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**ACADEMY OF JOURNALISM AND COMMUNICATION**

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**HANOI PARTY COMMITTEE'S LEADERSHIP IN SCIENCE AND  
TECHNOLOGY DEVELOPMENT IN THE CURRENT PERIOD**

**PHD THESIS MAJORING IN  
PARTY BUILDING AND STATE GOVERNMENT**

**SUMMARY OF PHD THESIS**

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## INTRODUCTION

### 1. The urgency of the topic

Science and technology play an especially important role in the development of every nation and people. In the contemporary era, science and technology are not only a direct productive force but also a decisive factor in determining national competitiveness, development capacity, and international standing. Recognizing this significance, the Communist Party of Vietnam has consistently identified science and technology development as a top national policy and a key driver of socio-economic development, as well as the safeguarding of national defence and security. In the context of the Fourth Industrial Revolution, digital transformation, and deep international integration, the development of science and technology has become increasingly urgent to innovate growth models, improve labour productivity, and promote rapid and sustainable national development.

As the Capital City, the political-administrative centre of the nation, and a major centre for science and technology, Hanoi possesses significant potential and outstanding advantages through its extensive network of research institutes, universities, science and technology organisations, and a large pool of intellectuals, experts, and highly qualified human resources. As the leadership body operating between sessions of the City Party Congress, the Hanoi Party Committee holds a particularly important position in leading, translating into practice, and organising the implementation of the Party's policies on science and technology development, while effectively mobilising resources to promote science and technology development commensurate with the status of the Capital. Therefore, the effectiveness of the Hanoi Party Committee's leadership not only directly influences the socio-economic development of the city but also contributes to advancing science and technology, innovation, and digital transformation nationwide.

In recent years, the Hanoi Party Committee has focused on disseminating, concretising, and implementing the Party's policies and resolutions on science and technology. It has issued numerous important programmes and plans, notably Program No. 07-CTr/TU on "Promoting Science, Technology and Innovation Development for the 2021–2025 Period." As a result, leadership in science and technology development has achieved many positive outcomes. Awareness among sectors and administrative levels has improved; organisational structures and human resources have been progressively strengthened; coordination within the political system has been enhanced; and inspection, supervision, preliminary reviews, and final evaluations have been conducted on a regular basis.

However, in light of new development requirements, the Hanoi Party Committee's leadership in science and technology development still exhibits certain limitations. The concretisation and implementation of some policies and resolutions have at times lacked consistency and practical relevance. The quality of science and technology human resources has not fully met development demands. The effectiveness of coordination and resource mobilisation remains limited, while inspection, supervision, preliminary reviews, and final evaluations continue to require further innovation.

At present, the rapid advancement of the Fourth Industrial Revolution, artificial intelligence, big data, and digital transformation is fundamentally reshaping development models across nations. Resolution No. 57-NQ/TW dated 22 December 2024 of the Politburo emphasises that: "The development of science and technology, innovation, and digital transformation is becoming a decisive factor in national development; it is the prerequisite and the greatest opportunity for our country to achieve prosperity and strength in the new era—the era of the nation's rise" [15]. At the same time, the implementation of the revised Capital Law

(2026) and Politburo Resolution No. 02-NQ/TW on building and developing Hanoi in the new era has imposed increasingly demanding requirements on the leadership capacity of the Hanoi Party Committee in the field of science and technology.

Arising from these theoretical and practical requirements, a systematic study of the Hanoi Party Committee's leadership in science and technology development; an objective assessment of achievements and limitations and their underlying causes; and the proposal of solutions to strengthen leadership in the coming period are matters of significant urgency. For this reason, the doctoral candidate has chosen the topic: **“Hanoi Party Committee's Leadership in Science and Technology Development in the Current Period”** as the subject of this doctoral thesis in Party Building and State Government Studies.

## **2. Research purpose and tasks**

### ***2.1. Research purpose***

Based on clarifying the theoretical and practical issues concerning the Hanoi Party Committee's leadership in science and technology development in the current period, this thesis proposes directions and solutions to strengthen the Party Committee's leadership over science and technology development in Hanoi in the coming years.

### ***2.2. Research tasks***

- Review representative scientific studies directly related to the thesis topic, identify the findings that can be inherited and utilised to achieve the objectives and tasks of the thesis, and determine the issues that require further investigation and clarification.

- Analyse and clarify the theoretical and practical issues relating to the Hanoi Party Committee's leadership in science and technology development, and develop the theoretical framework for the thesis.

- Examine and assess the current state of the Hanoi Party Committee's leadership in science and technology development from 2015 to the present; identify achievements, limitations, the causes of those achievements and limitations, and draw out key lessons learned.

- Analyse favourable conditions and challenges affecting the Hanoi Party Committee's leadership in science and technology development, and propose directions and solutions to strengthen its leadership over science and technology development in Hanoi in the coming period.

## **3. Study subjects and scope of the thesis**

### ***3.1. Study subjects***

The Hanoi Party Committee's leadership in science and technology development in the current period.

### ***3.2. Scope of the thesis***

- *Spatial scope*: The thesis investigates and examines the current state of the Hanoi Party Committee's leadership in science and technology development within Hanoi. The study focuses solely on science and technology activities under the management of the Hanoi municipal government and does not cover science and technology activities conducted by central government agencies or science and technology organisations outside the city's administrative jurisdiction.

- *Time scope*: The thesis examines the Hanoi Party Committee's leadership in science and technology development in Hanoi from 2015 to the present. The directions and solutions proposed in the thesis are intended to be applicable in the coming period. However, due to limitations in research time, data collection, and the page constraints of the thesis, the study primarily focuses on data from recent years within the 2020 - 2025 term of the Hanoi Party Congress, while selectively incorporating data from the 2015 - 2020 term where relevant.

## **4. Theoretical, practical basis and research methods of the thesis**

### **4.1. Theoretical basis**

The theoretical foundation of the thesis is grounded in the viewpoints of Marxism - Leninism and Ho Chi Minh Thought regarding the role of science and technology in social development and socialist construction, as well as the leadership role of Party organisations in various spheres of social life. The thesis is also based on the viewpoints and policies of the Communist Party of Vietnam concerning science and technology development.

### **4.2. Practical basis**

The practical basis of the thesis is the current state of the Hanoi Party Committee's leadership in science and technology development within Hanoi from 2015 to the present.

### **4.3. Research methods**

The thesis is conducted on the basis of the Marxist–Leninist methodological approach.

The study employs a combination of research methods commonly used in political science and interdisciplinary studies, including: systematisation; analysis and synthesis; logical and historical approaches; induction and deduction; statistical and comparative methods; sociological survey methods; theoretical research; and practical review and evaluation.

## **5. Scientific contributions of the thesis**

*Firstly*, the thesis develops the concept of the Hanoi Party Committee's leadership in science and technology development as follows: The Hanoi Party Committee's leadership in science and technology development refers to the entirety of activities undertaken by the Hanoi Party Committee and its Standing Committee in disseminating and concretising the Party's guidelines, policies, resolutions, directives, and conclusions on science and technology development; formulating and issuing resolutions, directives, and conclusions on science and technology development within Hanoi; and leading, directing, inspecting, and supervising the implementation of these guidelines, policies, resolutions, directives, and conclusions, thereby contributing to the successful realisation of the goal of building Hanoi into a cultured, civilised, modern, and prosperous capital city.

*Secondly*, the thesis identifies a distinctive lesson learned: the City Party Committee places particular emphasis on building the intellectual workforce and developing high-quality human resources to support science and technology development.

the City Party Committee places strong emphasis on leading the development of the intellectual workforce and high-quality human resources to serve the development of science and technology.

*Thirdly*, the thesis proposes a breakthrough solution: focusing leadership efforts on removing bottlenecks; fundamentally reforming science and technology management mechanisms; strengthening organisational structures; developing high-quality science and technology human resources; and increasing resources for science and technology development.

## **6. Theoretical and practical significance of the thesis**

The thesis contributes to the review of practical experiences and the enrichment and development of theoretical understanding regarding the Hanoi Party Committee's leadership in science and technology development in the current period.

The findings of the thesis may serve as a reference for the Hanoi Party Committee in leading science and technology development within Hanoi in the coming years.

The thesis may also be used as a reference resource for learning, teaching, and scientific research on Party Building at the Le Hong Phong Cadre School, the Academy of Journalism and Communication, and universities offering programmes in Party Building and State Government Studies.

