

Digital Transformation in Ho Chi Minh City: Progress, Innovation, and Future Outlook

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ABSTRACT: This paper examines the digital transformation journey of Ho Chi Minh City (HCMC), positioning it within the broader context of global digitalization trends and Vietnam's national digital agenda. Recognizing the strategic importance of HCMC as Vietnam's economic and technological hub, the study explores the city's policies, initiatives, and infrastructure developments aimed at fostering a digital economy, enhancing digital governance, and promoting inclusive digital society. Key progress includes the implementation of e-Government platforms, expansion of 5G and cloud infrastructure, and the rise of innovation ecosystems supported by leading tech enterprises. The research highlights successes in digital literacy, citizen engagement, and smart city technologies, while addressing persistent challenges such as the digital divide, talent shortages, and regulatory gaps. Looking forward, the paper outlines strategic recommendations and future milestones essential for achieving a sustainable, inclusive, and fully digital HCMC by 2030. This comprehensive assessment offers insights into the complex dynamics of urban digital transformation and provides a roadmap for stakeholders aiming to harness technology for inclusive urban development.

KEYWORDS: Digital Transformation, Smart City, Digital Governance, Innovation Ecosystem, Inclusive Digital Society.

I. INTRODUCTION

Digital transformation involves the comprehensive integration of digital technologies into all facets of society, including how individuals live, businesses operate, and governments deliver public services. It is not simply a matter of adopting new tools but represents a profound shift. In recent years, digital transformation has emerged as a critical driver of socio-economic development across the globe. The rapid integration of digital

technologies into all areas of society—from government services to business operations and everyday life—has reshaped how cities function, innovate, and compete on the international stage. Globally, urban centers are leveraging advancements such as artificial intelligence, big data, cloud computing, and the Internet of Things (IoT) to enhance public service delivery, foster economic growth, and improve citizens' quality of life (Kraus et al., 2021).

The importance of digitalization in urban development cannot be overstated. As cities face increasing challenges related to population growth, resource management, and environmental sustainability, digital tools offer innovative solutions that enable smarter governance, more efficient infrastructure, and inclusive social services. In this context, digital transformation is not merely a technological upgrade but a fundamental shift toward more agile, transparent, and citizen-centric urban ecosystems (Batty et al., 2012).

Ho Chi Minh City (HCMC), as Vietnam's largest metropolis and economic powerhouse, holds a strategic position within the country's national digital agenda. Recognizing the vital role of technology in accelerating modernization and global competitiveness, both the Vietnamese government and the HCMC People's Committee have prioritized digital transformation as a cornerstone of their development strategies. The city's vibrant economy, burgeoning technology sector, and dynamic population create a fertile environment for pioneering digital initiatives that could serve as a model for other urban centers in the region (Nguyen & Tran, 2020).

This report aims to provide a comprehensive analysis of Ho Chi Minh City's digital transformation journey, examining the progress made, the innovative approaches adopted, and the challenges encountered along the way. It

will explore the interplay between policy frameworks, technological infrastructure, digital government, economic shifts, and social inclusion efforts. Furthermore, the report will outline future outlooks and recommendations to guide sustainable and inclusive digital growth for HCMC through 2030. By highlighting key milestones and strategic priorities, this study contributes to a deeper understanding of how Ho Chi Minh City is navigating the complexities of becoming a fully digital and smart city in the rapidly evolving digital era.

II. POLICY AND STRATEGIC DIRECTION

Digital transformation in Ho Chi Minh City (HCMC) is deeply rooted in a comprehensive policy framework aligned with Vietnam's broader national digital agenda. The strategic direction set forth by both national and city-level authorities underscores the critical role of digitalization in driving sustainable urban development, economic growth, and governance innovation.

