Public Administration of the Digital Era and Its Effects on the Development of Livable Cities

Vichit Suradinkura[1], Nalinee Suradinkura[2] and Supakorn Suradinkura[3]
Doctor of Philosophy Program in Development Administration, Suan Sunandha Rajabhat University, Thailand[1,2]
Pathumthani University, Thailand[3]
Corresponding Author, E-mail: vichit.su@ssru.ac.th[1]

Received: 2025-2-9; **Revised:** 2025-3-30; **Accepted:** 2025-3-31

Abstract

This study aims to 1) to examine the level of development of livable cities; 2) to analyze the factors of Public Administration of the Digital Era influencing the development of livable cities; and 3) to propose digital-era public administration guidelines that contribute to the development of livable cities. Employing a mixed-methods approach, the research collected quantitative data from 400 government officials, state enterprise employees, and local administrative organization staff using a multi-stage sampling method, starting with stratified sampling by district, followed by purposive sampling of employees from local government units and state enterprises. The study also included qualitative insights from in-depth interviews, conducted using purposive sampling, with five executives from departments related to the management of local administrative organizations. The analysis utilized percentages, means, standard deviations, skewness, kurtosis, and multiple regression analysis to comprehensively assess variable relationships and model significance, and content analysis.

The findings highlight that 1) The level of livable city development in Pathum Thani Province is rated high across all five dimensions—social, economic, physical, environmental, and technological with an overall mean score of 4.03. 2) Regression analysis reveals that work skills, structure, and communication are key positive predictors across all dimensions. Leadership and organizational culture show mixed effects, with significant negative impacts in some areas. 3) The study proposes guidelines that integrate digital-era public administration practices to strengthen livable city development, offering practical insights for policymakers, public administrators, private sector stakeholders, and researchers to implement effective strategies in leveraging digital-era public administration.

Keywords: Public Administration, Digital-Era, Livable Cities

Introduction

Due to the complexity and diversity of livable city standards, developing such cities has increasingly captured global attention. Livable cities development trends focus on enhancing or maintaining the quality of life by meticulously planning urban infrastructures and fostering cities conducive to living through efficient developmental systems (Chen, 2020). A notable characteristic of a livable city is its ability to attract a disproportionate amount of global mobile resources such as skilled individuals, high-income earners, investors, innovators, entrepreneurs, and capital, which are recognized to contribute positively to economic growth, economic resilience, political in-fluence on a global scale, agenda-setting power, social and cultural innovation, and international lifestyles (Roka, 2019). As of 2023, Thailand has yet to rank among the top ten livable cities worldwide, indicating a need for further development. The adaptation of the livable city development concept from the World Health Organization's notion of "Healthy Cities" since 1994 in Thailand promotes urban community development across five pilot cities, focusing on top management in local and regional governments to lead the initiatives (World Health Organization, 2023).

Meanwhile, the contemporary society of the digital era since 2000 has significantly altered how citizens live and work. With faster access to information and limit-less connectivity, there is an expectation for cities to offer livability with comprehensive digital access, well-connected infrastructures, and technology-enhanced public services (Allam, 2020). Moreover, there is a demand for sustainable environments and community participation through digital channels. Thus, the trend of developing livable cities is now emphasizing the integration of new technologies efficiently and ensuring accessibility and participation for all, to prevent disparities and allow everyone to benefit from the advantages of livable cities in the digital era.

In Thailand, the transition into the digital era presents both opportunities and challenges. With the "Thailand 4.0" policy aiming for a fully digital economy and society, Pathum Thani Province, with its proximity to Bangkok and excellent infrastructure, becomes a focal point for technological and innovative investments (Thailand Government Public Relations Department, 2023). The development of livable cities in Pathum Thani includes enhancing public transportation systems for seamless connectivity with Bangkok, developing green spaces and environmentally friendly utilities, and providing access to various digital services such as education, health, and urban management. However, there remains a lack of research focusing specifically on digital-era public administration within the provincial context, particularly in relation to its role in livable city development. Therefore, this study focuses on exploring the level of livable city development, identifying influencing factors under digital-era public

administration, and proposing practical guidelines for improvement. These will provide insights into how management approaches in the digital era can be applied effectively, potentially guiding government strategy makers, private organizations, and researchers in livable city development initiatives.

Research Objectives

1. To examine the level of development of livable cities.
2. To analyze the factors of Public Administration of the Digital Era influencing the development of livable cities.
3. To propose digital-era public administration guidelines that contribute to the development of livable cities.

Literature Reviews

Concepts and Theories Related to Public Administration of the Digital Era

The shift to the digital era has required a reassessment of conventional public administration ideas to tackle the intricacies of contemporary government. Classical management theories are being integrated with contemporary digital practices to address the requirements of technology-driven and globalized contexts. Jiang, Cannella, Xia, and Semadeni (2020) emphasize the need of integrating conventional efficiency-driven techniques with novel, adaptable methodologies. This hybrid architecture enables public organizations to sustain operational efficiency while adapting to the fast technology changes influencing contemporary administrative landscapes. Their results highlight the need of strategic leadership to combine the use of traditional management frameworks with the adoption of creative paradigms for continued relevance in the twenty-first century. The human dimension in the areas of employee relations and leadership is the critical component of digital-era public administration. Likewise, Breevaart and Bakker (2018) examine the relationship between leadership behaviors and employee outcomes, highlighting that supportive leadership styles enhance employee engagement, well-being, and organizational success as correspond with the Human Relations Theory.