## **7. Structure of the thesis**

In addition to the introduction, conclusion, list of the author's published scientific works related to the thesis, references, and appendices, the thesis consists of four chapters and ten sections.

## Chapter 1

### OVERVIEW OF AVAILABLE RESEARCH RELATED TO THE TOPICS

#### 1.1. RESEARCH OUTSIDE VIETNAM

##### 1.1.1. Studies related to science and technology development

Gouk Tae Kim (2012), *Scientizing Science Policy: Implications for Science, Technology, and Innovation Policy and R&D Evaluation*.

Guillermo A. Lemarchand (2018), *Mapping Research and Innovation in Lao People's Democratic Republic*.

Jennifer Clark (2020), *Uneven Innovation: The Work of Smart Cities*.

Kayano Fukuda (2020), *Science, Technology and Innovation Ecosystem Transformation Toward Society 5.0*, *International Journal of Production Economics*.

Azeem Azhar (2021), *The Exponential Age: How Accelerating Technology Is Transforming Business, Politics, and Society*.

Xiaolan Fu, Bruce McKern, and Jin Chen (2021), *The Oxford Handbook of China Innovation*.

Alan Irwin and Tara Qian Sun (2021), *Transformative Innovation Policy: A Case Study from China*.

Lili Miao, Dakota Murray, Woo Sung Jung, Vincent Larivière, Cassidy R. Sugimoto, and Yong-Yeol Ahn (2022), *The Latent Structure of Global Scientific Development*.

Chen Jin, Yang Zhen, and Yin Ximing (2022), *China's Scientific and Technological Innovation Strategy under the New Pattern of Development*.

Seung Hwan Kim, Jeong Hwan Jeon, Anwar Aridi, and Bogang Jun (2023), *Factors That Affect the Technological Transition of Firms Toward Industry 4.0 Technologies*.

Thomas Ramge and Rafael Laguna de la Vera (2023), *Reinventing Innovation to Solve the World's Largest Problems*.

Rudi Volti and Jennifer Croissant (2024), *Society and Technological Change* (9th ed.).

Suelao Sotouky (2025), *Policies Encouraging the Development of Science and Technology in the Lao PDR*.

Andy Mok (2026), *The Innovation Machine: How China Creates and Adopts Technology Through Governance*.

##### 1.1.2. Studies related to communist party leadership in science and technology development

Xi Jinping (2016), *Excerpts from Xi Jinping's Discussions on Scientific and Technological Innovation*.

Angelo Baracca and Rosella Franconi (2016), *Subalternity vs. Hegemony: Cuba's Outstanding Achievements in Science and Biotechnology, 1959 - 2014*.

Xi Jinping (2020), *The Governance of China*.

Richard P. Suttmeier (2020), *Chinese Science Policy at a Crossroads*.

Yutao Sun and Cong Cao (2021), *Planning for Science: China's "Grand Experiment" and Global Implications*.

Rumi Aoyama (2022), *China's Dichotomous BeiDou Strategy: Led by the Party for National Deployment, Driven by the Market for Global Reach*.

Ministry of Science and Technology of the People's Republic of China (2023), *In-depth Study of Xi Jinping's Important Expositions on Scientific and Technological Innovation*.

Agustín Lage Dávila (2024), *The Knowledge Economy and Socialism: Science and Society in Cuba*.

Andrew B. Kennedy (2024), *The Process of Paradigm Change: The Rise of Guided Innovation in China*.

## 1.2. RESEARCH IN VIETNAM

### 1.2.1. Studies related to science and technology development

Ta Ba Hung (Editor-in-Chief) and colleagues (2007), *World Science and Technology: The Early Years of the Twenty-First Century*, National Political Publishing House, Hanoi.

Various authors (2014), *3S Technology*, Science and Technics Publishing House, Hanoi.

Nguyen Thi Thom (2020), “The Role of Science, Technology and Innovation in Vietnam’s Growth Model”, *Political Theory Journal*, August 2020.

Various authors (2020), *Scientific and Technological Ideas in the Era of Industry 4.0*, translated by Tran Giang Son, Knowledge Publishing House, Hanoi.

Ministry of Science and Technology (2021), *Science, Technology and Innovation in Vietnam 2020*, Science and Technics Publishing House, Hanoi.

Bui Quang Tuan and Ha Huy Ngoc (Co-editors) (2021), *A Growth Model Based on Science, Technology and Innovation in Vietnam’s Socio-Economic Development Strategy for the 2021–2030 Period*, National Political Publishing House, Hanoi.

Gia Bao (2021), “Hanoi Promotes the Transformation of Its Growth Model Based on Science, Technology and Innovation”, *Communist Review Online*.

Nguyen Thi Mien and Doi Gia Thien Linh (2023), “Enhancing Endogenous Science and Technology Capacity to Promote Industrialisation and Modernisation”, *Political Theory Journal*, No. 3.

Pham Van Dung (2024), *Developing Vietnam’s Science and Technology Market*, National Political Publishing House, Hanoi.

Dang Thu Giang (2024), *Science, Technology and Innovation in Achieving Vietnam’s Sustainable Development Goals by 2030*, Science and Technics Publishing House, Hanoi.

Nguyen Dinh Uyen (2024), *Development of Science and Technology Enterprises in Hanoi*, Doctoral Dissertation in Economic Management, VNU University of Economics and Business, Hanoi.

Pham Thi Du (2024), *Research on the Impact of Technological Change on Labour Structure Transformation in Vietnam’s Manufacturing Industry*, Doctoral Dissertation in Economic Management, Thuongmai University, Hanoi.

Pham Minh Son (Editor-in-Chief) (2025), *Promoting Research, Transfer and Application of Scientific and Technological Advances and Innovation for Rapid and Sustainable Economic Development*, Political Theory Publishing House, Hanoi.

Nguyen Manh Hai (2025), “Developing Science and Technology Human Resources in Hanoi to Meet the Requirements of Building a Cultured, Civilised and Modern Capital City”, *Political Theory Journal*, No. 4.

Tao Thi Quyen and Mai Thi Thanh Tam (2025), “Requirements for Improving Institutions Governing Science and Technology Development in Vietnam in the New Context”, *Political Theory Journal*, No. 5.

Nguyen Thanh Trung (2025), “Ho Chi Minh’s Views on the Subjects of Science, Technology and Innovation Development and Their Application in the New Context”, *Political Theory Journal*, No. 6.

Ministry of Science and Technology (2025), *Science, Technology and Innovation in Vietnam 2024*, Science and Technics Publishing House, Hanoi.

Tue Minh (2025), “Hanoi Promotes Science, Technology and Innovation Development in the Context of International Integration”, *Communist Review Online*.

Huynh Thanh Dat (2025), “Breakthrough Thinking for Advancing Science, Technology and Innovation in the Era of National Rise”, *Communist Review*, Nos. 1053–1054.

Nguyen Van Tung (2025), “Hai Phong City Focuses on Science and Technology Development to Promote Socio - Economic Growth”, *Communist Review*, No. 1063.

Nguyen Thanh Tham (2025), “Experiences of Selected Countries in Science, Technology and Innovation Policies for Economic Development”, *Political Theory Journal*, No. 6.

Tran Sy Phan and Nguyen Thi Kim Dung (2025), “Science, Technology and Innovation as Drivers of the Rapid Development of Productive Forces in Vietnam”, *Political Theory Journal*, No. 8.

Dang Quang Dinh (2025), “Marxism - Leninism on the Role of Science and Technology in Human Development and Contemporary Practice”, *Political Theory Journal*, No. 11.

Nguyen Van Chau (2025), “Developing Science and Technology to Achieve Double-Digit Economic Growth”, *Political Theory Journal*, No. 12.

Dinh Ngoc Quy (2026), “Ho Chi Minh Thought on Science and Technology and Its Application in Contemporary Science, Technology, Innovation and National Digital Transformation”, *Political Theory Journal*, No. 577.

Vu Van Phuc (2026), “The Role of Science, Technology, Innovation and Digital Transformation in Realising the Vision of an Independent, Self-Reliant, Prosperous and Happy Nation”, *Political Theory Journal*, No. 3.

Bui Thi Hong Ha (2026), “The Current State of Science and Technology Human Resource Development in Hanoi”, *Political Theory Journal Online*.

Nguyen Tuan Anh (2026), “The Communist Party of Vietnam’s Viewpoints on Science, Technology, Innovation and National Digital Transformation”, Vietnam Academy of Social Sciences.