National and City-Level Digital Transformation Strategies

Vietnam's commitment to digital transformation is articulated through key national strategies such as the National Digital Transformation Program until 2025, with a vision toward 2030, approved by the Prime Minister in 2020. This program establishes foundational goals for the entire country, emphasizing digital government, digital economy, digital society, and technological infrastructure as pillars of development (Prime Minister's Decision No. 749/QĐ-TTg, 2020).

HCMC, as the nation's largest economic and technological hub, has tailored this national framework to its unique urban context. The city's Digital Transformation Program integrates with national policies but also sets ambitious localized targets to enhance administrative efficiency, stimulate digital innovation, and improve quality of life for its residents. This strategy includes specific focus areas such as smart city development, digital public services, and fostering a vibrant digital startup ecosystem (Ho Chi Minh City People's Committee, 2021).

Role of the Ho Chi Minh City People's Committee

The Ho Chi Minh City People's Committee plays a pivotal role in orchestrating the city's digital transformation agenda. It acts as the principal government body responsible for policy formulation, implementation oversight, and multi-stakeholder coordination. The Committee's digital

initiatives are characterized by strong leadership in driving e-Government projects, fostering partnerships with private sector technology firms, and mobilizing resources for infrastructure development (Vietnam Ministry of Information and Communications, 2022).

In recent years, the Committee has prioritized the creation of a Centralized Administrative Service Center, aimed at streamlining citizen interactions with government agencies through integrated digital platforms. This reflects the Committee's strategic vision to leverage technology for improving governance transparency and responsiveness.

Key Digital Transformation Goals by 2025 and 2030: The digital transformation strategy for HCMC outlines clear, measurable objectives to be achieved in two main phases:

❖ By 2025:

- ✓ Achieve 80-90% digitization of public administrative procedures, reducing physical paperwork and processing times.
- ✓ Establish a fully operational smart city infrastructure including IoT-enabled utilities, traffic management systems, and public safety monitoring.
- ✓ Expand digital literacy programs to reach at least 70% of the population, focusing on vulnerable groups.
- ✓ Enhance the digital economy's contribution to the city's GRDP to over 25%, led by fintech, healthtech, and creative tech sectors.
- ✓ Deploy city-wide 5G networks and cloud computing infrastructure to support digital services and innovation.

❖ By 2030:

- ✓ Transition towards a fully digital government with seamless data sharing across agencies and citizen-centric service delivery.
- ✓ Position HCMC as a leading Southeast Asian digital innovation hub, attracting global technology investments and startups.
- ✓ Achieve near-universal digital inclusion, bridging the digital divide for marginalized communities.
- ✓ Establish robust cybersecurity and data privacy frameworks aligned with international standards.
- ✓ Develop sustainable smart city models integrating AI, big data analytics, and green technologies.

Together, these goals reflect HCMC's strategic vision of becoming a smart, inclusive, and innovative metropolis that harnesses digital technologies to enhance urban living and economic competitiveness.

III. DIGITAL GOVERNMENT

The digital transformation of government services in Ho Chi Minh City (HCMC) marks a critical pillar in the city's broader smart city and digital economy initiatives. With a population exceeding 9 million, efficient governance supported by digital infrastructure is essential to enhancing public administration, transparency, and citizen engagement.

Implementation of e-Government Platforms: HCMC has made substantial progress in deploying e-Government platforms aimed at simplifying administrative procedures and improving service delivery. The city's Digital Government Portal provides an integrated online gateway where citizens and businesses can access a wide range of public services such as business registration, tax filings, and public health declarations. The platform supports seamless interactions, reduces paperwork, and shortens processing times, which contributes to increased administrative efficiency and public satisfaction (Nguyen & Tran, 2021).

Integration with National Databases: A cornerstone of HCMC's digital government strategy is the integration with national-level databases and systems. This interconnectivity allows real-time data sharing and verification across ministries and agencies, enhancing accuracy and reducing redundancy. For example, the integration with the national population database enables instant verification of citizen identity, streamlining processes such as social welfare disbursement and public service access. This linkage supports a "one-stop-shop" service experience and is fundamental to the city's vision of a connected digital ecosystem (Le & Pham, 2022).

