al., 2010). For countries like Vietnam, these shifts demand strategic adaptation to respond to complex international pressures. The South China Sea (SCS) dispute (Figure 1), a central issue in Vietnam’s foreign policy and economic strategy, exemplifies these challenges. Tensions between Vietnam and China over territorial claims in the SCS are compounded by the involvement of global powers such as the United States (U.S.), whose commitment to maritime security and freedom of navigation has significant implications for Vietnam’s strategic choices (Aquino et al., 2023; Boon Dar, 2023; Vo Van et al., 2023).

Figure 1

Disputed Claims in the South China Sea



Notes. Davies (2024)

China’s expanding military presence and assertive policies in the SCS threaten Vietnam’s territorial sovereignty and economic interests, particularly regarding resource extraction and fishing rights (Boon Dar, 2023). This situation requires Vietnam to balance a “cooperate and struggle” approach, whereby it manages relations with China while seeking alliances with countries like India and the U.S. to protect its interests. Further complicating this dynamic are environmental issues, as rising sea levels and changing marine ecosystems—exacerbated by climate change—intensify the need for effective resource management and bolster Vietnam’s need for a robust geopolitical strategy (Øverland et al., 2017; Riaño, 2022).

Technological advancements are also integral to Vietnam's strategic adaptation. The increasing importance of technology in maritime security has prompted Vietnam to pursue partnerships, such as those with India, emphasising the role of digital transformation, maritime domain awareness, and defence innovation to safeguard its borders (Blough et al., 2010; McFarland et al., 2010; Vo Van et al., 2023; Vuong et al., 2019). Additionally, as cybersecurity threats grow alongside digital globalisation, Vietnam has bolstered its domestic digital infrastructure and strengthened international alliances to ensure economic resilience and national security (Eklund et al., 2021; Hu et al., 2023).

Given these challenges, this study aims to provide strategic directions for Vietnam to navigate the complex global environment, emphasising climate resilience, technological adaptation, and international cooperation. By addressing these interconnected issues, we seek to offer insights into Vietnam's adaptive strategies, highlighting how they align with its broader International Relations goals and enhance its position within the Asia-Pacific region. The scope of this analysis includes environmental adaptation, technological and market shifts, and strategic management to support Vietnam's continued stability and influence on the global stage.

LITERATURE REVIEW

Vietnam's strategic adaptation to global challenges has been analysed within various theoretical frameworks, including complexity theory, landscape genetics, and strategic improvisation. These frameworks offer critical perspectives on how nations like Vietnam navigate multifaceted issues in a turbulent global environment. However, while these theories provide a foundational understanding, the existing literature often lacks an integrated view of Vietnam's adaptation across geopolitical, technological, and environmental domains, leaving a significant gap in comprehensively addressing the complexities and interdependencies of these challenges.

Complexity Theory has been widely applied to study adaptive strategies in uncertain environments, focusing on how organisations and states evolve within dynamic, interlinked systems (Anderson, 1999; Stacey, 1995). This theory is particularly relevant to Vietnam, where adaptive responses to geopolitical conflicts, like the South China Sea dispute, exemplify the need for non-linear, emergent strategies in response to escalating regional tensions (Boon Dar, 2023). Studies have demonstrated that Vietnam's approach of balancing assertiveness with diplomacy aligns with complexity theory's emphasis on flexibility in complex systems. However, while the theory explains strategic flexibility, it does not fully address the specific role of technological adaptation in enhancing Vietnam's geopolitical resilience. This gap underscores the need to examine how complexity theory can incorporate technological dimensions, such as digital transformation and AI, in state-level adaptive strategies (McFarland et al., 2010; Vo Van et al., 2023).

Landscape Genetics provides a unique perspective on Vietnam's adaptation by linking geographical and environmental factors with strategic decision-making. Originally used to explain genetic adaptations in ecological contexts (Holderegger et al., 2006), this framework has been applied to geopolitical analysis to examine how geographic constraints and environmental threats shape strategic adaptations (Manel et al., 2010). Vietnam's extensive coastline and proximity to contested maritime territories in the South China Sea make it a critical case for studying environmental and geographical influences on adaptation (Vo Van et al., 2023). Research has shown that Vietnam's efforts to establish strategic alliances, particularly with India, are partially shaped by its geographical positioning. Despite this, the literature lacks an integrated view of how environmental challenges, such as rising sea levels

and biodiversity loss, intersect with these geopolitical adaptations, highlighting a gap in understanding the compounded effects of geographical and environmental factors on national security strategies (Khuu et al., 2021).