Additionally, the Contingency Theory offers valuable insights into digital-era governance by emphasizing the need for organizations to align their structures and strategies with societal expectations and technological advancements in the external environment. Thus, Alford and Head (2017) emphasize the necessity for adaptive decision-making frameworks to assist officials in adapting to changing digital environments. These frameworks foster innovation and keep public administration current in a fast-changing world. The New Public Management (NPM) paradigm is

another critical theoretical framework that emphasizes effectiveness, performance measurement, and citizen-centric service delivery. NPM has evolved in the digital age with the integration of e-governance and advanced technology.

Accordingly, digital technologies improve openness, accountability, and the efficiency of public services via real-time data sharing, improved communication, and citizen involvement in decision-making (Choi, 2016). The digital revolution in public administration emphasizes using technology to improve government while prioritizing accountability and inclusion. Also, Van Wart (2020) asserts that transformational leaders should inspire teams to adapt and innovate, enabling the public sector to meet the challenges of technology-driven governance. Therefore, public administration of the digital era refers to transforming public administration through digital technologies, ensuring secure integration, seamless collaboration, and equitable access for all stakeholders.

Concepts and Theories Related to Development of Livable Cities in the Digital Era

During the digital era, the concept of livable cities has garnered attention for its emphasis on the improvement of urban environments through technology, while also prioritizing sustainability and quality of life. Bibri and Krogstie (2020) have emphasized the potential of data-driven systems and modern technology to convert urban areas into more efficient and sustainable ecosystems. Also, Ahvenniemi et al. (2017) highlight the significance of digital innovations in developing inclusive urban environments, stressing the need for accessible and equitable technical solutions to close the digital gap and enhance social resilience. The use of these frameworks in public administration highlights the need of cultivating specialized competences, enhancing structural efficiency, and implementing efficient communication techniques. In the public sector, work skills, particularly those related to digital and analytical capabilities, are deemed essential for the development of innovative solutions to complex urban challenges. Moreover, cultivating soft skills like flexibility and cooperation improves collaboration and facilitates participatory urban government, enabling the co-creation of solutions with many stakeholders (Idzi & Gomes, 2022).

A well-organized structure is essential for ensuring that government in digital approach is both responsive and efficient. Well-structured designs enhance resource efficiency, prompt decision-making, and congruence with community requirements (Allam et al., 2022). Communication is equally vital, as it promotes cooperation among stakeholders, guarantees alignment of objectives, and aids in the effective execution of municipal policy. By establishing two-way communication channels, public administrations may guarantee that urban development programs are relevant, efficient, and responsive to people's interests (Viale Pereira

et al., 2021). Organizational Culture has a crucial role in attaining urban development objectives. Organizations are capable of effectively adapting to changes and challenges when they have a strong, unified culture that fosters coordination. Leadership enhances these initiatives, with visionary leaders acting as catalysts for dramatic change. Such leaders are crucial in harmonizing national policies, fostering trust, and facilitating cross-sector cooperation (Breevaart & Bakker, 2018).

Theoretical frameworks provide significant insights for enhancing the city's livability. Maslow's Hierarchy of Needs emphasizes the need to fulfill both fundamental services (e.g., water, transportation) and elevated goals, including societal welfare and cultural advancement (Maslow, 1943). Structural Functionalism provides a framework for comprehending the interactions among different social elements that contribute to stability and advancement in urban environments (Parsons, 1951). These ideas highlight the interaction between institutional processes and human requirements in promoting sustainable urban life. Cultural considerations significantly influence the development of livable cities. In Thailand, the community spirit inherent in social traditions corresponds well with the concepts of inclusive urban administration. According to Phusit Phukamchanoad (2015), participatory city's planning is fundamentally rooted in the Thai culture's emphasis on collective progress and mutual dependency. By amalgamating these cultural components with digital technologies, cities may guarantee that technological breakthroughs are used in manners that honor local values and promote comprehensive change.

In summary, the creation of livable cities in the digital era requires a comprehensive strategy that integrates technological advancement with sustainability, inclusiveness, and cultural awareness. Public administration is pivotal in this process, with competencies, organizational frameworks, communication, and leadership identified as essential catalysts. Therefore, the development of a livable city refers to enhancing the physical and social environment through community participation, efficient resource use, and collaborative efforts. It aims to improve quality of life with clean air, good health, efficient mobility, and strong leadership aligning with the province's urban development goals.

Therefore, based on the literature reviewed, the proposed research framework (Figure 1) builds on these foundational theories and integrates them with empirical insights to examine the interplay between digital-era public administration practices and the development of livable cities.