Launch of Centralized Administrative Service Center: The city has operationalized a centralized Administrative Service Center (ASC) that functions as a physical and digital hub for administrative services. This center embodies the principle of "Government at Your Fingertips," consolidating services from multiple departments into a single access point. It employs digital tools for appointment scheduling, document submission, and progress tracking, minimizing the need for in-person visits. This approach not only enhances convenience but also reduces bureaucratic bottlenecks and corruption risks (Ho Chi Minh City People's Committee, 2023).

Smart City Tools- AI, Data Analytics, Citizen Feedback Systems: HCMC is actively leveraging advanced technologies such as artificial intelligence (AI) and data analytics to optimize public administration. AI-powered chatbots assist citizens in navigating government services and provide 24/7 support, while data analytics help authorities monitor service performance and identify areas for improvement. Moreover, digital citizen feedback systems collect real-time opinions and grievances, fostering a responsive and transparent governance culture. These tools empower the city to respond adaptively to citizens' needs and enhance service quality (Vo et al., 2023).

Challenges in Governance Digitization: Despite significant strides, challenges persist in the digitization of governance in HCMC. Inter-agency data interoperability remains limited due to legacy systems and inconsistent data standards, impeding seamless information exchange. Additionally, concerns about cybersecurity and data privacy require ongoing attention, particularly as sensitive citizen data is increasingly digitized. Resistance to change within some bureaucratic structures and a digital skills gap among government staff also slow adoption rates. Addressing these challenges is crucial to realizing the full potential of digital government initiatives in the city (Nguyen & Tran, 2021; Le & Pham, 2022).

IV. DIGITAL ECONOMY

The digital economy has become a vital pillar in the economic development of Ho Chi Minh City (HCMC), significantly contributing to its Gross Regional Domestic Product (GRDP) and driving innovation across multiple sectors. As Vietnam's largest economic hub, HCMC has embraced digital technologies to foster a dynamic ecosystem that supports startups, attracts major technology investments, and promotes digital entrepreneurship.

Contribution of Digital Economy to HCMC's GRDP: The digital economy in HCMC has shown remarkable growth, accounting for an estimated 25–30% of the city's GRDP as of 2024, with projections suggesting an increase to nearly 40% by 2030. This growth is fueled by rapid urbanization, increasing internet penetration, and government policies promoting digital adoption in business and public services. Digital commerce, online services, and digital platforms have substantially expanded, enhancing productivity and creating new revenue streams.

Key Sectors Driving Digital Growth: Several sectors have emerged as critical drivers of HCMC's digital economy:

- ✓ **Fintech:** HCMC has become a regional fintech hub, supported by innovative digital payment platforms, blockchain applications, and online lending services. Companies such as MoMo and ZaloPay lead the market by offering accessible financial services that enhance financial inclusion for both urban and rural populations.
- ✓ **Healthtech:** The city has embraced telemedicine, AI-driven diagnostics, and electronic health records, especially accelerated by the COVID-19 pandemic. Startups and hospitals collaborate to provide remote healthcare solutions, improving accessibility and efficiency.
- ✓ **Edtech:** Online education platforms and digital learning tools have surged in popularity, addressing the needs of students and professionals for flexible and quality education. The city supports initiatives to integrate technology into classrooms and lifelong learning programs.

Innovation Hubs, Tech Parks, and Startup Ecosystems: HCMC's vibrant startup ecosystem benefits from several innovation hubs and technology parks, including the Saigon Hi-Tech Park and the Saigon Innovation Hub. These centers provide crucial infrastructure, mentorship, and funding opportunities for startups and tech enterprises. Incubators and accelerators work alongside universities and investors to nurture talent and promote technology commercialization.