Strategic Improvisation further illuminates Vietnam's approach to navigating uncertainties. Mamédo et al. (2021) describe strategic improvisation as the ability to make real-time adjustments within volatile environments, a skill essential for countries like Vietnam, where shifting alliances and economic dependencies require agile responses. Studies on Vietnam's response to the COVID-19 pandemic underscore its improvisational capacity, particularly in adapting market strategies and integrating digital platforms to maintain economic resilience (Duong et al., 2020; Sigala, 2020). While these findings highlight the significance of improvisation in Vietnam's pandemic response, the broader application of this concept to ongoing geopolitical conflicts and environmental threats remains underexplored. Further research is necessary to examine how improvisational strategies are employed beyond market and economic contexts to address persistent geopolitical and environmental challenges.

In terms of **Geopolitical Adaptation**, prior studies emphasise Vietnam's adaptive strategies in response to China's assertive policies in the South China Sea. Vietnam's geopolitical strategy focuses on defending its territorial claims while avoiding direct confrontation with China, striking a careful balance that has been critical for maintaining regional stability (Boon Dar, 2023). However, while Vietnam's diplomatic balancing is well-documented, the influence of technological advancements, such as maritime surveillance and AI-driven defence systems, on this strategy requires further investigation (Vo Van et al., 2023; Weber et al., 2021). Additionally, the role of international partnerships, such as those with India and the United States, is critical in countering China's influence. Existing research on these alliances often focuses on their immediate geopolitical implications but lacks an analysis of how these partnerships contribute to long-term security and environmental sustainability within the region (Eklund et al., 2021).

Technological and Market Adaptation studies have highlighted the role of digital transformation in strengthening Vietnam's economic resilience and market competitiveness. Vietnam's rapid adoption of digital technologies during the COVID-19 pandemic demonstrated its capability to pivot amid crises, a shift that was critical for maintaining continuity in business and governance (Nguyen et al., 2023; Weber et al., 2021). However, while these studies focus on the short-term benefits of digital adaptation, there is limited research on how these technological strategies contribute to Vietnam's broader national security framework, especially regarding cybersecurity threats and the modernisation of defence systems (Eklund et al., 2021). Furthermore, the role of corporate entrepreneurship in driving technological adaptation within Vietnamese organisations is recognised, yet further examination is needed to understand how organisational innovation supports the nation's strategic resilience amid geopolitical and environmental pressures (Fiol & Lyles, 1985; Nguyen et al., 2019).

Environmental Adaptation in Vietnam, particularly in response to climate change, has been extensively studied within the context of biodiversity conservation and coastal management (Ando & Mallory, 2012; Runting et al., 2012). Vietnam's strategic conservation efforts, such as establishing national parks and coastal management programs, underscore its commitment to mitigating the impacts of rising sea levels and biodiversity loss (Khuu et al., 2021). Despite these efforts, research on Vietnam's environmental adaptation strategies often overlooks the link between environmental resilience and national security, particularly in regions vulnerable to both environmental degradation and geopolitical conflict, such as the South China Sea. This gap in the literature underscores the need for an integrated

approach to studying environmental adaptation that accounts for both ecological sustainability and strategic security (Huong et al., 2021).

While existing studies provide valuable insights into Vietnam's adaptive strategies in the face of geopolitical, technological, and environmental challenges, significant gaps remain. Current literature often addresses each domain in isolation, lacking an integrated perspective that captures the interconnected nature of these challenges. This study addresses this gap by synthesising theories from complexity science, landscape genetics, and strategic improvisation, offering a comprehensive view of Vietnam's multifaceted adaptation strategies. By bridging these theoretical frameworks, the study contributes to a holistic understanding of how Vietnam's strategic adaptation can inform broader policy and security discussions in an increasingly complex global landscape.

METHODOLOGY

This study employs a qualitative research design to explore Vietnam's strategic adaptation to geopolitical, technological, and environmental challenges, particularly in the context of the South China Sea dispute. A flexible and inductive approach was chosen to allow for the emergence of insights directly from the data, rather than testing a predetermined hypothesis. This qualitative framework is suited to the exploratory nature of the study, providing a comprehensive understanding of Vietnam's multifaceted strategies within a complex global environment.

Research Design

The research design is structured around an interpretive, flexible framework. This inductive approach facilitates a deep exploration of Vietnam's strategic responses to global dynamics, allowing for adaptation throughout the study as new themes and perspectives emerge. The study integrates theoretical perspectives, including complexity theory and strategic improvisation, which provide a foundation for understanding Vietnam's responses to dynamic and interdependent global challenges.

Data Collection

Data were collected through document analysis and observation, ensuring a comprehensive and multi-layered understanding of Vietnam's strategic adaptation.

- **Document Analysis:** Primary and secondary sources were analysed, including government reports, policy documents, defence white papers, international treaties, and academic articles. This data provided a foundational understanding of Vietnam's strategic policies and adaptation efforts in response to environmental, technological, and geopolitical pressures.
- **Observation:** Observational data were gathered from ongoing regional developments, such as diplomatic engagements and security exercises in the South China Sea. This data was sourced from policy briefings, reports from international think tanks, and reputable media, providing real-time insights into Vietnam's adaptive strategies.