Do Phu Tran Tinh and colleagues (2026), “Enhancing the Effectiveness of Implementing Politburo Resolution No. 57-NQ/TW on Breakthrough Development in Science, Technology, Innovation and National Digital Transformation”, *Communist Review Online*.

### **1.2.2. Studies related to communist party leadership in science and technology development**

Tran Van Phuong (2017), Provincial and Municipal Party Committees in the Central Coastal Region Leading the Development of Science and Technology Human Resources in the Current Period, Doctoral Dissertation in Party Building and State Governance, Ho Chi Minh National Academy of Politics, Hanoi.

Tran Thi Anh Dao, Tran Thi Huong, and Nguyen Thi Thu Thuy (2018), *Party Leadership in Various Spheres of Social Life*, Political Theory Publishing House, Hanoi.

Tran Quoc Toan (2020), “Promoting Science, Technology and Innovation Development as a Strategic Breakthrough in the New Period”, *Communist Review Online*.

Bui Quang Tuan and Ha Huy Ngoc (2021), *A Growth Model Based on Science, Technology and Innovation in Vietnam’s Socio-Economic Development Strategy for the 2021 - 2030 Period*, National Political Truth Publishing House, Hanoi.

Nguyen Phu Trong (2022), *Some Theoretical and Practical Issues on Socialism and the Path to Socialism in Vietnam*, National Political Truth Publishing House, Hanoi.

Dao Duy Tung (2022), “The Party’s Leadership in Science and Technology Development (1986 - 2021): Achievements and Lessons Learned”, *Communist Review*, No. 987, pp. 45 - 53.

Nguyen Van Nam (2022), “Enhancing the Leadership Capacity of Party Committees in Science and Technology Development”, *Communist Review*, No. 1025, pp. 78 - 85.

Vu Van Long (2023), *The Party’s Leadership in High-Tech Agricultural Development from 2011 to 2020*, Doctoral Dissertation in History of the Communist Party of Vietnam, Ho Chi Minh National Academy of Politics.

Tran Thi Mai (2023), “Improving the Party’s Leadership Mechanism over State Management of Science and Technology”, *State Management Review*, 31(4), pp. 12 - 20.



Tran Thi Nhan (2023), “The Party’s Leadership in Promoting the Power of Science and Technology for Economic Development during 2011 - 2021”, *Party History Journal Online*.

Le Thi Hong (2023), “Party Committee Leadership in Innovation Activities: Experience from Da Nang”, *Journal of Political Science*, No. 4, pp. 12 - 25.

Doan Thanh Thuy (2024), *The Party’s Leadership in Information Technology Development from 2011 to 2020*, Doctoral Dissertation in History of the Communist Party of Vietnam, Ho Chi Minh National Academy of Politics.

Tran Thi Thanh Mai (2025), Science and Technology: The “Golden Key” to Operating the Two-Tier Local Government Model in Hanoi, *Communist Review Online*.

Ha Phuong (2026), “Promoting the Role of Science, Technology, Innovation and Digital Transformation in Implementing the Resolution of the 14th National Party Congress”, *Communist Review Online*.

Vu Minh Giang (2026), “Breakthroughs in Science, Technology, Innovation and Digital Transformation: From Thinking to Action in Line with the 14th National Party Congress”, *Vietnam Science and Technology Journal Online*.

Dang Hoang Luan (2026), “The Leadership Role of the Party in Science and Technology Development in Vietnam”, *Vietnam Integration Science Journal*, Nos. 377 - 378, pp. 65 - 70.

Trinh Thi Thu Thao (2026), The Leadership Role in the Development of Science, Technology, and Innovation in the New Context: The Practice in Tuyên Quang Province, *State Management Review Online*.

### **1.3. OVERVIEW OF THE RESEARCH FINDINGS OF RELATED WORKS AND ISSUES ADDRESSED BY THE THESIS**

#### **1.3.1. Overview of the research findings of related works**

Science and technology development, as well as Party leadership in science and technology development, has attracted the attention of numerous scholars both domestically and internationally. The published studies have generated significant findings in three main areas.

*Firstly*, existing studies have clarified the theoretical foundations of science and technology and Party leadership in science and technology development. They have analysed the concepts, characteristics, and roles of science and technology in socio-economic development, while also elucidating the perspectives of Marxism - Leninism, Ho Chi Minh Thought, and the Communist Party of Vietnam on science and technology development. Many international studies have approached the issue from the perspectives of science and technology policy, innovation systems, and science governance.

*Secondly*, the studies have provided relatively comprehensive assessments of the state of science and technology development and the leadership and management of this field in various countries and localities. They have examined international experiences, evaluated the development of science and technology, innovation, and digital transformation in Vietnam, and identified achievements, limitations, challenges, and emerging issues associated with science and technology development in the context of the Fourth Industrial Revolution.

*Thirdly*, many studies have proposed solutions for promoting science and technology development and strengthening Party leadership. These recommendations focus on improving institutions and policies, developing high-quality human resources, promoting research and technology transfer, building innovation ecosystems, accelerating digital transformation, and reforming Party leadership methods.

The above research findings constitute an important source of theoretical and practical reference for this thesis. However, to date, no study has systematically and comprehensively examined the Hanoi Party Committee’s leadership in science and technology development from the perspective of Party Building and State Government Studies. No research has developed a comprehensive analytical framework covering leadership content, leadership methods, influencing factors, and solutions for strengthening the Hanoi Party Committee’s leadership in

science and technology development. Likewise, no study has comprehensively analysed the situation from 2015 to the present in the context of implementing Resolution No. 57-NQ/TW, the 2024 Capital Law, Resolution No. 15-NQ/TW, and the objective of developing Hanoi into the nation's leading centre for science, technology, and innovation. This represents an important research gap and provides both the theoretical and practical basis for selecting the topic "*The Hanoi Party Committee's Leadership in Science and Technology Development in the Current Period.*" The study seeks to contribute to theoretical development, clarify the current situation, and propose solutions for strengthening the Hanoi Party Committee's leadership in science and technology development in the new era.

### **1.3.2. Issues addressed by the thesis**

Based on the review of published research, the thesis focuses on addressing the following issues:

*Firstly*, it clarifies the theoretical and practical issues that serve as the foundation for developing the thesis's theoretical framework, including fundamental issues relating to Hanoi City, the Hanoi Party Organisation, the Hanoi Party Committee, and the Standing Committee of the Hanoi Party Committee; as well as key issues concerning science and technology, science and technology development, and the role of science and technology development in Hanoi.

*Secondly*, it develops the theoretical framework of the thesis by clarifying the central concept of "*the Hanoi Party Committee's leadership in science and technology development*"; identifying the content, methods, and role of the Hanoi Party Committee's leadership in this field; and establishing the theoretical basis for examining, analysing, and evaluating the process of science and technology development leadership in Hanoi.

*Thirdly*, it systematically examines, analyses, and evaluates the current state of the Hanoi Party Committee's leadership in science and technology development in recent years, while identifying its achievements, limitations, causes, and valuable lessons of both theoretical and practical significance.

*Fourthly*, it forecasts the factors affecting science and technology development and the strengthening of the Hanoi Party Committee's leadership in this field in the coming period. On that basis, the thesis proposes directions and major feasible solutions, including breakthrough measures, to strengthen the Hanoi Party Committee's leadership in science and technology development in the years ahead.

## **Chapter 2**

### **THEORETICAL AND PRACTICAL ISSUES OF THE HANOI PARTY COMMITTEE'S LEADERSHIP IN SCIENCE AND TECHNOLOGY DEVELOPMENT IN THE CURRENT PERIOD**

#### **2.1. HANOI CITY, THE CITY PARTY ORGANISATION, THE HANOI PARTY COMMITTEE, AND THE STANDING COMMITTEE OF THE HANOI PARTY COMMITTEE**

##### **2.1.1. Overview of Hanoi City**

##### **2.1.1.1. Natural conditions**

Hanoi is the capital of the Socialist Republic of Vietnam and a centrally governed municipality with a natural area of 3,359.82 square kilometres. The city's terrain is relatively flat, gradually descending from north to south and from west to east. Hilly and mountainous areas are located in the northern and western parts of the city, including several high mountain peaks. Its favourable geographical location, well-developed transportation network, and the maintenance of stable administrative boundaries, combined with the current consolidation and streamlining of commune-level administrative units following recent mergers, have created an important foundation for guiding and promoting the development of science and technology in the Capital City.