Investment from Tech Giants: Investment from multinational technology companies has further accelerated digital economic development in HCMC. Key players such as FPT Corporation, Nvidia, Google, and Alibaba have established a strong presence in the city through research centers, data centers, and partnerships with local startups. For instance, FPT's expansion into AI and cloud computing services and Google's collaboration on digital skills training exemplify the symbiotic relationship between global firms and HCMC's digital economy.

These investments not only boost technology transfer but also generate employment and foster innovation ecosystems, positioning HCMC as a leading digital economy hub in Southeast Asia.

V. DIGITAL SOCIETY

Digital society represents a critical pillar in Ho Chi Minh City's (HCMC) overall digital transformation agenda, emphasizing inclusivity, accessibility, and citizen empowerment through technology. This section explores key initiatives aimed at enhancing digital literacy, fostering broad-based digital inclusion, leveraging digital tools for public engagement, and cultivating community-driven technological adoption.

Digital Literacy Initiatives and Training Programs: Recognizing that human capital is central to a thriving digital society, HCMC has prioritized widespread digital literacy programs. These initiatives target various demographic groups, from students in urban schools to working professionals and marginalized populations. Training programs focus on foundational skills such as computer use, internet navigation, cybersecurity awareness, and digital content creation. Public libraries, community centers, and educational institutions have partnered with the city government to deliver workshops and online courses, ensuring the citizenry can fully participate in the digital economy and governance (Tran & Nguyen, 2022).

Digital Inclusion for Elderly and Underserved Communities: One of the significant challenges in HCMC's digital transformation has been bridging the digital divide, especially among elderly residents and low-income groups who traditionally have limited access to technology. The city has launched targeted efforts to provide affordable devices, subsidized internet access, and tailored training programs to these communities. Mobile outreach teams and "Digital Ambassadors" work directly within neighborhoods to assist residents in using smartphones, accessing government e-services, and connecting with telehealth and social welfare platforms. These efforts aim to ensure that no segment of the population is left behind in the digital era (Pham et al., 2023).

"Digital Citizen" App and Its Impact: A landmark innovation in fostering citizen engagement is the introduction of the "Digital Citizen" mobile application, designed as a one-stop platform for accessing public services, submitting feedback, and participating in local governance. The app integrates features such as real-time service status updates, digital document submission, and interactive forums for civic participation. Since its launch, the app has recorded rapid adoption, with over 1 million active users

within the first year, reflecting the public's growing trust and reliance on digital channels (Le & Hoang, 2023). The platform has not only improved service delivery efficiency but also enhanced transparency and accountability in municipal administration.

Community Digital Technology Teams: To encourage grassroots participation in the digital transformation journey, HCMC has established Community Digital Technology Teams—volunteer groups equipped with training and tools to assist neighbors with digital literacy and troubleshoot technology issues. These teams act as local champions for technology adoption, particularly in less connected districts. By fostering peer-to-peer learning and community support, these initiatives help to accelerate digital inclusion and promote a culture of innovation at the neighborhood level.

Public Engagement and User Adoption Rates: Overall, the digital society initiatives have resulted in significant increases in public engagement with digital services. Surveys conducted in 2024 show that over 70% of HCMC residents regularly use at least one government e-service, and digital adoption rates among vulnerable groups have improved markedly (Pham et al., 2023). However, continuous efforts are needed to sustain momentum, address remaining barriers, and enhance user experience through responsive design and multilingual support.

VI. INFRASTRUCTURE AND TECHNOLOGICAL FOUNDATIONS

A robust digital infrastructure forms the backbone of Ho Chi Minh City's (HCMC) ambitious digital transformation agenda, driving the city's evolution into a smart urban ecosystem. Over recent years, the city has made significant strides in deploying cutting-edge communication technologies, establishing scalable data management systems, and implementing rigorous cybersecurity frameworks. These technological foundations are crucial in enabling a wide array of smart city initiatives, while expanding digital services across public administration, commerce, healthcare, education, and beyond. By systematically enhancing its technological landscape, HCMC is setting a model for sustainable urban growth and innovation in Vietnam and the broader Southeast Asian region.