Data Analysis

A thematic analysis approach was used to interpret the qualitative data, enabling the identification of key themes related to Vietnam's strategic adaptations.

- **Coding Process:** Data were initially coded through open coding to identify emerging themes without predefined categories. This was followed by axial coding, where related codes were grouped into categories. Finally, selective coding refined the core themes to reflect the study's primary findings on Vietnam's adaptation strategies.
- **Thematic Development:** Themes were developed around Vietnam's strategic responses across three main areas: technological innovation, geopolitical adaptation, and environmental resilience. The analysis emphasised the interconnectedness of these strategies, revealing how Vietnam balances immediate national security concerns with long-term environmental and technological imperatives.

Rigour and Reliability

To ensure rigour, triangulation of data sources was conducted, combining insights from document analysis and observation. This approach validated findings across different data sources, enhancing the credibility and reliability of the conclusions. Additionally, a reflective journal was maintained to document the analytical process, ensuring transparency and consistency throughout the study. This audit trail allows for the replication of the study's analytical framework, thereby supporting its methodological robustness.

By employing a comprehensive qualitative methodology, this study provides a detailed examination of Vietnam's strategic adaptations within the global landscape. The methodological rigour enhances the transparency and reliability of the findings, contributing to the field by offering insights into state-level adaptation strategies in complex international contexts.

FINDINGS AND DISCUSSION

Environmental and Climate Change Adaptation

Vietnam faces significant environmental challenges due to climate change, particularly in coastal regions and forested areas, which are highly sensitive to sea level rise and ecosystem degradation. This section examines Vietnam's strategic efforts in various domains to enhance resilience, manage biodiversity, and sustain environmental health, focusing on Coastal Conservation, Forest Management, and Agroforestry.

Coastal Conservation

Sea level rise presents a severe risk to coastal biodiversity, necessitating adaptive conservation strategies that consider the dynamic nature of these ecosystems (Ando & Mallory, 2012; Runting et al., 2012). In response, Vietnam has incorporated sea level rise projections into conservation planning to identify vulnerable areas and implement proactive measures to protect biodiversity. These efforts aim to enhance the resilience of coastal ecosystems, which are crucial for maintaining biodiversity and supporting

marine resources (Ando & Mallory, 2012; Runting et al., 2012). The South China Sea (SCS) dispute further complicates these challenges, intersecting with environmental vulnerabilities and underscoring the importance of Vietnam's national climate strategies (Boon Dar, 2023).

Vietnam's extensive coastline and rich marine biodiversity underscore the need for a sustainable approach to development in coastal regions. The government has established national parks and protected areas to safeguard marine resources and biodiversity, reflecting a commitment to addressing rising sea levels and habitat degradation (Khuu et al., 2021; Truong, 2022).

Forest Management

Vietnam has made substantial progress in adapting to climate change through its forest management initiatives, recognising forests as essential for carbon sequestration and ecosystem resilience. Forest ecosystems, which play a vital role in absorbing CO₂ and providing other ecological services, are crucial in mitigating climate change impacts (Kim et al., 2022). Sustainable forest management strategies—such as promoting species diversity and resilience—are central to Vietnam's approach, especially in light of global climate shifts.

A noteworthy achievement is Vietnam's transition from net deforestation to reforestation, reflecting a proactive stance on environmental challenges (Meyfroidt & Lambin, 2011). Forest plantation expansion has supported natural forest regrowth, highlighting the importance of balanced land-use practices in sustaining these ecosystems (Khuc et al., 2020). Programs like Payment for Forest Environmental Services (PFES) also contribute to sustainable forest management by incentivising local communities to participate in forest protection (Ngoc et al., 2021).

Vietnam's forest management efforts include tackling threats from invasive species, tropical cyclones, and other environmental stressors (Thu et al., 2021; Trang et al., 2022). Modern technologies like remote sensing support these efforts by monitoring forest cover changes and enhancing evidence-based conservation strategies, demonstrating Vietnam's commitment to resilience in forest landscapes (Ngoc et al., 2021).

Agroforestry

In response to diverse climatic stresses across regions, Vietnam has embraced agroforestry as a viable adaptation strategy, particularly in the mountainous Northwest, where local conditions necessitate tailored solutions (Do & Bui, 2023). Agroforestry not only supports sustainable agriculture but also contributes to climate resilience by preserving soil health and biodiversity. This approach reflects Vietnam's commitment to adapting agricultural systems to local environmental conditions, ensuring sustainable livelihoods in vulnerable areas.