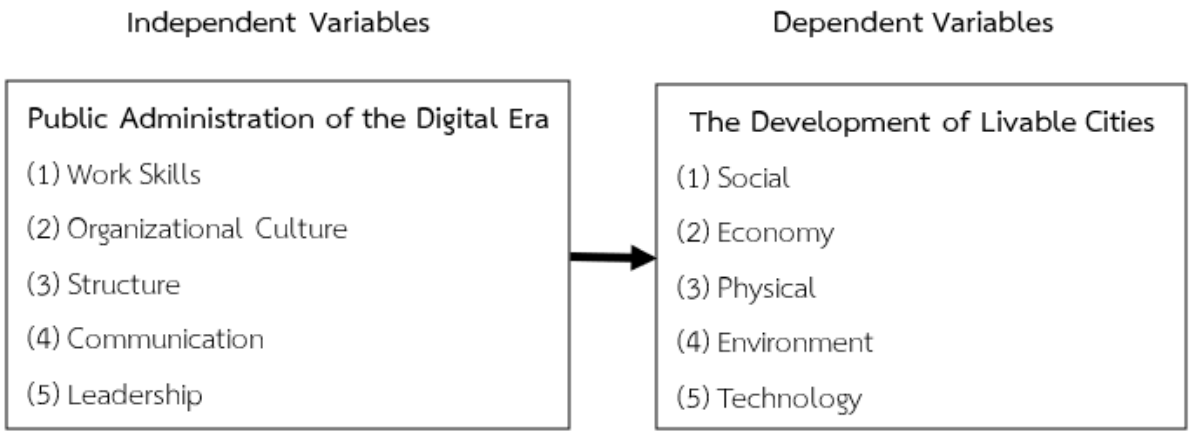

Figure 1 Research Framework

Research Methodology

Population and Sample

Quantitative Study

The study's population includes Government officials or employees of state enterprises, officials, and employees of local administrative organizations of Pathum Thani Province. The residents of Pathum Thani province are 1,219,199 individuals (Pathum Thani Provincial Statistical Office, 2023), the Yamane (1973) method for determining sample size is employed. This method is designed to achieve a 95% confidence level with a 5% margin of error. Applying these parameters, the calculated sample size required for the study is approximately 400 individuals. The sampling methodology implemented is Multi-Stage Sampling, beginning with Stratified Sampling, which divides the population by the seven districts of Pathum Thani. The second stage, Purposive Sampling, selects specific groups of employees from local governmental units and state enterprises.

Qualitative Study

The study includes in-depth interviews with five executives in departments related to the management of local administrative organizations as follows: (1) Governor of Pathum Thani Province; (2) Inspector-General, Ministry of Interior; (3) Executive of the Digital Economy Promotion Agency (DEPA); (4) Executive of the Digital Government Development Agency (Public Organization) (DGA); (5) Executive of the Pathum Thani Provincial Office of Social Development and Human Security, selected through purposive sampling to obtain expert insights into the development of livable cities. This qualitative sampling provides depth to the study, leveraging the expertise and experiences of these executives to augment the quantitative data. The research's validity is

assessed by triangulation, which ensures the reliability and completeness of the data through cross-verification of information sources, collection methods, and content analysis, enhancing the overall data integrity.

Research Tools

Quantitative Study

The primary tool for quantitative data collection is a questionnaire designed to align with the research objectives concerning the public administration of the digital era that affects the development of livable cities in Pathum Thani province. The questionnaire development was guided by three main criteria: alignment with the research goals, incorporation of relevant literature, and the application of the researcher's expertise to ensure clarity and specificity. Divided into three sections on participants' information, the opinion about public administration of the digital era and the development of livable cities in Pathum Thani province. The questionnaire was pilot tested with 30 government officials or employees of state enterprises, officials, and employees of local administrative organizations of Pathum Thani Province to validate its reliability, achieving a Cronbach's Alpha coefficient of 0.778-0.954, which indicates high internal consistency that ensures the questionnaire's suitability for data collection. This study follows established guidelines for interpreting standard deviation (SD), skewness, and kurtosis. Low SD (< 1.0) indicates minimal variation, while high SD (≥ 1.0) reflects greater diversity (Field, 2013). Skewness values between -0.5 and +0.5 suggest symmetry, with values > +0.5 indicating right-skewness and < -0.5 indicating left-skewness (Tabachnick & Fidell, 2013). Kurtosis values between -1 and +1 indicate a normal distribution, while values > +1 and < -1 denote heavy-tailed (leptokurtic) and light-tailed (platykurtic) distributions, respectively (Field, 2013).

Qualitative Study

In-depth interviews are utilized with five executives in departments related to the management of local administrative organizations to capture a broad range of perspectives from the samples, enriching the quantitative data with deeper insights into the development of livable cities in Pathum Thani, including social, economic, physical, environmental, and technological dimensions. The interview questions were designed flexibly to facilitate comprehensive discussions, guided by a structured outline that incorporates extensive literature reviews and the researcher's expertise to ensure relevance and depth. To uphold the data's accuracy and reliability, the interviews undergo a rigorous validation process, including expert content review and triangulation methods, which cross-verify the data's completeness and consistency through content analysis, enhancing the study's overall validity and reliability.