6.1. 5G Deployment and Broadband Expansion

At the forefront of HCMC's infrastructure development is the rapid deployment of 5G technology, positioning the city as a pioneering hub

in Vietnam's telecommunications sector. Beginning in 2021, the city prioritized the rollout of 5G networks, initially targeting high-density urban districts and commercial zones. Leading service providers such as Viettel, VNPT, and MobiFone spearheaded these efforts, leveraging their nationwide networks and technical expertise to accelerate coverage. By mid-2024, 5G networks had expanded substantially, covering key residential areas, business hubs, and transport corridors, thereby enabling ultra-fast, low-latency connectivity essential for a new generation of digital applications (Nguyen & Pham, 2023).

This enhanced connectivity supports transformative applications ranging from autonomous vehicles, which require rapid real-time data exchange, to telemedicine platforms delivering remote diagnostics and care. Augmented reality (AR) services for education, tourism, and retail are also becoming viable with 5G's bandwidth capabilities. Such developments align with global smart city trends, where ubiquitous high-speed networks serve as the fundamental enabler of digital innovation.

Complementing the 5G rollout, HCMC has strategically invested in expanding fiber-optic broadband infrastructure. This investment ensures that high-speed internet access is not confined to central urban areas but extends into residential neighborhoods and emerging commercial districts. Through public-private partnerships and infrastructure subsidies, the city aims to reduce the digital divide by providing affordable and reliable broadband connectivity to all residents. This inclusive approach fosters equitable digital participation, which is essential for sustainable social and economic development.

6.2. Data Centers and Cloud Infrastructure

The proliferation of digital services and IoT devices has resulted in an exponential growth of data generated across the city. To handle this surge, HCMC has accelerated the development of modern data centers and cloud computing infrastructure designed for scalability, energy efficiency, and robust security. These facilities adhere to internationally recognized standards such as ISO/IEC 27001, reflecting the city's commitment to maintaining stringent information security management systems (Le et al., 2022a).

These data centers serve as the critical backbone for storing and processing vast volumes of data generated by government operations, businesses, and the diverse array of smart city devices deployed throughout the urban environment. Beyond traditional data storage,

cloud platforms hosted within HCMC support the deployment of advanced applications powered by artificial intelligence (AI), big data analytics, and Internet of Things (IoT) management systems. For instance, financial institutions leverage cloud analytics to enhance fraud detection and risk management, while healthcare providers utilize AI-driven diagnostics and patient management platforms hosted on local cloud infrastructure. Educational institutions also benefit from scalable cloud resources that support remote learning and digital collaboration.

In addition to pure cloud solutions, the city promotes hybrid cloud strategies that combine public and private cloud resources. This approach optimizes data storage and processing capabilities while enabling organizations to maintain control over sensitive data, thereby ensuring compliance with local data sovereignty regulations. Hybrid models provide the flexibility to manage workloads efficiently, scale resources dynamically, and enhance disaster recovery mechanisms, further strengthening the city's digital ecosystem.

6.3. Cybersecurity and Data Privacy Frameworks

As HCMC expands its digital infrastructure and services, it concurrently recognizes the critical importance of cybersecurity and data privacy. The city has established comprehensive cybersecurity policies and frameworks that align closely with national regulations, aiming to mitigate risks associated with increasing digitalization. These frameworks impose stringent security protocols on both public institutions and private enterprises, emphasizing essential practices such as data encryption, multi-factor identity management, and continuous network monitoring (Tran & Hoang, 2024).

To further bolster defenses, HCMC has integrated advanced threat detection systems capable of identifying and neutralizing cyber threats in real time. The establishment of a dedicated Cybersecurity Operations Center (CSOC) within the city facilitates coordinated responses to cyber incidents, ensuring rapid containment and remediation. This institutional capacity underscores the city's proactive stance toward securing its digital environment.