Vietnam's climate adaptation strategy integrates governance and capacity-building, aiming to enhance understanding and collaboration among officials and stakeholders. However, challenges such as data-sharing constraints and governance issues can hinder effective adaptation efforts (Nguyen et al., 2016). Addressing these limitations remains essential to strengthening adaptive capacity and promoting sustainable practices across diverse ecosystems (Van et al., 2015).

Vietnam's adaptive strategies in coastal conservation, forest management, and agroforestry underscore a comprehensive approach to addressing climate change. By integrating conservation planning,

promoting resilient forest landscapes, and tailoring agroforestry practices to regional needs, Vietnam demonstrates a proactive commitment to environmental sustainability. Nevertheless, continued efforts in governance, capacity-building, and stakeholder engagement are vital to overcoming the remaining challenges and ensuring the long-term resilience of Vietnam's ecosystems.

Technological and Market Adaptation

The rapid evolution of global dynamics, especially driven by technological advancements and market disruptions, has necessitated strategic adaptations across various sectors, including Vietnam's. This necessity has become particularly apparent in light of the COVID-19 pandemic, which dramatically shifted market landscapes, consumer behaviours, and technological priorities. For Vietnam, technological and market adaptation has not only been a response to the pandemic but also a broader shift towards enhancing its competitiveness in a global digital economy. This section will explore Vietnam's strategic responses to market disruptions, its digital transformation, and the role of artificial intelligence (AI) and digital technologies in driving its growth.

Impact of the COVID-19 Pandemic on Market Adaptation

The COVID-19 pandemic had profound effects on global economies, and Vietnam was no exception. The pandemic introduced unprecedented challenges, disrupting traditional business models, supply chains, and market dynamics. However, Vietnam's quick and strategic response to these disruptions positioned the country as a resilient player in the global market.

During the pandemic, businesses across the world were forced to rapidly adapt to new ways of operating. Sigala (2020) highlights how industries had to pivot to digital platforms, remote work models, and shift their operational strategies to accommodate new consumer behaviours. In Vietnam, this transition was part of a broader economic strategy to maintain business continuity amid periods of lockdown and restricted movement. The pandemic underscored the importance of flexibility, with companies leveraging digital tools and platforms to sustain their operations.

Vietnam's multisectoral strategy in response to the pandemic combined public health initiatives with economic resilience. According to Duong et al. (2020), Vietnam's government employed a comprehensive approach that included accurate risk communication, active surveillance, and the suspension of non-essential services to control the virus's spread. This effort ensured that the economic disruptions were minimised, while public health remained the priority. Furthermore, the utilisation of digital tools and social media for disseminating information was crucial in maintaining transparency and public adherence to health guidelines (La et al., 2020).

As Vietnam transitions from a command economy to a market economy, the adaptive strategies used during the pandemic were particularly significant. Scheela et al. (2015) argue that Vietnam's transition presents numerous opportunities for private equity investments, particularly in emerging economies like Vietnam. The pandemic accelerated the need for these adaptive strategies as businesses had to navigate through significant market challenges while maintaining growth. For instance, Vietnam's efforts to enhance food safety during the pandemic were emblematic of its broader strategy to safeguard public well-being, as highlighted by Nguyen-Viet et al. (2017). These strategies emphasised ethical considerations in the food value chain, ensuring consumer protection and public health in a rapidly changing global landscape.

Digital Transformation and Technological Innovation

The COVID-19 pandemic also catalysed Vietnam's digital transformation. Faced with the challenges of lockdowns and restricted physical interactions, businesses, and governments turned to digital platforms to sustain operations. Vietnam's rapid shift towards digital technologies was not only a response to the immediate challenges of the pandemic but also part of a long-term strategy to position itself in the global digital economy.

Weber et al. (2021) provide insight into the strategic challenges faced by AI startups, especially in navigating market competition, securing funding, and dealing with regulatory complexities. In Vietnam, these challenges have become increasingly relevant across sectors like healthcare, education, and finance, as AI and digital transformation become critical components of the country's growth strategy. The pandemic underscored the importance of these technologies, as businesses and public institutions alike needed to maintain continuity through digital means.

Vietnam's response to these challenges is visible through its efforts to foster a robust entrepreneurial ecosystem, which has supported both formal and informal channels for startups (Khuong & Nguyen, 2022). Supported by government initiatives, this ecosystem has been crucial in fostering innovation and digital transformation. For instance, Vietnam has adopted telemedicine guidelines and digital health technologies to enhance its healthcare system in response to pandemic-related disruptions (Dang et al., 2021; Sabrina & Defi, 2021). These innovations are now being integrated into the country's broader healthcare strategy, demonstrating Vietnam's forward-thinking approach to technological adaptation.