### ***2.1.1.2. Economic and political conditions***

#### ***\* Economic conditions***

Hanoi is a major economic centre and continues to affirm its role as one of the leading economic drivers of the country. The city's economic structure has undergone significant transformation in the direction of industry - services - agriculture.

#### ***\* Political conditions***

Hanoi is the national political-administrative centre of Vietnam. During the 2015 - 2020 and 2020 - 2025 terms, the City Party Organisation focused on effectively implementing Party building and rectification initiatives and strengthening the political system. It has taken the lead in restructuring and streamlining the organisational apparatus towards greater efficiency, effectiveness, and operational capacity, thereby fostering a high level of consensus among cadres, Party members, and the people.

### ***2.1.1.3. Socio-cultural conditions***

Hanoi, a city with a thousand years of civilisation, is the largest cultural and social centre in Vietnam and a place where the nation's distinctive cultural values are preserved, nurtured, and disseminated. The city is currently home to 8,807,523 residents who live and work within its administrative boundaries.

### ***2.1.1.4. National defence, security, and external relations***

Hanoi has focused on building a strong people's national defence system and a robust defensive zone, closely linked to the requirements of safeguarding the Capital City under all circumstances.

The city has largely maintained political security, social order, and public safety, while ensuring the absolute security of key targets and major political, diplomatic, and cultural events.

Hanoi continues to strengthen its international position and reputation by expanding cooperative relationships with more than 100 cities and capitals worldwide and by actively participating in regional and international cooperation networks and forums.

## **2.1.2. The Hanoi Party Organisation, the Hanoi Party Committee, and the Standing Committee of the Hanoi Party Committee**

### ***2.1.2.1. Overview of the Hanoi Party Organisation***

The Hanoi Party Organisation exercises comprehensive leadership across all fields, including the economy, politics, culture, science and technology, national defence, security, and external relations within the Capital City. In recent years, the Hanoi Party Organisation has remained stable and has been continuously strengthened in all aspects. It has effectively led the people of Hanoi in accomplishing the political tasks assigned to the Party Organisation, thereby making significant contributions to national development.

### ***2.1.2.2. The Hanoi Party Committee: concept, functions, tasks, powers, and responsibilities***

**\* Concept of the Hanoi Party Committee:** The Hanoi Party Committee is the abbreviated name of the Executive Committee of the Hanoi Party Organisation. It is the leadership body of the Hanoi Party Organisation between sessions of the City Party Congress, responsible for directing the implementation of resolutions adopted by the City Party Congress, as well as resolutions and directives of the Central Committee and the policies and laws of the State within the Capital City. The Hanoi Party Committee is elected by the City Party Congress or established by appointment of the directly superior Party organisation. Its term of office is five years, and it operates under the comprehensive leadership and direction of the Central Committee of the Communist Party of Vietnam, directly and regularly exercised through the Politburo and the Secretariat.

**\* Functions, tasks, and powers:** The functions, tasks, and powers of the Hanoi Party Committee are prescribed in Regulation No. 305-QĐ/TW dated 13 June 2025 of the Politburo

on the functions, tasks, and organisational structure of provincial and municipal Party committees directly under the Central Committee.

*\* Working relationships of the Hanoi Party Committee:* The working relationships of the Hanoi Party Committee are governed by Article 5 of Regulation No. 305-QĐ/TW dated 13 June 2025 issued by the Politburo.

### ***2.1.2.3. The Standing Committee of the Hanoi Party Committee: concept, tasks, and powers***

*\* Concept of the Standing Committee of the Hanoi Party Committee*

The Standing Committee of the Hanoi Party Committee is the leadership body operating between meetings of the Hanoi Party Committee. It is elected by the Executive Committee of the Hanoi Party Organisation and is responsible for handling the regular affairs of the Party Organisation within its authority. The Standing Committee operates under the direct leadership and guidance of the Central Committee, the Politburo, and the Secretariat, and is accountable to the Hanoi Party Committee for its decisions.

*\* Tasks and powers of the Standing Committee of the Hanoi Party Committee*

The tasks and powers of the Standing Committee are stipulated in Article 5 of Regulation No. 10-QĐi/TW dated 12 December 2018 and Article 3 of Regulation No. 305-QĐ/TW dated 13 June 2025 issued by the Politburo.

### ***2.1.2.4. Number and composition of members of the Hanoi Party Committee and the Standing Committee***

During the 2020–2025 term, the Seventeenth Executive Committee of the Hanoi Party Organisation consisted of 71 members, while the Standing Committee comprised 17 members.

During the 2025–2030 term, the Eighteenth Executive Committee of the Hanoi Party Organisation increased in size to 75 members. However, the number of members of the Standing Committee remained unchanged at 17.

### ***2.1.2.5. Specialised advisory and support agencies of the Hanoi Party Committee and its Standing Committee, and affiliated public service units***

The specialised advisory and support agencies assisting the Hanoi Party Committee and its Standing Committee include the Office of the Hanoi Party Committee, the Organisation Commission, the Inspection Commission Office, the Commission for Publicity, Education and Mass Mobilisation, and the Internal Affairs Commission.

Affiliated public service units include the Le Hong Phong Cadre Training School and the Party Organisation's press, radio, and television agencies.

## **2.2. SCIENCE AND TECHNOLOGY IN HANOI AND SCIENCE AND TECHNOLOGY DEVELOPMENT IN HANOI**

### **2.2.1. Science and technology in Hanoi: concept, classification, characteristics, and role**

#### ***2.2.1.1. Concept of science and technology in Hanoi***

Science and technology constitute a unified system that combines activities aimed at understanding the objective laws of nature, society, and human thought with activities that apply those laws in practice through technical solutions, processes, tools, know-how, and organisational methods to create new products, services, and values. Through this process, science and technology directly promote the development of productive forces and serve as a key driver of innovation and sustainable development.

#### ***2.2.1.2. Classification of science and technology in Hanoi***

From the perspective of studying the Hanoi Party Committee's leadership in science and technology development, science and technology activities in Hanoi may be broadly classified into the following categories:

*Firstly*, social sciences and humanities.

*Secondly*, natural sciences.

*Thirdly*, engineering sciences and technology.

*Fourthly*, medical, pharmaceutical, and health sciences.

*Fifthly*, agricultural sciences and technologies serving agricultural and rural development.

#### **2.2.1.3. Characteristics of science and technology in Hanoi**

*Firstly*, science and technology in Hanoi encompass a comprehensive range of disciplines and maintain a relatively high level of development.

*Secondly*, Hanoi possesses large-scale and high-quality science and technology resources, including research institutions, experts, scientists, and highly skilled human resources.

*Thirdly*, science and technology activities in Hanoi closely integrate research, education and training, and smart-city applications.

*Fourthly*, Hanoi has developed a relatively comprehensive science, technology, and innovation ecosystem with significant spillover effects across sectors and regions.

#### **2.2.1.4. The role of science and technology in Hanoi**

*Firstly*, science and technology serve as an important driver of economic growth and economic restructuring in the Capital City, contributing to increased labour productivity, the development of the knowledge economy, and the emergence of new high value-added industries.

*Secondly*, science and technology provide the foundation for enhancing the competitiveness and standing of the Capital City.

*Thirdly*, science and technology play an important role in modernising urban management models and social governance.

*Fourthly*, science and technology contribute to addressing major urban challenges such as traffic congestion, environmental pollution, infrastructure overload, population management, and the provision of public services.

*Fifthly*, science and technology activities in Hanoi generate significant spillover effects and play a leading role in promoting science and technology development throughout Vietnam.

### **2.2.2. Science and technology development in Hanoi: concept, content, measures, and role**

#### **2.2.2.1. Concept of science and technology development in Hanoi**

Science and technology development in Hanoi is a systematic, continuous, and long-term process of transformation of the science and technology system within the Capital City. It is achieved through expanding and enhancing scientific knowledge, innovating and progressively mastering technologies, strengthening research capacity, and improving the application of science and technology in governance, production, and social life. Through these efforts, science and technology development contributes to qualitative improvements in the productive forces, promotes economic growth, enhances competitiveness, and meets the requirements for the sustainable development of Hanoi.

*Subjects of science and technology development in Hanoi include:*

*Firstly*, leadership subjects: the Hanoi Party Committee, directly and regularly through its Standing Committee; and Party committees and Party organisations under the Hanoi Party Committee.