Recognizing that cybersecurity is as much a cultural challenge as a technical one, the city also promotes public awareness campaigns focused on data privacy and digital hygiene. These initiatives educate citizens on protecting personal information, recognizing phishing attempts, and maintaining safe online behaviors, fostering a

resilient cyber culture at the grassroots level. Such holistic approaches are vital in creating a trusted digital environment where both citizens and businesses can confidently engage with emerging technologies.

6.4. Smart Utilities and IoT Integration

The modernization of HCMC's infrastructure extends beyond connectivity and data management into the realm of smart utilities and Internet of Things (IoT) integration. The city has embraced IoT technologies as key enablers for optimizing resource consumption and improving service delivery efficiency. Deployment of IoT sensors and automated control systems across electricity grids, water supply networks, and waste management services exemplifies this trend.

For example, smart electricity grids equipped with IoT sensors allow for real-time monitoring of power usage, load balancing, and predictive maintenance. This reduces operational costs and minimizes the risk of outages. Similarly, automated water meters transmit consumption data continuously, enabling accurate billing, early leak detection, and better resource allocation. Waste management systems utilize sensors to monitor bin fill levels, optimizing collection routes and schedules, which reduces fuel consumption and environmental impact.

In public spaces, smart street lighting systems automatically adjust brightness based on pedestrian activity and ambient conditions, lowering energy consumption while enhancing urban safety. Collectively, these IoT-enabled utilities contribute to creating a more sustainable urban environment, lowering carbon footprints, and improving residents' quality of life.

VII. CHALLENGES AND BARRIERS

Despite notable progress in Ho Chi Minh City's digital transformation, several significant challenges and barriers impede the city's full realization of its digital ambitions. These issues must be addressed to ensure equitable, efficient, and sustainable development.

Digital Divide and Access Disparities: One of the foremost challenges is the persistent digital divide, which reflects disparities in access to digital technologies and high-speed internet between urban and peri-urban or rural populations within and around Ho Chi Minh City. While urban centers benefit from 5G deployment and broadband expansion, marginalized communities—especially low-income households and the elderly—face limited access and digital literacy, hindering

inclusive participation in the digital economy and society (Nguyen & Tran, 2023). Addressing these disparities is critical to avoid deepening socio-economic inequalities.

Talent Shortage in Tech and Data Sectors: The rapid expansion of digital initiatives has led to a growing demand for skilled professionals in information technology, data analytics, cybersecurity, and AI. However, Ho Chi Minh City experiences a shortage of qualified talent, exacerbated by brain drain and the global competition for tech specialists (Le et al., 2022b). This talent gap limits the city's capacity to innovate and maintain digital infrastructure, requiring enhanced education and training programs alongside incentives to retain and attract talent.

Regulatory and Policy Gaps: Although the city benefits from strong national digital transformation policies, regulatory frameworks have struggled to keep pace with technological advancements. Ambiguities in data privacy laws, cybersecurity standards, and digital transaction regulations create uncertainties for businesses and citizens alike (Pham, 2024). Furthermore, inconsistent policies across agencies hamper coherent governance and slow the implementation of digital projects.

Inter-agency Coordination and Data Interoperability: Effective digital transformation demands seamless coordination among diverse governmental departments and the integration of disparate data systems. However, siloed data management and lack of interoperability between platforms continue to present obstacles, limiting the potential of smart city applications and comprehensive e-government services. Overcoming these barriers requires the establishment of unified data governance frameworks and enhanced inter-agency collaboration mechanisms. Addressing these challenges will be essential for Ho Chi Minh City to realize its vision as a fully digital, inclusive, and smart metropolis by 2030.

VIII. FUTURE OUTLOOK AND RECOMMENDATIONS

As Ho Chi Minh City (HCMC) accelerates its digital transformation journey, the period from 2025 to 2030 promises to be critical in consolidating progress and scaling innovations to achieve a fully integrated digital ecosystem. Building on current momentum, several key initiatives and strategic milestones are anticipated, alongside essential policy adjustments and

collaborative efforts to ensure sustainable and inclusive digital growth.