Moreover, Vietnam has been actively integrating digital platforms into its education system. Huyen et al. (2022) highlight how Vietnam's education sector embraced digital transformation, particularly through online learning platforms. The pandemic necessitated this shift, but it also opened up new opportunities for enhancing educational practices through technological innovation. By incorporating digital tools into its curriculum, Vietnam is preparing its workforce for a more digitised global economy.

The role of social capital and human capital in Vietnam's digital transformation has been crucial. Nguyen et al. (2023) emphasise that the success of this transformation is closely tied to the availability of skilled professionals and entrepreneurs who can navigate the evolving digital landscape. The influence of business angels, as explored by Hai et al. (2023), has been particularly significant in providing venture capital for startups in Vietnam, further fueling innovation and growth.

The Role of AI and Digital Technologies in Vietnam's Growth

Artificial intelligence (AI) and digital technologies are at the forefront of Vietnam's strategic adaptation to global market dynamics. As Vietnam integrates these technologies into its economy, it positions itself as a key player in the digital age. The role of AI in particular has become increasingly prominent across various sectors, from healthcare and education to national security and defence.

Vietnam's adaptation to AI technologies reflects its broader efforts to embrace digital transformation. As Weber et al. (2021) note, AI startups in Vietnam face several challenges, including market competition and regulatory hurdles. However, the country's entrepreneurial ecosystem, supported by government policies, is addressing these challenges, making Vietnam an attractive destination for AI investments and innovation.

A key area where AI and digital technologies have had a significant impact is in healthcare. The adoption of telemedicine and digital health tools during the pandemic was a testament to the potential of these technologies in enhancing healthcare delivery (Sabrina & Defi, 2021). The implementation of digital health technologies has not only improved access to care but also paved the way for future innovations in Vietnam's healthcare system. This shift aligns with the country's broader goals of leveraging digital technologies for socio-economic development.

In the education sector, digital transformation has also played a critical role. Duong (2023) discusses how Vietnam's higher education system has integrated digital platforms, which have transformed how students learn and how educational institutions operate. This transformation is vital in preparing Vietnam's workforce for the challenges of a digital economy.

Moreover, the role of AI in national security and defence cannot be understated. As Vietnam strengthens its defence capabilities, AI and other digital technologies are becoming essential tools for modernising its military and protecting its national interests, particularly in the context of maritime security in the South China Sea navigation (Vo Van et al., 2023). These technological innovations are not only about enhancing defence capabilities but also ensuring that Vietnam remains competitive in a region marked by geopolitical tensions.

However, Vietnam's embrace of digital technologies also necessitates comprehensive regulatory frameworks. Artzt and Dung (2022) argue that while Vietnam is advancing rapidly in digital transformation, it faces challenges in developing robust AI legal frameworks. These frameworks are crucial for ensuring that technological innovations are aligned with data protection, security, and ethical standards. Without such regulations, the rapid adoption of digital technologies could expose the country to vulnerabilities, particularly in critical areas like national security and data privacy.

Human capital is another critical factor in Vietnam's digital transformation. Thanh and Tri (2024) emphasise that Vietnam's ability to develop high-quality professionals in AI and digital technologies is essential for driving socio-economic development. As Vietnam integrates more digital technologies into its economy, the need for skilled workers will only increase. This highlights the importance of investing in education and training programs that prepare Vietnam's workforce for the challenges and opportunities of a digital economy.

Vietnam's technological and market adaptation has been driven by its response to the COVID-19 pandemic and its broader strategy for integrating digital technologies into its economy. From healthcare and education to national security and defence, AI and digital tools are transforming how Vietnam operates in the global landscape. However, as Vietnam embraces these technologies, it must also address regulatory challenges to ensure that its digital transformation is secure, ethical, and sustainable. The country's ability to navigate these challenges will determine its success in becoming a leading player in the global digital economy. Through continued investment in technological innovation, regulatory development, and human capital, Vietnam is well-positioned to harness the full potential of the digital revolution.

Strategic Adaptation in Maritime Security and The South China Sea Dispute

Vietnam's approach to the South China Sea (SCS) dispute reflects a complex and strategic balancing act of geopolitical manoeuvring, technological innovation, and international cooperation. The territorial conflict over the Spratly and Paracel Islands, coupled with China's expansive claims in the

region, poses significant challenges to Vietnam's national security and economic interests. Vietnam's strategic adaptation in the SCS, therefore, is multifaceted, involving efforts to safeguard territorial sovereignty, maintain economic stability, and foster regional alliances. This section analyses Vietnam's strategic adaptation in three key areas: its geopolitical strategy, partnerships with global powers, and technological advancements in defence and surveillance.