Data Collection

Data collection for the quantitative study involved distributing questionnaires to a targeted group of 400 government officials, employees of state enterprises, and officials and employees of local administrative organizations in Pathum Thani Province from January to March 2023 across all seven districts of the province. For the qualitative study encompassed both secondary and primary data. Primary data were collected in March 2023 via in-depth interviews with five executives in Pathum Thani Province. The interviews were carefully prepared and executed with emphasis on the accuracy and reliability of the results. Secondary data were collected from books, scholarly publications, reports, and digital media, to furnish a thorough backdrop for the investigation.

Data Analysis

Quantitative data were analyzed using a descriptive analytical approach to gauge general statistics about the sample group and variable levels, interpreting results based on Best's criteria (1997). This process involved calculating averages to measure the degree of agreement or disagreement, with scores ranging from 1.00 (least) to 5.00 (most). Additionally, percentages, means, and standard deviations were used to analyze participants' demographic information and opinions on public administration of the digital era and development of livable cities in Pathum Thani province. Additionally, multiple regression and Pearson's correlation coefficient were applied to examine the effects of various independent variables on these areas.

Qualitative data analysis followed a structured approach grounded in content analysis. The process began with document research and in-depth interviews to collect diverse opinions and suggestions. Data were then organized and refined to ensure clarity and relevance. The analysis involved categorization, reduction of redundant information, and evaluation of consistency and conceptual connections among data points. Through content analysis, inductive conclusions were drawn to highlight both commonalities and distinctions within the data, providing a nuanced understanding of the concepts studied. These qualitative insights were subsequently integrated to enhance and corroborate the quantitative findings, enriching the overall analysis.

Results

Quantitative Results

The respondents profile reveals that the majority were female (76%), with male respondents constituting (24%). Most participants (73.75%) were between the ages of 20 and 40, while (16.75%) were aged 41 to 60, and (10%) were aged 61 and above. In terms of educational

qualifications, (78%) held a bachelor's degree, and (22%) had education levels higher than a bachelor's degree. Regarding marital status, (76.75%) of respondents were married, followed by (21.25%) who were single, and (2%) who were widowed or divorced. Professionally, nearly half (48.5%) were government officials, (45.5%) were employees of state enterprises, and (6%) were employees of local administrative organizations. This demographic composition highlights the diversity of participants, providing a representative sample for understanding the interplay between public administration and the development of livable cities.

The findings on Public Administration of the Digital Era (Table 1), the overall level is also rated high ($\bar{X}$ = 4.03). Among the components, Work Skills is rated the highest ($\bar{X}$ = 4.26), followed by Structure ($\bar{X}$ = 4.04), Leadership ($\bar{X}$ = 4.00), Organizational Culture ($\bar{X}$ = 3.95), and Communication ($\bar{X}$ = 3.92). As Table 1 demonstrates, the overall level of Public Administration of the Digital Era is high. When analyzed by individual components, all independent variables are also rated at a high level. Regarding the Development of Livable Cities (Table 2) reveal that the overall level of development is rated high ($\bar{X}$ = 4.03). Among the components, the highest-rated aspect is Physical ($\bar{X}$ = 4.15), Technology ($\bar{X}$ = 4.12), followed by Social ($\bar{X}$ = 3.97), Environment ($\bar{X}$ = 3.97), and Economy ($\bar{X}$ = 3.94). Similarly, Table 2 shows that the overall level of The Development of Livable Cities is high. A detailed examination reveals that all independent variables within this category are consistently rated at a high level.

Table 1 Findings on the Variable Public Administration of the Digital Era

Independent Variable	Mean	SD	Level
Work Skills	4.26	.673	High
Organizational Culture	3.95	.525	High
Structure	4.04	.492	High
Communication	3.92	.579	High
Leadership	4.00	.622	High
Total	**4.03**	**.459**	**High**

Table 2 Findings on the Variable the Development of Livable Cities

Dependent Variable	Mean	SD	Level
Social	3.97	.507	High
Economy	3.94	.506	High
Physical	4.15	.473	High
Environment	3.97	.592	High
Technology	4.12	.582	High

Total	**4.03**	**.614**	**High**

Table 3 Correlation Coefficients Between Independent and Dependent Variables

Correlations

	X_1	X_2	X_3	X_4	X_5
X_1	1				
X_2	.744**	1			
X_3	.775**	.769**	1		
X_4	.753**	.859**	.766**	1	
X_5	.743**	.823**	.661**	.823**	1

**Correlation is significant at the 0.01 level (2-tailed)

From Table 3, the Pearson correlation analysis between Public Administration of the Digital Era and The Development of Livable Cities reveals a statistically significant positive relationship at the 0.01 level. The correlation coefficients range from .661 to .859, indicating a moderate relationship suitable for regression analysis.