Key Initiatives and Milestones by 2025–2030: HCMC aims to deepen the deployment of advanced digital infrastructure such as ubiquitous 5G coverage and next-generation broadband networks to support high-speed connectivity for all urban areas and suburbs. The city plans to expand the use of AI-driven smart city solutions, including real-time urban management, intelligent transportation systems, and enhanced public safety frameworks. Moreover, comprehensive integration of big data analytics across government and private sectors is expected to enhance decision-making, improve service delivery, and foster innovation hubs within existing tech parks (Vu et al., 2023). The establishment of interoperable data platforms will be a priority to enable seamless information exchange among agencies, facilitating more efficient public services and enhancing transparency. Furthermore, by 2030, HCMC targets to become a regional leader in digital economy sectors such as fintech, healthtech, and edtech, supported by robust startup ecosystems and sustained foreign investment (Nguyen & Tran, 2024).

Policy Recommendations for Sustainable Digital Transformation: To overcome persisting challenges such as the digital divide and talent shortages, it is crucial to implement inclusive policies that promote digital literacy and skills development across all demographics, including marginalized and elderly populations. Encouraging lifelong learning and vocational training programs aligned with industry needs will help bridge the workforce gap (Pham, 2022). Additionally, establishing clear regulatory frameworks that address data privacy, cybersecurity, and digital ethics is imperative to build public trust and safeguard digital assets. Enhanced coordination mechanisms between government bodies must be instituted to avoid fragmented efforts and to promote data interoperability.

Public-Private Partnerships and Global Collaboration: Public-private partnerships (PPPs) will continue to play a vital role in financing and innovating digital infrastructure and services. By fostering an ecosystem that supports startups and attracts global technology leaders, HCMC can leverage international expertise and capital. Collaboration with global smart city initiatives and technology alliances will enable knowledge sharing

and adoption of best practices, further accelerating transformation.

Metrics for Evaluating Long-term Success: To ensure continuous improvement, HCMC should adopt comprehensive performance metrics that include digital access and inclusion rates, quality and efficiency of e-government services, cybersecurity resilience, innovation outputs (e.g., patents, startups), and citizen satisfaction indices. These indicators will provide transparent and actionable insights to guide policy adjustments and strategic planning (Vu et al., 2023).

IX. CONCLUSION

Ho Chi Minh City has made significant strides in its journey toward digital transformation, positioning itself as a key driver of Vietnam's national digital agenda. The city's progress across government digitization, economic innovation, societal inclusion, and robust technological infrastructure demonstrates a strong commitment to becoming a smart, inclusive, and sustainable urban center. The implementation of e-Government platforms and centralized administrative services has enhanced governance efficiency, while burgeoning sectors such as fintech, healthtech, and edtech fuel the city's digital economy. Furthermore, initiatives like digital literacy programs and the "Digital Citizen" app have fostered greater public engagement and helped bridge the digital divide among vulnerable populations.

Nonetheless, challenges such as talent shortages, regulatory gaps, and interoperability issues remain critical barriers to fully realizing the digital vision. Addressing these challenges through coordinated policy efforts, enhanced public-private partnerships, and continuous innovation will be essential for sustaining momentum. Looking ahead, the strategic milestones set for 2025 and 2030 provide a clear roadmap to deepen Ho Chi Minh City's digital transformation, fostering an ecosystem that supports innovation, inclusivity, and resilience.

In summary, Ho Chi Minh City's digital transformation exemplifies how strategic vision, combined with technological innovation and community engagement, can reshape urban development in the digital age. The city's experience offers valuable insights for other emerging urban centers seeking to harness digital technologies to improve governance, economic growth, and social wellbeing. Continued commitment to addressing existing barriers and leveraging collaborative opportunities will ensure

Ho Chi Minh City's position as a leading smart city in Southeast Asia.

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