*Secondly*, management subjects: the People's Council and People's Committee of Hanoi; municipal departments, agencies, and sectors, particularly the Hanoi Department of Science and Technology, together with the local government system at all levels.

*Thirdly*, implementation subjects: science and technology organisations, research and development institutions, intellectuals, scientists, experts, research institutes, universities, science and technology enterprises, innovation centres, and the scientific and technical workforce operating within Hanoi.

Participants in science and technology development in Hanoi include: the Vietnam Fatherland Front, socio-political organisations at all levels, professional associations, economic organisations, central-level research institutions, the business community, media organisations, the people of Hanoi, and international partners.

#### **2.2.2.2. Content of science and technology development in Hanoi**

*Firstly*, promoting scientific research and technological development in priority fields.

*Secondly*, developing science and technology capacity in a comprehensive and modern manner.

*Thirdly*, promoting technology application and transfer, and developing the innovation and start-up ecosystem.

*Fourthly*, developing the science and technology market and supporting services.

*Fifthly*, expanding cooperation, collaboration, and international integration in science and technology.

*Sixthly*, promoting the role and participation of all sectors of society in science and technology development.

#### **2.2.2.3. Measures for science and technology development in Hanoi**

*Firstly*, formulating and improving institutions, policies, and governance mechanisms for science and technology in a modern and effective manner.

*Secondly*, developing the intellectual workforce and high-quality science and technology human resources.

*Thirdly*, ensuring and enhancing the effectiveness of financial investment and technical infrastructure for science and technology development.

*Fourthly*, creating and strengthening domestic and international environments for cooperation and collaboration in science and technology.

#### **2.2.2.4. The role of science and technology development in Hanoi**

*Firstly*, science and technology development is an important driver of economic growth and economic restructuring in the Capital City.

*Secondly*, science and technology development serves as a fundamental pillar for modernising urban governance and building a cultured, civilised, modern, and prosperous capital city.

*Thirdly*, science and technology development is one of the key factors in enhancing Hanoi's competitiveness and standing at both regional and international levels.

*Fourthly*, science and technology development in Hanoi plays an important role in strengthening the nation's overall scientific and technological capacity.

### **2.3. THE HANOI PARTY COMMITTEE'S LEADERSHIP IN SCIENCE AND TECHNOLOGY DEVELOPMENT: CONCEPT, CONTENT, METHODS, AND ROLE**

#### **2.3.1. Concept of the Hanoi Party Committee's leadership in science and technology development**

The Hanoi Party Committee's leadership in science and technology development refers to the entirety of activities undertaken by the Hanoi Party Committee and its Standing Committee in disseminating and concretising the Party's resolutions, directives, and conclusions on science and technology development; formulating and issuing resolutions, directives, and conclusions of the Hanoi Party Committee and its Standing Committee concerning science and technology development within Hanoi; leading and directing their implementation; and inspecting and supervising the implementation process. Through these activities, the Hanoi Party Committee contributes to the successful achievement of the goal of building Hanoi into a cultured, civilised, modern, and prosperous capital city.

*Leadership subjects:* The Hanoi Party Committee, with its Standing Committee serving as the direct and regular leadership body, supported by specialised advisory and support

agencies, particularly the Commission for Publicity, Education and Mass Mobilisation and the Office of the Hanoi Party Committee.

*Objects of leadership:* Party committees and Party organisations under the Hanoi Party Committee, as well as cadres and Party members working in state agencies responsible for science and technology, and in the city's departments, agencies, and sectors.

### **2.3.2. Content of the Hanoi Party Committee's leadership in science and technology development**

*Firstly*, the Hanoi Party Committee provides leadership over the strategic direction and tasks of science and technology development in Hanoi.

*Secondly*, the Hanoi Party Committee leads subordinate Party committees and Party organisations in implementing its resolutions and policies on science and technology development.

*Thirdly*, the Hanoi Party Committee leads local governments at all levels, particularly the People's Council and People's Committee of Hanoi, in implementing the resolutions, decisions, directives, and conclusions of the Hanoi Party Committee and its Standing Committee concerning science and technology development within the city.

*Fourthly*, the Hanoi Party Committee leads the strengthening and development of scientific research institutions, enterprises, and science and technology organisations, while promoting the development of the intellectual workforce and improving the quality of science and technology human resources in Hanoi.

*Fifthly*, the Hanoi Party Committee directs coordination among organisations and stakeholders; mobilises, allocates, and effectively utilises resources; and expands domestic and international cooperation in science and technology development within Hanoi.

*Sixthly*, the Hanoi Party Committee leads the conduct of preliminary reviews, final evaluations, and the drawing of lessons learned from the implementation of its resolutions and policies on science and technology development.

### **2.3.3. Methods of the Hanoi Party Committee's leadership in science and technology development**

*Firstly*, the Hanoi Party Committee exercises leadership through resolutions, policies, and major strategic orientations concerning science and technology development.

*Secondly*, the Hanoi Party Committee exercises leadership through communication, persuasion, and mobilisation activities.

*Thirdly*, the Hanoi Party Committee exercises leadership through organisational and personnel work.

*Fourthly*, the Hanoi Party Committee exercises leadership through Party organisations and Party members.

*Fifthly*, the Hanoi Party Committee exercises leadership through inspection and supervision.

### **2.3.4. The role of the Hanoi Party Committee's leadership in science and technology development**

*Firstly*, it provides political direction, ensuring that science and technology development in the Capital City is aligned with the Party's guidelines and policies and the State's laws and regulations.

*Secondly*, it serves as the decisive factor in ensuring the successful achievement of Hanoi's science and technology development goals and tasks.

*Thirdly*, it plays a central coordinating role in connecting stakeholders and mobilising the combined strength of all actors involved in science and technology development.

*Fourthly*, it plays a leading role in mobilising public participation and ensuring the effective allocation of resources for science and technology development.

## **Chapter 2 summary**

Chapter 2 has clarified the theoretical and practical foundations of the Hanoi Party Committee's leadership in science and technology development. The chapter focused on defining the concept of the Hanoi Party Committee's leadership in science and technology development, identifying six key areas of leadership content and five principal methods of leadership. These findings provide an important theoretical foundation for assessing the current situation and for the subsequent analyses presented throughout the thesis.

## **Chapter 3**

### **THE HANOI PARTY COMMITTEE'S LEADERSHIP IN SCIENCE AND TECHNOLOGY DEVELOPMENT: CURRENT SITUATION, CAUSES, AND LESSONS LEARNED**

#### **3.1. THE CURRENT STATE OF THE HANOI PARTY COMMITTEE'S LEADERSHIP IN SCIENCE AND TECHNOLOGY DEVELOPMENT**

##### **3.1.1. Achievements and positive outcomes**

##### ***3.1.1.1. Achievements and positive outcomes in implementing the content of the Hanoi Party Committee's leadership in science and technology development***

*Firstly*, the Hanoi Party Committee has provided timely, proactive, and generally practical leadership in determining the directions and tasks for science and technology development, aligning them with the development requirements of the Capital City and broader national trends.

*Secondly*, the Hanoi Party Committee has led subordinate Party committees and Party organisations in implementing resolutions and policies on science and technology development with positive and relatively coordinated results.

*Thirdly*, the Hanoi Party Committee has effectively directed local governments at all levels, particularly the People's Council and People's Committee of Hanoi, in implementing the resolutions, decisions, directives, and conclusions of the Hanoi Party Committee and its Standing Committee on science and technology development in a coordinated and effective manner.

*Fourthly*, the Hanoi Party Committee has led and directed the strengthening of scientific research institutions, enterprises, and science and technology organisations, while placing strong emphasis on building and developing the intellectual workforce and high-quality science and technology human resources for the city.

*Fifthly*, the Hanoi Party Committee has promoted close, coordinated, and relatively effective cooperation among organisations and stakeholders; paid attention to the mobilisation, allocation, and effective utilisation of resources; and expanded domestic and international cooperation in science and technology development.

*Sixthly*, the Hanoi Party Committee has regularly conducted preliminary reviews, final evaluations, and lesson-learning activities in a systematic manner, thereby enabling the timely adjustment, supplementation, and refinement of policies and solutions to enhance the effectiveness of leadership in science and technology development throughout the city.

##### ***3.1.1.2. Achievements in the Hanoi Party Committee's methods of leadership in science and technology development***

*Firstly*, leadership through resolutions, policies, and major strategic orientations for science and technology development has been prioritised by the Hanoi Party Committee and implemented in a systematic and well-organised manner, producing relatively clear and positive outcomes.