Table 4 Summary of Regression Analysis for Public Administration of the Digital Era and the Development of Livable Cities

Dependent Variable	Independent Variable	B	Beta	t	Sig.	R^2 (Adj. R^2)	F-test
Social	Communication	.640	.732	8.737	.000*	.455 (.448)	565.452
	Structure	.483	.469	6.843	.000*		
	Leadership	.140	.172	2.296	.000*		
	Organizational Culture	-.682	-.706	-8.395	.000*		
Economy	Structure	.595	.578	15.732	.000*	.843 (.841)	158.959
	Leadership	.180	.221	5.502	.000*		
	Communication	.154	.176	3.923	.000*		
	Work Skills	.067	.090	2.464	.014*		
Physical	Leadership	.308	.049	6.334	.000*	.601 (.594)	360.344
	Work Skills	.281	.399	6.893	.000*		
	Communication	-.117	-.143	-1.995	.047*		
Environment	Communication	.825	.807	10.990	.000*	.581 (.576)	182.295
	Work Skills	.382	.434	7.296	.000*		
	Structure	.356	.296	4.919	.000*		
	Leadership	-.382	-.401	-6.117	.000*		
	Organizational Culture	-.547	-.484	-6.567	.000*		
Technology	Work Skills	.694	.801	28.106	.000*	.904 (.902)	175.580
	Structure	.420	.355	12.319	.000*		

Dependent Variable	Independent Variable	B	Beta	t	Sig.	R^2 (Adj. R^2)	F-test
	Communication	.003	.000	.007	.000*		
	Organizational Culture	-.224	-.201	-5.691	.000*		
Overall	Work Skills	.415	.608	12.394	.000*	.715 (.711)	387.883
Development of	Structure	.228	.245	4.939	.000*		
Livable Cities	Communication	.140	.176	2.910	.004*		
	Organizational Culture	-.169	-.193	-3.175	.002*		

*Statistically significant at $p < 0.05$

The regression analysis highlights the influence of Public Administration of the Digital Era on The Development of Livable Cities across its dimensions. For the Social dimension, Communication (β = .732) and Structure (β = .469) emerge as significant predictors, explaining 45.5% of the variance. In the Economy dimension, four factors significantly influence development: Structure (β = .578), Leadership (β = .221), Communication (β = .176), and Work Skills (β = .09). These factors collectively account for 84.3% of the variance, indicating a strong relationship between administrative efficiency and economic outcomes.

For the Physical dimension, Leadership (β = .405), Work Skills (β = .399), and Communication (β = −.143) are significant, explaining 60.1% of the variance. This reflects the importance of effective leadership and technical skills, though communication presents a minor negative impact. The Environment dimension is most influenced by Communication (β = .807) and Work Skills (β = .434), while Organizational Culture (β = −.484) and Leadership (β = −.401) demonstrate significant negative effects. These factors together explain 58.1% of the variance, suggesting that while strong communication improves environmental outcomes, cultural and leadership issues may hinder progress.

For the Technology dimension, Work Skills (β = .801) and Structure (β = .355) are key contributors, explaining 90.4% of the variance. This underscores the critical role of technical competencies and organizational efficiency in driving technological advancement. Lastly, for Overall Development, significant predictors include Work Skills (β = .608), Structure (β = .245), Communication (β = .176), and Organizational Culture (β = −.193). These factors collectively explain 71.5% of the variance, reinforcing the essential role of technical and structural efficiency while identifying challenges in organizational culture.

The results indicate that Communication, Work Skills, and Organizational Structure are consistently significant predictors across multiple dimensions of livable city development. Organizational Culture and Leadership exhibit both positive and negative effects, depending on

the specific dimension. The models' explanatory power (R^2 between 45.5% and 90.4%) emphasizes the crucial role of public administration components in driving the development of livable cities.