Vietnam's Geopolitical Strategy in the South China Sea

The geopolitical tensions in the South China Sea are deeply rooted in territorial claims, with Vietnam and China as two of the most prominent stakeholders. Vietnam's geopolitical strategy in this context involves a dual approach that emphasises a careful balance between diplomacy and assertiveness, allowing the country to defend its territorial interests while maintaining stable relations with neighbouring powers. As Boon Dar (2023) explains, Vietnam seeks to defend its territorial claims in the Spratly and Paracel Islands while maintaining essential political and economic ties with China, a major regional power. This dual strategy enables Vietnam to pursue its sovereignty claims without entirely alienating China, thus preserving a fragile peace while defending its national interests.

The South China Sea dispute is particularly significant due to the region's economic and strategic importance. The SCS is one of the world's busiest maritime routes, carrying about one-third of global maritime trade. Control over these waters is crucial not only for the national security of littoral states like Vietnam but also for maintaining the economic lifeblood of the region. For Vietnam, freedom of navigation in the SCS is indispensable to its economy, particularly its oil and gas exploration activities and fisheries, both of which are vital industries that contribute to the national GDP (Boon Dar, 2023).

At the heart of Vietnam's geopolitical strategy is the need to balance its territorial defence with regional stability. Vietnam has repeatedly emphasised the importance of adhering to international law, particularly the United Nations Convention on the Law of the Sea (UNCLOS), as the foundation for resolving territorial disputes in the SCS. However, China's increasing militarisation of artificial islands and its assertive behaviour in the region have complicated efforts to resolve the dispute diplomatically. In response, Vietnam has fortified its defence capabilities and bolstered its alliances with global powers, particularly those who share an interest in counterbalancing China's influence in the Asia-Pacific.

Partnerships with Global Powers for Maritime Security

Vietnam's strategic adaptation in the SCS is not confined to unilateral actions. The country has actively sought partnerships with global powers to enhance its maritime security and counterbalance China's growing influence in the region. A key aspect of this strategy is Vietnam's partnership with India. Both countries share mutual concerns about China's assertiveness in the Indo-Pacific, particularly in the maritime domain. Vo Van et al. (2023) emphasise that Vietnam's collaboration with India is central to its efforts to strengthen its defence posture in the SCS. These partnerships are not only about countering China but also about promoting regional stability and ensuring the security of critical maritime routes.

India has become an increasingly important strategic partner for Vietnam, particularly in the context of maritime security. The two countries have expanded their cooperation through joint naval exercises, defence dialogues, and initiatives to enhance maritime domain awareness. Vietnam sees India as a counterweight to China's influence and a key ally in maintaining a rules-based order in the Indo-Pacific. The partnership with India also extends beyond defence, as both nations collaborate on capacity-

building initiatives, such as training programs for Vietnam's naval forces and technological cooperation in maritime surveillance (Vo Van et al., 2023).

The United States is another global power with which Vietnam has strengthened ties, especially in the maritime security domain. The U.S. has long been a proponent of freedom of navigation in the SCS and regularly conducts naval operations in the region to challenge China's expansive claims. Vietnam has sought to balance its relationship with the U.S., avoiding full alignment while leveraging the partnership to bolster its security apparatus. The U.S. has provided Vietnam with patrol boats, maritime law enforcement training, and other forms of security assistance, further enhancing Vietnam's ability to monitor and defend its territorial waters.

These strategic partnerships demonstrate Vietnam's reliance on a network of global allies to secure its interests in the SCS. While Vietnam remains cautious about over-reliance on any single power, its collaborative approach underscores the importance of multilateralism in addressing the security challenges posed by China's actions in the region. Partnerships with India, the U.S., Japan, and other like-minded countries enable Vietnam to maintain a balanced approach to the SCS dispute while safeguarding its economic and security interests.

Technological Solutions in Defence and Surveillance

Vietnam's strategic adaptation to the SCS dispute also involves significant investments in technological innovation, particularly in defence and maritime surveillance. The modernisation of Vietnam's naval capabilities is a critical component of its strategy to protect its territorial waters. As maritime security becomes increasingly reliant on technology, Vietnam has recognised the need to integrate advanced surveillance systems and defence technologies into its maritime security infrastructure. Vo Van et al. (2023) highlight that Vietnam's collaboration with India has been instrumental in advancing these technological capabilities, particularly through joint efforts to enhance maritime domain awareness.

One of the key areas of technological focus for Vietnam is artificial intelligence (AI) and its application in defence systems. However, as Artzt and Dung (2022) point out, Vietnam faces challenges in developing comprehensive legal frameworks for AI, especially in the defence sector. The absence of robust regulatory frameworks could expose Vietnam to security vulnerabilities, particularly in the highly contested SCS region, where technological superiority is increasingly a determinant of strategic advantage. Developing a secure and accountable AI framework is essential for ensuring that technological innovations in surveillance and defence are effectively integrated into Vietnam's broader security strategy.