*Second*, the Hanoi Party Committee has adopted more innovative and flexible approaches to leadership through communication, persuasion, and mobilisation, contributing to building consensus and raising social awareness of science and technology development.



*Thirdly*, organisational and personnel work has been carried out proactively, gradually strengthening the workforce and creating a solid human resource foundation for science and technology development.

*Fourthly*, leadership and direction through Party organisations and Party members have been implemented relatively effectively in promoting science and technology development.

*Fifthly*, leadership through inspection and supervision has been conducted on a push, implemented seriously, and has generated many positive improvements in science and technology development.

### **3.1.2. Limitations**

#### ***3.1.2.1. Limitations in the content of the Hanoi Party Committee's leadership in science and technology development***

*Firstly*, the Hanoi Party Committee's leadership in determining the direction and tasks of science and technology development has, at times and in certain areas, not fully kept pace with practical requirements and the rapid advancement of science and technology.

*Secondly*, the leadership and direction provided by some subordinate Party committees and Party organisations in implementing resolutions and policies on science and technology development have occasionally lacked sufficient depth and determination.

*Thirdly*, the Hanoi Party Committee's leadership of local governments, particularly the People's Council and People's Committee of Hanoi, in implementing resolutions, decisions, directives, and conclusions on science and technology development has at times lacked close oversight, especially at the commune level.

*Fourthly*, progress in strengthening science and technology institutions has not been uniform; the quality of human resources has not always met development requirements; and mechanisms for attracting, utilising, and retaining talented personnel have not been fully effective.

*Fifthly*, coordination among organisations and stakeholders has at times lacked consistency and cohesion. The mobilisation and allocation of resources, as well as the expansion of cooperation in science and technology development, have not always been fully synchronised, while the effectiveness of resource utilisation and collaborative arrangements has occasionally fallen short of development requirements.

*Sixthly*, preliminary reviews, final evaluations, and lesson-learning activities related to the implementation of resolutions and policies on science and technology development have sometimes been conducted in a formalistic manner, with lessons learned not always analysed in sufficient depth.

#### ***3.1.2.2. Limitations in the Hanoi Party Committee's methods of leadership in science and technology development***

*Firstly*, leadership through resolutions, directives, and conclusions on science and technology development has revealed certain shortcomings. In some cases, implementation and direction have tended to be formalistic and insufficiently aligned with the intent and requirements of policy documents.

*Secondly*, the Hanoi Party Committee's leadership in conducting communication, persuasion, and mobilisation on science and technology development has at times and in some places been untimely; its effectiveness has been uneven; and its reach and depth of awareness among certain groups remain limited.

*Thirdly*, the Hanoi Party Committee has exhibited certain shortcomings in the training, deployment, utilisation, and development of human resources serving the science and technology sector.

*Fourthly*, leadership through organisational and personnel work within agencies and units operating in the field of science and technology has continued to face limitations and challenges.

*Fifthly*, the role of some Party organisations and Party members in implementing science and technology development policies under the leadership of the Hanoi Party Committee has not always been fully realised, and the quality of implementation has varied across organisations and units.

*Sixthly*, leadership through inspection and supervision still requires further improvement and has, on occasion, lacked sufficient rigor and determination.

## **3.2. CAUSES AND LESSONS LEARNED FROM THE HANOI PARTY COMMITTEE'S LEADERSHIP IN SCIENCE AND TECHNOLOGY DEVELOPMENT**

### **3.2.1. Causes**

#### **3.2.1.1. Causes of the achievements**

##### *\* Objective causes*

*Firstly*, the attention, strategic direction, and consistent system of policies and guidelines of the Party and the State regarding science and technology development.

*Secondly*, Hanoi's advantages as the Capital City, together with its strong scientific and technological capacity and diverse science and technology ecosystem.

*Thirdly*, the priority and support provided by the central government to Hanoi in promoting science and technology development.

*Fourthly*, the requirements of socio-economic development, economic restructuring, and the impact of the Fourth Industrial Revolution.

##### *\* Subjective causes*

*Firstly*, the sound awareness and strong political commitment of the Hanoi Party Committee and its Standing Committee regarding the role of science and technology development as a key driver of growth and development.

*Secondly*, the increasingly enhanced leadership capacity of the Hanoi Party Committee, particularly in policy institutionalisation, inspection, and supervision.

*Thirdly*, the improved advisory and implementation capacities of specialised agencies responsible for science and technology development.

#### **3.2.1.2. Causes of the limitations**

##### *\* Objective causes*

*Firstly*, science and technology development is a complex task involving a substantial workload and demanding requirements.

*Secondly*, institutions, policies, and the science and technology market remain insufficiently coordinated and have yet to be fully developed.

*Thirdly*, rapid urbanisation has generated considerable pressure, while science and technology infrastructure has not fully met development requirements.

*Fourthly*, the impacts of the international environment and the consequences of the COVID-19 pandemic.

##### *\* Subjective causes*

*Firstly*, some Party committees, government agencies, sectors, enterprises, cadres, and Party members have not fully recognised science and technology development as a central task.

*Secondly*, the dissemination and concretisation of directives have at times been delayed, while the advisory capacity of certain agencies has remained limited.

*Thirdly*, mechanisms for inter-sectoral coordination and policies supporting international cooperation have not been sufficiently coordinated or robust.

*Fourthly*, Hanoi's mechanisms and policies for mobilising, allocating, and utilising resources for science and technology development still contain shortcomings and have not fully met development requirements.

### **3.2.2. Lessons learned**

*Firstly*, consistently disseminating and creatively applying the Party's guidelines and policies to the practical development of science and technology in the Capital City.

*Secondly*, the City Party Committee places particular emphasis on building the intellectual workforce and developing high-quality human resources to support science and technology development.

*Thirdly*, placing strong emphasis on building the intellectual workforce and developing high-quality human resources to support science and technology development.

*Fourthly*, prioritising the mobilisation of resources and strengthening coordination among stakeholders involved in science and technology development.

*Fifthly*, regularly conducting reviews, evaluations, inspections, and supervision, and promptly adjusting policies and solutions for science and technology development where necessary.

### **Chapter 3 summary**

Chapter 3 analysed the current state of the Hanoi Party Committee's leadership in science and technology development based on the six areas of leadership content and five leadership methods identified in Chapter 2. Through this analysis, the chapter clarified the achievements, limitations, underlying causes, and five key lessons learned.

The findings indicate that the Hanoi Party Committee's leadership has generated positive changes in the development of science and technology within the Capital City. However, a number of shortcomings and challenges remain and require further attention and resolution. These findings provide an important practical foundation for proposing directions and solutions to strengthen the leadership role of the Hanoi Party Committee in science and technology development in the coming period.

## **Chapter 4**

### **DIRECTIONS AND SOLUTIONS FOR STRENGTHENING THE HANOI PARTY COMMITTEE'S LEADERSHIP IN SCIENCE AND TECHNOLOGY DEVELOPMENT IN THE COMING PERIOD**

#### **4.1. FORECAST OF OPPORTUNITIES, CHALLENGES, AND DIRECTIONS FOR STRENGTHENING THE HANOI PARTY COMMITTEE'S LEADERSHIP IN SCIENCE AND TECHNOLOGY DEVELOPMENT IN THE COMING PERIOD**

##### **4.1.1. Opportunities and challenges**

##### **4.1.1.1. Opportunities**

*Firstly*, the consistency of the Party's and the State's policies, together with the continued improvement of the political and legal environment, provides favourable conditions for science and technology development.

*Secondly*, Hanoi's position as a major national centre for science and technology continues to be strengthened and maintained.

*Thirdly*, the political system and society will pay increasing attention to the development of science and technology.

*Fourthly*, the Party committees and authorities of the Capital will formulate many new policies and solutions to promote the development of science, technology, and innovation.

*Fifthly*, the Fourth Industrial Revolution and the accelerating process of digital transformation are creating new opportunities for Hanoi to advance science and technology development.

*Sixthly*, the great achievements of the country and the Capital in the cause of national renewal will increasingly drive and generate new momentum for the development of science and technology.

#### **4.1.1.2. Challenges**

*Firstly*, the impacts of organisational restructuring and the implementation of the two-tier local government model.

*Secondly*, the pressure to improve science and technology institutions and policies in the context of expanded decentralisation and delegation of authority to the Capital City.