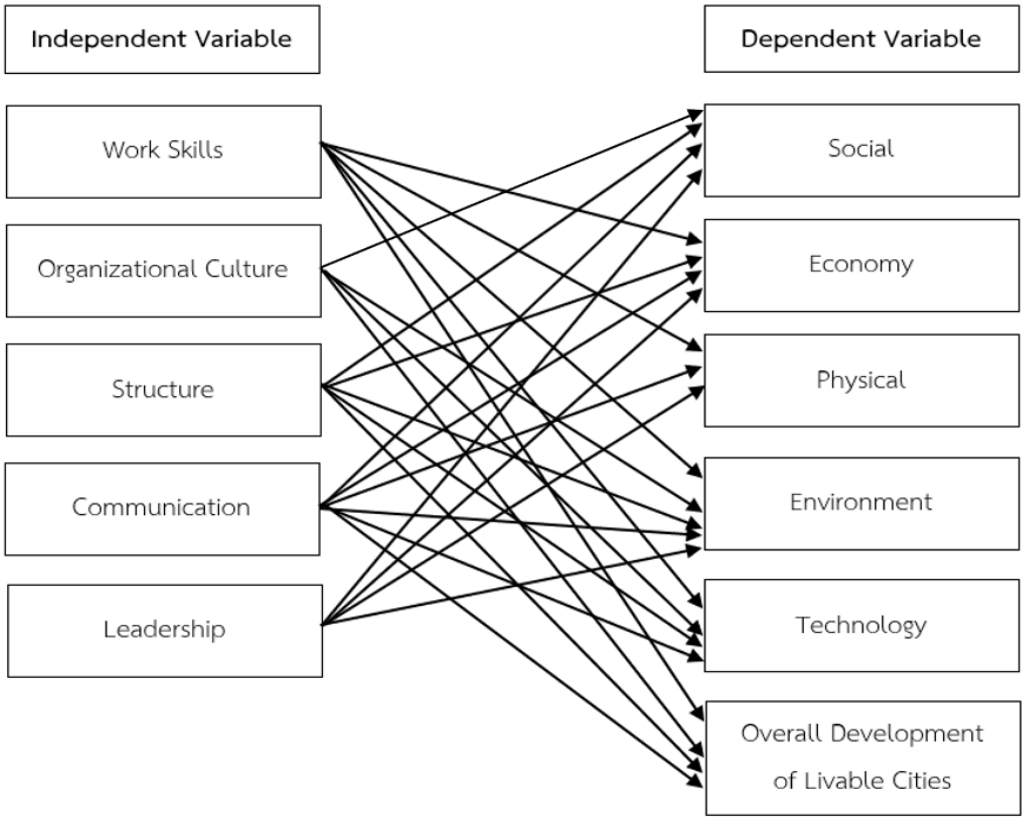

Figure 2 Relationships Between Public Administration of the Digital Era and the Development of Livable Cities

As a result, Figure 2 presents the framework illustrating the influence of Public Administration of the Digital Era on The Development of Livable Cities. The findings highlight that Work Skills, Organizational Structure, and Communication are the most significant factors, positively influencing key dimensions such as Social, Economy, Physical, Environment, and Technology. While Work Skills and Organizational Structure drive advancements in technology, infrastructure, and economic outcomes, Communication plays a critical role in improving social and environmental aspects. Conversely, Organizational Culture and Leadership show varying impacts, including negative effects in specific areas. These results underscore the need to prioritize

skills development, structural efficiency, and effective communication to support livable city development in the digital era.

Qualitative Results

The qualitative analysis of five executives in departments related to the management of local administrative organizations, the interviews highlight key elements of Public Administration of the Digital Era that influence the Development of Livable Cities. The executives emphasize the importance of effective policies and infrastructure management to support urban development. Priorities include traffic management and public transportation using smart technologies to reduce congestion, efficient management of water and electricity systems to minimize resource loss and leveraging technology for public health monitoring. Additionally, urban planning must involve community participation through collaboration among government agencies, the private sector, and citizens, supported by digital data for effective decision-making.

In terms of Work Skills, the findings indicate that developing digital and analytical competencies is critical for public sector employees. Experts stress the importance of fostering soft skills, adaptability, and open mindedness to drive collaboration and innovation. Skilled personnel contribute to improving quality of life, enhancing the environment, supporting sustainable economic growth, ensuring efficient and responsive governance in urban settings. Thus, Organizational Culture plays a vital role in uniting employees and aligning their behaviors with organizational goals. A strong culture enhances collaboration, improves operational efficiency, and allows organizations to adapt to changes effectively. Shared objectives within organizations foster unity, creating a foundation for achieving urban development goals.

The executives also highlight the impact of Organizational Structure on the development of livable cities. Well-designed and flexible structures enable efficient resource management, faster decision-making, and improved responsiveness to community needs. Clear hierarchies and appropriate delegation of authority ensure that urban development projects are implemented successfully, supporting evolving urban contexts. The findings further emphasize the importance of Communication as a critical factor in fostering collaboration among stakeholders. Two-way communication between government agencies, the private sector, and citizens promotes mutual understanding, facilitates policy implementation, and ensures alignment of development goals. Effective communication minimizes redundancies, optimizes resource use, and ensures that development initiatives meet community needs efficiently.

Lastly, Leadership is identified as a key driver of sustainable livable city development. Visionary leaders are essential for directing policy, allocating resources, and fostering inter-agency cooperation. Provincial leaders play a significant role in integrating national policies with local

contexts, inspiring trust, and ensuring effective execution of projects. Collaborative leadership aligns efforts and resources toward the creation of livable cities. The findings collectively underline the need for targeted improvements in governance practices, emphasizing digital competencies, collaborative culture, efficient organizational structures, and inclusive communication to achieve sustainable urban development. These insights provide a comprehensive framework for advancing Pathum Thani as a livable city in the digital era.

Collaboration and adaptability are encouraged by a strong organizational culture, which concentrates efforts on shared objectives. In addition, an effective organizational structure promotes effective resource management and operational efficiency, which enables more prompt responses to public requests and supports the development of infrastructure. Competent communication practices enhance the exchange of information between the public and government organizations, guaranteeing that public services live up to citizen expectations. Also, leadership emerged as a crucial driver, with visionary leaders guiding policy direction and project execution, fostering collaboration and public trust. The interviewed executives also identified Pathum Thani's strategic location, industrial base, and educational institutions as assets to support innovation and sustainable development. Recommendations include promoting waste management and recycling, increasing public green spaces, advancing sustainable tourism, and encouraging citizen participation in urban planning.