Another critical aspect of Vietnam's technological adaptation is the development of high-quality human resources in defence and maritime security. As Thanh and Tri (2024) argue, human capital plays a pivotal role in driving technological innovation in Vietnam's defence sector. The country's ability to cultivate skilled professionals in AI, cybersecurity, and defence technologies is essential for ensuring that technological advancements are successfully deployed to enhance national security. Vietnam's investment in training and capacity-building, supported by international partners, ensures that its defence modernisation efforts are sustained and effective.

Moreover, Vietnam's emphasis on corporate digital responsibility, as discussed by Vo Thai et al. (2023), highlights the importance of aligning technological innovation with ethical and security standards. In the context of maritime security, this means ensuring that surveillance systems, naval technologies, and

AI applications are not only cutting-edge but also compliant with global best practices in data protection and cybersecurity. This alignment of technology with regulatory oversight is crucial for Vietnam to maintain a secure and resilient defence posture in the SCS.

Vietnam's strategic adaptation in the South China Sea dispute reflects a comprehensive approach that integrates geopolitical manoeuvring, international partnerships, and technological innovation. By adopting a dual strategy of cooperation and struggle with China, Vietnam is able to assert its territorial claims while maintaining critical diplomatic and economic relations. Partnerships with global powers such as India and the U.S. further enhance Vietnam's maritime security capabilities and provide a counterbalance to China's growing influence in the region. At the same time, Vietnam's investments in naval modernisation, AI, and maritime surveillance underscore its commitment to leveraging technological solutions to protect its territorial integrity and ensure freedom of navigation in the SCS. As Vietnam continues to navigate the complexities of the SCS dispute, the interplay between geopolitical strategy, technological adaptation, and international cooperation will remain central to its efforts to secure its place as a resilient and influential actor in the Asia-Pacific.

Strategic Management and Organisational Adaptation

In the evolving global environment, Vietnam's organisational adaptation and strategic management have become increasingly significant, particularly in the face of dynamic global shifts such as climate change, technological innovation, and geopolitical challenges. Corporate entrepreneurship and cross-functional fertilisation play a critical role in ensuring that organisations remain competitive and resilient in this landscape (Raisch & Birkinshaw, 2008). The integration of entrepreneurial activities within established organisations fosters both incremental and radical innovations, driving organisational agility and adaptability in response to market changes. This becomes even more essential in countries like Vietnam, where the need to adapt to global dynamics—especially in sectors such as technology and maritime security—has a profound impact on national and corporate strategies.

Corporate Entrepreneurship and Innovation

In Vietnam, the emphasis on strategic adaptation is not only evident in the IT industry but also in the broader business environment. The relationship between organisational culture, employee commitment, and innovation underscores the importance of fostering an entrepreneurial culture to drive organisational adaptation and innovation (Nguyen et al., 2019). As Vietnam continues to integrate itself into global markets and the technological landscape, organisations must continuously evolve to maintain competitiveness. This is especially relevant in sectors facing rapid technological change, where firms need to manage innovation effectively while navigating environmental and geopolitical challenges, such as those posed by the South China Sea dispute (Boon Dar, 2023).

Corporate entrepreneurship allows Vietnamese organisations to pursue a dual strategy of incremental and radical innovation, fostering strategic transformation and resilience. The ability to pivot between these two approaches provides firms with the flexibility to address short-term market needs while preparing for long-term shifts. Fiol and Lyles (1985) argue that continuous strategic choices are essential in an unpredictable environment, which is increasingly relevant as Vietnam faces both global disruptions and internal pressures to modernise and innovate. The South China Sea dispute, for example, demands that Vietnam adopt a cooperative yet assertive stance, balancing national security concerns with the need for regional stability and economic growth (Boon Dar, 2023). This geopolitical challenge underscores the necessity of strategic agility in both national policy and corporate governance.

Partnerships and Pedagogical Innovation in Education

Partnerships also play a pivotal role in Vietnam's adaptation to global changes, particularly in the field of education. The adaptation of educational programs to online environments during the COVID-19 pandemic has highlighted the importance of strategic collaboration between educational institutions, online platforms, and learning designers. Such partnerships are critical for transforming educational programs and ensuring their effectiveness in the digital age (Lloyd et al., 2021). Vietnam's education sector has embraced this shift, emphasising the integration of digital technologies and innovative pedagogical approaches to enhance the quality of online learning (Maheshwari, 2021).

This strategic adaptation in education is reflective of broader trends in Vietnam's organisational management, where digital transformation is being leveraged to foster innovation and growth. By embracing online learning platforms and integrating digital technologies into the curriculum, Vietnamese institutions are positioning themselves to better meet the needs of a modern, globalised workforce. However, the transition has not been without challenges. Faculty training costs, student-professor interaction, and the impact on existing programs must be carefully managed to ensure a smooth and effective adaptation to the online environment (Biedermann & Ahern, 2023). Despite these challenges, Vietnam's education sector continues to evolve, highlighting the importance of collaboration and innovation in driving strategic adaptation in dynamic environments.