*Thirdly*, challenges relating to leadership capacity, governance, and risk management associated with the development and application of artificial intelligence in science and technology.

*Fourthly*, increasingly intense international competition in the field of science and technology.

*Fifthly*, challenges related to intellectual property protection, data sovereignty, technological self-reliance, cybersecurity, and information security.

*Sixthly*, ongoing conflicts and wars in various regions of the world, with the potential for further escalation and wider impacts.

#### **4.1.2. Directions for strengthening the Hanoi Party Committee's leadership in science and technology development in the coming period**

*Firstly*, continue to affirm that the development of science and technology is a strategic breakthrough for the Capital; strengthening leadership in science and technology development is a key task of the Hanoi Party Committee.

*Secondly*, enhancing the quality and effectiveness of leadership exercised by Party committees and Party organisations in science and technology development.

*Thirdly*, strengthen leadership in improving mechanisms, regulations, and specific policies for science and technology development in the Capital.

*Fourthly*, focus leadership on building and developing high-quality science and technology human resources.

*Fifthly*, continuing to promote digital transformation in the leadership and management of science and technology development.

### **4.2. SOLUTIONS FOR STRENGTHENING THE HANOI PARTY COMMITTEE'S LEADERSHIP IN SCIENCE AND TECHNOLOGY DEVELOPMENT IN THE COMING PERIOD**

#### **4.2.1. Enhancing awareness, responsibility, and innovative thinking among the Hanoi Party Committee, Party committee leaders, subordinate Party committees and organisations, cadres, and Party members regarding the strengthening of the Hanoi Party Committee's leadership in science and technology development**

##### ***4.2.1.1. Strengthening and fundamentally reforming the organisation of study and dissemination of resolutions on science and technology development towards greater substance and depth***

The organisation of study sessions and the dissemination of the Party's and the Hanoi Party Committee's viewpoints, policies, and resolutions on science and technology development constitute a key step in fostering a shared understanding, promoting innovative thinking, and enhancing the responsibility of cadres and Party members in leadership, direction, and implementation. Reforming this work should focus on ensuring substantive outcomes, deeper engagement, and greater coherence in content, methods, and implementation tools.

##### ***4.2.1.2. Enhancing the responsibility and exemplary role of Party committee leaders in strengthening leadership and direction for science and technology development***

*Firstly*, strengthen the awareness and political responsibility of Party committee leaders, recognising science, technology, and innovation as central and long-term tasks in leadership and governance rather than delegating them entirely to specialised agencies.

*Secondly*, promote exemplary leadership in both strategic thinking and practical action through continuous updating of knowledge, a willingness to innovate, readiness to assume

responsibility, and leadership in applying science, technology, and digital transformation in governance and administration.

*Thirdly*, establish accountability mechanisms linked to substantive outcomes in science and technology development, making such outcomes important criteria in cadre assessment, planning, appointment, and performance evaluation, thereby reducing formalism and encouraging innovation.

*Fourthly*, strengthen inspection, supervision, and power control in the field of science and technology; promptly identify and recognise effective models and initiatives while strictly addressing manifestations of stagnation, avoidance of responsibility, or failure to meet assigned tasks.

*Fifthly*, continue improving institutions and decentralisation mechanisms by clearly defining responsibilities and authority, while ensuring effective oversight and adequate financial resources, human resources, and digital infrastructure to enable leaders to fully perform their role in promoting science, technology, and innovation development.

***4.2.1.3. Integrating the need to strengthen the Hanoi Party Committee's leadership in science and technology development into Party activities, conferences, scientific seminars, workshops, research projects, and meetings in Hanoi to enhance the awareness and responsibility of cadres and Party members***

Integrating discussions on the leadership role of the Hanoi Party Committee in science and technology development into Party activities, conferences, seminars, workshops, research projects, and professional meetings will contribute to continuously and sustainably enhancing awareness among cadres and Party members. This approach also helps connect political awareness with practical responsibilities, clarifies the guiding role of the Hanoi Party Committee in science and technology development, and improves implementation effectiveness across agencies, organisations, and localities.

***4.2.1.4. Promoting the role of the Commission for Publicity, Education and Mass Mobilisation, the Hanoi Department of Science and Technology, and the cadre workforce in raising awareness of science and technology development in Hanoi***

The Commission for Publicity, Education and Mass Mobilisation should play a central role in guiding and advising on communication strategies related to science and technology, highlighting the importance of science and technology in the development of the Capital City and countering erroneous viewpoints. The Hanoi Department of Science and Technology should provide the scientific and practical foundations for communication activities while encouraging cadres and Party members to serve as exemplary models and catalysts for broader awareness. Responsibility for communication should also be linked to performance evaluation in order to generate substantive changes in both awareness and action.

***4.2.1.5. Expanding the use of mass media, effectively utilising digital platforms, social media, and information technology to promote awareness, responsibility, and innovation in leadership thinking regarding science and technology development***

The Hanoi Party Committee and subordinate Party organisations should strengthen cooperation with media organisations, research institutions, technology enterprises, and experts in order to expand training, professional development, communication, and dissemination of knowledge related to science, technology, and digital transformation for cadres and Party members. At the same time, digital communication platforms, news media, and information technology should be utilized more effectively to disseminate official information, guide public opinion, counter misinformation and erroneous viewpoints, and enhance the effectiveness of public communication throughout society.

#### **4.2.2. Reforming the formulation, issuance, and implementation of resolutions and decisions of the Hanoi Party Committee and its Standing Committee on science and technology development**

##### ***4.2.2.1. Reforming the research, preparation, discussion, formulation, and issuance of resolutions and decisions on science and technology development by the Hanoi Party Committee***

The formulation and issuance of resolutions and decisions on science and technology development should be reformed to ensure greater substance, a stronger scientific foundation, and closer alignment with the development requirements of the Capital City. Such documents should clearly define objectives, priorities, and implementation conditions. At the same time, conferences, seminars, and workshops should be utilised more effectively to provide scientific and practical evidence and to mobilise the expertise of scholars, scientists, and businesses, thereby enhancing the quality and feasibility of resolutions and decisions.

##### ***4.2.2.2. Strengthening the Hanoi Party Committee's leadership and direction in effectively implementing resolutions and decisions on science and technology development***

*Firstly*, strengthen and reform the dissemination and communication of Party and Hanoi Party Committee resolutions on science and technology development in order to promote unity of understanding and action throughout the political system.

*Secondly*, direct the city government to rapidly and synchronously institutionalise the Party's and the Hanoi Party Committee's resolutions and policies on science and technology development.

*Thirdly*, strengthen decentralisation and delegation of authority while clearly assigning responsibilities in implementing resolutions and decisions. The principle of "five clarities" should be effectively applied to Party committees and key officials in implementing resolutions and decisions on science and technology development in Hanoi.

#### **4.2.3. Focusing leadership on removing bottlenecks, fundamentally reforming science and technology management mechanisms, strengthening organisational structures, developing high-quality science and technology human resources, and increasing resources for science and technology development**

##### ***4.2.3.1. Focusing leadership on removing bottlenecks in science and technology development in Hanoi***

*Firstly*, addressing institutional and policy bottlenecks.

*Secondly*, addressing bottlenecks related to finance and mechanisms for resource allocation and disbursement.

*Thirdly*, addressing bottlenecks relating to data governance and digital infrastructure.

*Fourthly*, addressing bottlenecks in human resources and the innovation and start-up ecosystem.

##### ***4.2.3.2. Focusing leadership on fundamentally reforming science and technology management mechanisms***

*Firstly*, leading the transition from ex-ante control to ex-post supervision combined with evidence-based governance.

*Secondly*, establishing regulatory sandbox mechanisms and promoting the development of the science and technology market.

*Thirdly*, diversifying investment resources and reforming the commissioning mechanism for science and technology tasks and projects.

##### ***4.2.3.3. Leading the strengthening of organisational structures and the development of high-quality science and technology human resources***

*Firstly*, strengthening and enhancing the quality of the Hanoi Party Committee and its Standing Committee to meet the requirements of stronger leadership in science and technology development in Hanoi

*One*, specifying the standards for members of the Hanoi Party Committee and its Standing Committee in accordance with the requirements of science and technology leadership.

*Two*, maintaining regular training and knowledge-updating programmes to enhance leadership capacity and science and technology governance capabilities.

*Three*, effectively implementing all aspects of cadre work and building a high-quality successor cadre workforce.