Discussion

This study underscores the prospective influence of Public Administration in the Digital Era on the development of livable cities. The findings provide actionable guidelines for integrating digital-era public administration practices, emphasizing their potential to enhance various aspects of urban development. The results establish a foundation for the integration of digital-era public administration practices, emphasizing their potential to improve a variety of aspects of livable city development. Through effective leadership, organizational culture, work skills, communication, and organizational structure, these approaches can make a substantial contribution to the enhancement of the cities in the areas of social, economic, physical, and environmental aspects.

The crucial role of occupational skills in facilitating urban growth shows a significant result. As in the digital era, it is essential to educate public sector staff with digital and analytical competencies. Enhancing flexibility, interpersonal skills, and teamwork promotes cooperation and creativity in public enterprises. Skilled and well-trained personnel may connect technical breakthroughs with efficient administration, enhancing infrastructure, economic initiatives, and public involvement. The report emphasizes the need to invest in continuous training programs

and promoting knowledge-sharing across sectors to equip the workforce for the challenges of instantly changing urban settings. Furthermore, the structure of public organizations in promoting effective governance and flexible framework could enhance resource management, facilitate decision-making, and improve response to the residents' requirements. These institutions facilitate the efficient implementation of development projects, guaranteeing they are timely and in accordance with community interests. The study highlights the advantages of well-defined hierarchies and suitable delegation of authority, which improves governance efficiency, particularly in resource-limited contexts. The adaptable organizational structures in Pathum Thani serve as a valuable model for other communities seeking to reconcile efficiency with flexibility.

Accordingly, communication also emerges as a fundamental component of effective urban governance. Likewise, effective communication between government officials, the business sector, and residents can reduce misconceptions and result in harmonizing common goals. Involving communities in city planning and policy dialogues guarantees that development projects align with local aspirations. Furthermore, effective communication strategies create transparency and trust while enhancing project execution. This minimizes redundancy, maximizes resource efficiency, and guarantees that public services correspond to the requirements of inhabitants. Organization culture is a crucial element in promoting sustainable, livable development. Strong organizational cultures that prioritize common goals, teamwork, and flexibility ensure that employee endeavors align with overarching goals. The research emphasizes that promoting creativity and diversity within an organization might yield inventive solutions for persistent urban challenges. Organizations that prioritize learning and adaptability are more proficient in adjusting to emerging technology and evolving conditions in the digital era.

The study identifies leadership as a critical factor in the direction of municipal development efforts. Leaders possessing a definitive vision who can synchronize national policies with local requirements, effectively distribute resources, and promote inter-agency cooperation are essential in developing sustainable environments. Collaborative leadership promotes public confidence, harmonizes diverse initiatives, and encourages collective accountability. Effective leadership has been instrumental in the advancement of programs such as progressive urban design, optimal resource management, and intelligent transportation systems. Cities can navigate the complexities of the digital era while promoting sustainability and fairness by emphasizing strategic leadership. The respondents' profiles are also underscored by the results, which demonstrate that the progressive attitudes toward urban governance and digital transformation in Pathum Thani are influenced by the predominance of a youthful, educated workforce.

This observation emphasizes the importance of organizational culture in the promotion of innovation and adaptability in public administration.

These results are consistent with recent research on the digital era of public administration. For instance, Idzi and Gomes (2022) conduct a thorough examination of the effects of the digital era on government strategies and public services, emphasizing the significance of governance models in the digital era. Additionally, Agostino et al. (2021) conducted research that analyzes how the COVID-19 pandemic has accelerated digital transformation in public service delivery, underscoring the necessity of effective communication and organizational adaptability in the digital era. In addition, Neumann et al. (2022) conducted a study that identifies critical success factors for digital transformation in public sector organizations, emphasizing the importance of organizational structure and leadership in achieving successful outcomes.

In summary, the investigation provides practical guidelines for the integration of Public Administration of the Digital Era into livable development practices. The findings underscore the necessity of a coordinated strategy that achieves a balance between human-centric governance and technological innovation, thereby enabling other cities to implement comparable strategies in the digital era. Pathum Thani Province is in an advantageous position to enhance the livable environment by leveraging the identified factors of Work Skills, Structure, Communication, Leadership, and Organizational Culture and serving as a model for other cities that aspire to accomplish comparable objectives.

Conclusions

In conclusion, this investigation underscores the potential of Public Administration of the Digital Era in the advancement of the development of livable cities. The results emphasize the critical role of Work Skills, Structure, Communication, Leadership, and Organizational Culture in facilitating improvements in the social, economic, physical, and environmental. These findings are consistent with recent research that underscores the significance of strategic leadership, adaptability, and governance models in the context of digital era. Pathum Thani Province is in a prime position to improve its viability and sustainability by incorporating these factors into urban development practices. This serves as a model for other cities that are interested in adopting similar strategies in the digital era.