Talent Management and Organisational Resilience in the "New Normal"

Amidst global disruptions like the pandemic, talent management in Vietnam has become a foundational element of organisational resilience, critical to maintaining performance and competitiveness. This strategic adaptation of talent practices is increasingly significant as Vietnam positions itself within a competitive global system shaped by the race for skilled labour, intensified by trade agreements, international alliances, and shifting economic landscapes (Thite et al., 2021). Vietnam's IT industry exemplifies how fostering an innovative organisational culture can enhance employee commitment and drive sustained performance, a necessity as the country aims to align its workforce with international standards and remain competitive in a rapidly globalising economy (Nguyen et al., 2019).

Vietnam can also draw insights from multinational organisations, such as Indian IT firms operating in China, that have adapted their talent strategies to align with global shifts. These cases reveal the importance of flexible talent management approaches, which can help Vietnam attract and retain skilled professionals even as regional dynamics and trade relationships evolve (Thite et al., 2021). In this context, strategic human resource management, organisational culture, and employee innovation are not merely domestic concerns but are pivotal components of Vietnam's adaptation to a dynamic global market (Nguyen et al., 2019). By cultivating these attributes, Vietnamese firms contribute to the country's broader economic and strategic goals, supporting Vietnam's integration within regional trade agreements and cooperation frameworks.

Strategic agility, a characteristic seen in Vietnamese privatised firms, underscores the need for organisations to stay focused on long-term objectives while responding to short-term changes. Such agility is especially relevant as Vietnam faces not only global market shifts but also domestic challenges related to economic development and industrial modernisation (Bui et al., 2019). Organisational resilience is also integral to Vietnam's stability in light of geopolitical pressures in Southeast Asia, particularly in sensitive areas like the South China Sea dispute, where a stable, innovative workforce can reinforce Vietnam's international stance. For example, the positive impact of organisational culture

on performance, as observed in the quality of accounting information systems in Vietnam, highlights the importance of building adaptable, innovation-oriented workplaces that can withstand regional tensions and economic uncertainties (Binh et al., 2022).

Vietnam's response to global dynamics is a multi-layered strategy encompassing corporate entrepreneurship, talent management, and international partnerships. This strategy is not only aimed at addressing immediate market or geopolitical challenges but also at embedding a culture of resilience that aligns with the country's long-term development and International Relations objectives. By strengthening talent and fostering resilience, Vietnam is better positioned to contribute to regional stability and safeguard its economic and strategic interests. Across sectors like IT, education, and maritime security, Vietnam's ability to leverage global partnerships, foster innovation, and adapt to shifts will be critical to its resilience and influence within the global system. Whether facing technological innovation, climate change, or maritime disputes, Vietnam's approach to organisational and strategic management highlights the central role of agility, collaboration, and innovation in securing its position as a robust and resilient actor on the international stage.

CONCLUSION

Vietnam's adaptive strategies reflect a comprehensive approach to navigating complex global dynamics, addressing climate resilience, technological integration, and strategic alliances. These adaptations not only serve as responses to immediate geopolitical and environmental challenges but also enhance Vietnam's influence and strengthen its diplomatic leverage within Southeast Asia and on the global stage.

Through proactive climate adaptation and a focus on environmental sustainability, Vietnam positions itself as a responsible and resilient actor amid the escalating impacts of climate change, contributing to regional stability and ecological conservation. Vietnam's integration of advanced technologies, particularly in digital transformation and artificial intelligence, further enhances its competitiveness within a digitally driven global economy. These technological advancements, combined with strategic partnerships in maritime security, allow Vietnam to assert its sovereignty and safeguard its economic interests in the South China Sea, an area crucial to regional economic and security frameworks.

Collaborations with global powers, such as India and the United States, are integral to Vietnam's strategy, bolstering its maritime security capabilities and ensuring freedom of navigation. These alliances not only support Vietnam's territorial claims but also contribute to maintaining a balance of power in the Asia-Pacific region. Additionally, Vietnam's emphasis on talent management and organisational resilience fosters an innovative, adaptable workforce, reinforcing its internal stability and aligning with regional trade agreements and cooperation frameworks.

In linking domestic resilience with broader international objectives, Vietnam's strategic adaptations underscore its role as a stabilising force within Southeast Asia. By prioritising agility, collaboration, and innovation, Vietnam secures a strong position in the region and solidifies its strategic importance on the global stage. This multifaceted approach highlights Vietnam's commitment to sustainable development and resilience, ensuring its influence and relevance in an increasingly interconnected and volatile world.

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