*Four*, encouraging self-learning and self-improvement among Party Committee and Standing Committee members while strengthening inspection and supervision.

**Secondly**, strengthening organisational structures and improving the quality of cadres and civil servants within specialised agencies, particularly the Hanoi Department of Science and Technology, to meet the requirements of stronger Party leadership in science and technology development

*One*, continuing to consolidate and stabilise specialised agencies, particularly the Hanoi Department of Science and Technology, in the direction of greater efficiency, effectiveness, and streamlined operation.

*Two*, improving the quality of cadres and civil servants in specialised agencies in accordance with job requirements and the needs of science and technology development.

*Three*, developing working regulations and coordination mechanisms to improve the quality of policy advice and implementation.

**Thirdly**, prioritising the development of high-quality science and technology human resources

*One*, expanding the scale and accelerating the development of science and technology human resources in priority and strategic sectors.

*Two*, restructuring science and technology human resources to ensure greater balance and alignment with the Capital City's emerging development requirements.

*Three*, enhancing the quality, skills, and innovation capacity of science and technology human resources while strengthening links with enterprises and market demands.

#### ***4.2.3.4. Strengthening leadership in mobilising, allocating, and effectively utilising resources for science and technology development***

The Hanoi Party Committee should lead efforts to mobilise, allocate, and utilise resources for science and technology development in a more effective manner by diversifying investment sources and prioritising strategic technologies and projects that directly support the development of the Capital City. At the same time, inspection and supervision should be strengthened to ensure that resources are managed transparently, used for their intended purposes, and deliver the greatest possible effectiveness.

#### **4.2.4. Strengthening leadership in coordination among local government, the Vietnam Fatherland Front, socio-political organisations, science and technology organisations, and the people of Hanoi in science and technology development**

##### ***4.2.4.1. Strengthening coordination between the city government and relevant agencies, organisations, and institutions in implementing science and technology development tasks***

The Hanoi Party Committee should lead efforts to improve coordination mechanisms between the city government and relevant departments, sectors, local authorities, and agencies by clearly defining responsibilities, focal points, procedures, and expected outcomes. Such mechanisms should ensure effective coordination in policy formulation, implementation, inspection, and supervision. At the same time, greater cooperation should be promoted in data sharing, professional expertise, resource mobilisation, human resource development, and technical infrastructure in order to enhance the implementation of science and technology, innovation, and digital transformation initiatives throughout the Capital City.

***4.2.4.2. Promoting the role of the Vietnam Fatherland Front and socio-political organisations in communication, mobilisation, supervision, and social criticism relating to science and technology development***

The Hanoi Party Committee should strengthen the role of the Vietnam Fatherland Front and socio-political organisations in raising public awareness of science and technology, encouraging innovation, and mobilising the participation of citizens and businesses in science and technology development. At the same time, their functions of supervision and social criticism should be enhanced with respect to policies, programmes, and projects related to science and technology in order to improve democratic participation, objectivity, and policy feasibility, while fostering social consensus and broadening public support for the Party Committee's leadership.

***4.2.4.3. Strengthening linkages among science and technology organisations, educational institutions, enterprises, and the public in science and technology development***

The Hanoi Party Committee should lead the establishment of close cooperation mechanisms among science and technology organisations, research institutes, universities, enterprises, and the public in order to connect research and training with practical application, technology transfer, and commercialisation of scientific outcomes. Through research commissioning mechanisms, the development of high-quality human resources, the promotion of technological innovation, and the active participation of citizens, a comprehensive science and technology ecosystem can be developed, creating a solid foundation for the Capital City's future development.

***4.2.5. Strengthening leadership in promoting domestic and international cooperation, expanding connections with major science and technology centres in Vietnam and around the world, and mobilising resources for science and technology development in conjunction with environmental protection***

*Firstly*, leading the expansion and enhancement of cooperation and connectivity mechanisms with major science and technology centres both domestically and internationally.

*Secondly*, leading the mobilisation, allocation, and effective utilisation of resources for science and technology development.

*Thirdly*, ensuring that science and technology development is closely integrated with environmental protection and sustainable development objectives.

***4.2.6. Strengthening inspection, supervision, review, and evaluation activities relating to science and technology development***

***4.2.6.1. Improving the quality, effectiveness, and efficiency of inspection and supervision in implementing science and technology policies, programmes, and projects***

*Firstly*, strengthening leadership in developing and implementing coordinated, focused, and priority-based inspection and supervision programmes and plans in the field of science and technology.

*Secondly*, strengthening leadership in developing and improving inspection and supervision mechanisms and procedures that are appropriate to the specific characteristics of science and technology activities.

*Thirdly*, reforming inspection and supervision methods through a closer integration of ex-ante and ex-post oversight, with practical outcomes serving as the primary measure of effectiveness.

***4.2.6.2. Fundamentally reforming and improving the quality and substantive nature of reviews, evaluations, and lesson-learning activities in science and technology leadership***

*Firstly*, enhancing the quality, scientific rigour, and substantive value of reviews and evaluations relating to the implementation of science and technology resolutions, programmes, and projects.



*Secondly*, placing greater emphasis on practical evaluations linked to the identification, replication, and dissemination of effective models, while contributing to the improvement of science and technology development mechanisms and policies.

*Thirdly*, closely integrating review and evaluation activities with theoretical development and the reform of the Hanoi Party Committee's leadership methods in the field of science and technology.

#### **Chapter 4 summary**

Chapter 4 forecast the opportunities and challenges affecting the Hanoi Party Committee's leadership in science and technology development in Hanoi in the coming period. Based on this analysis, the chapter identified five strategic directions and proposed six solutions that are systematic, practical, and focused on key breakthrough areas to strengthen the Hanoi Party Committee's leadership in science and technology development in the years ahead. These directions and solutions aim to enhance leadership effectiveness, remove institutional and operational bottlenecks, promote innovation, strengthen human resources and resource mobilisation, expand cooperation, and ensure that science and technology development contributes effectively to the sustainable development of the Capital City.

## CONCLUSION

The Hanoi Party Committee's leadership in science and technology development within the city encompasses all activities undertaken by the Hanoi Party Committee and its Standing Committee in disseminating and implementing the Party's guidelines, resolutions, directives, and conclusions on science and technology development; formulating and issuing resolutions, programmes, plans, and conclusions on science and technology development; directing and overseeing implementation; and conducting inspection, supervision, preliminary reviews, and final evaluations of these policies. The ultimate objective is to ensure that science and technology become a genuine foundation and driving force for socio-economic development, national defence and security, improvements in the quality of life of the people, and the comprehensive and modern development of the Capital City of Hanoi.

Over recent years, the Hanoi Party Committee has consistently attached great importance to science and technology development and has achieved many significant results. As a result, scientific research, technological application, innovation, digital transformation, the development of the science and technology market, and the cultivation of high-quality human resources in Hanoi have all recorded positive progress, making important contributions to the socio-economic development achievements of both Hanoi and the country. Nevertheless, the Hanoi Party Committee's leadership in science and technology development continues to face certain limitations and shortcomings in both leadership content and leadership methods. The Party Committee has implemented and continues to implement various measures to build on its achievements and address these weaknesses.

Strengthening the Hanoi Party Committee's leadership in science and technology development in the coming years requires the coordinated implementation of the following solutions. *Firstly*, enhancing awareness, responsibility, and innovative thinking among the Hanoi Party Committee, Party committee leaders, subordinate Party committees and organisations, cadres, and Party members regarding the strengthening of Party leadership in science and technology development. *Secondly*, reforming the formulation, issuance, and implementation of resolutions and decisions of the Hanoi Party Committee and its Standing Committee relating to science and technology development. *Thirdly*, focusing leadership on removing bottlenecks, fundamentally reforming science and technology management mechanisms, strengthening organisational structures, developing high-quality science and technology human resources, and increasing resources for science and technology development. *Fourthly*, strengthening coordination among local government, the Vietnam Fatherland Front, socio-political organisations, science and technology organisations, and the people of Hanoi in promoting science and technology development. *Fifthly*, strengthening leadership in expanding domestic and international cooperation, enhancing connections with major science and technology centres in Vietnam and around the world, and mobilising resources for science and technology development in conjunction with environmental protection. *Sixthly*, strengthening inspection, supervision, review, and evaluation activities and drawing lessons from practical experience in science and technology development.

## **AUTHOR'S PUBLICATIONS RELATED TO THE THESIS TOPIC**

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