Recommendations

Policy Recommendations

1. Pathum Thani Province executives might contemplate allocating responsibilities based on individual competencies, as well as encouraging participation in planning, improvement, and assessment processes to ensure compliance with corporate policies.

Practice Recommendations

1. Investment from the private sector in establishing a smart, sustainable urban environment should be encouraged, with a focus on technical developments and collaborative commercial opportunities to drive urban improvement.

2. Scholars might contemplate allocating responsibilities based on individual competencies, as well as encouraging participation in planning, improvement, and assessment processes to ensure compliance with corporate policies.

Research Recommendations

1. Further research into livable city development can focus on adaptive coordinating mechanisms in order to coordinate with urban development programs with rapid technology change.

References

Agostino, D., Arnaboldi, M., & Lema, M. D. (2021). New development: COVID-19 as an accelerator of digital transformation in public service delivery. *Public Money & Management, 41*(1), 69–72.

Ahvenniemi, H., Huovila, A., Pinto-Seppä, I., & Airaksinen, M. (2017). What are the differences between sustainable and smart cities?, 60, 234-245.

Allam, Z. (2020). Seeking liveability through the Singapore model. *In Urban governance and smart city planning: Lessons from Singapore.* Emerald Publishing Limited.

Allam, Z., Sharifi, A., Bibri, S. E., & Chabaud, D. (2022). Emerging trends and knowledge structures of smart urban governance. *Sustainability, 14*(9), 5275.

Alford, J., & Head, B. W. (2017). Wicked and less wicked problems: a typology and a contingency framework. *Policy and society, 36*(3), 397-413.

Best, J. W. (1997). *Research in education* (3rd ed.). Prentice-Hall.

Bibri, S. E., & Krogstie, J. (2020). Smart sustainable cities of the future: An extensive interdisciplinary literature review. *Sustainable Cities and Society, 53*, 101933.

Breevaart, K., & Bakker, A. B. (2018). Daily job demands and employee work engagement: The role of daily transformational leadership behavior. *Journal of Occupational Health Psychology, 23*(3), 338–349.

Chen, Z. (2020). Evaluating Sustainable Liveable City via Multi‐MCDM and Hopfield Neural Network. *Mathematical Problems in Engineering, 2020*(1), 4189527.

Choi, I. (2016). Digital era governance: IT corporations, the state, and e Government. *International Review of Public Administration, 21*(4), 359–361.

Cochran, W. G. (1977). *Sampling techniques* (3rd ed.). Wiley.

Field, A. (2013). *Discovering Statistics Using IBM SPSS Statistics* (4th ed.). SAGE Publications.

Idzi, R., & Gomes, R. C. (2022). Digital governance: Government strategies that impact public services. *Global Public Policy and Governance, 2*(4), 427–452.

Jiang, Y., Cannella, A. A., Xia, J., & Semadeni, M. (2020). Strategic leadership in the twenty-first century: Integrating the traditional corporate strategies with changing management paradigms. *Strategic Management Journal, 41*(12), 2174-2199.

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*(4), 370-396.

Neumann, O., Guenther, E., & Schoenherr, T. (2022). Digital transformation and its role in public sector organizations: Identifying critical success factors. *Government Information Quarterly, 39*(2), 101680.

Parsons, T. (1951). *The social system.* Free Press.

Pathum Thani Provincial Statistical Office. (2023). *Pathum Thani provincial statistics report 2024.* Retrieved from https://pathumthani.nso.go.th/reports-publications/ebook/44-2567.html

Phusit, P. (2015). *Innovation, development paths, and indigenous wisdom.* Bangkok: Deewit.

Roka, K. (2019). Liveable city: Towards economic, social, cultural, and environmental well-being. In W. Leal Filho, A. Marisa Azul, L. Brandli, P. Gökcin Özuyar, & T. Wall (Eds.), *Sustainable cities and communities (Encyclopedia of the UN Sustainable Development Goals).* Springer, Cham.

Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate Statistics* (6th ed.). Pearson.

Thailand Government Public Relations Department. (2023). *Plan for driving Thailand with the BCG model, 2021-2027.* Retrieved September 9, 2024, from https://www.thailand.go.th

Van Wart, M. (2014). *Leadership in public organizations: An introduction.* Routledge.

Viale Pereira, G., Parycek, P., Falco, E., & Kleinhans, R. (2021**).** Smart governance in the context of smart cities: A literature review. *Information Polity, 26*(3), 203–220.

World Health Organization. (2023). *Thailand recognizes local governments for achieving healthy cities goals. World Health Organization.* Retrieved September 9, 2024, from https://www.who.int/thailand/news/detail/28-08-2023-thailand-recognizes-local-governments-for-achieving-healthy-cities-goals

Yamane, T. (1973). *Statistics: An Introductory Analysis* (3rd ed.). New York, NY: Harper and Row.