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| RESEARCH ARTICLE

The Effect of Business Concept Intervention to the Implementation of Digital Governance in Local Government

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| ABSTRACT
This study investigated the effect of business concept intervention on the implementation of digital governance within local government units in Guangdong, China. The purpose of this study is to recognize the increasing importance of digital governance for improving government efficiency, transparency, and citizen engagement. Quantitative research design is utilized and the respondents were 500 government employees from various departments across Guangdong's local government units. The data were collected using a structured questionnaire for measuring the understanding of employees in business concepts, their attitudes toward digital governance, and the extent of digital governance implementation within their respective units. Descriptive statistics, correlation, and regression, were employed to evaluate the relationship between business concept intervention and digital governance outcomes. There is a significant positive effect of business concept intervention on the successful implementation of digital governance practices as indicated in the results, this highlighted that employees with greater familiarity and competence in business principles are more adept at adopting and leveraging digital tools for governance purposes. The study also discovered that enhanced business concept understanding can facilitate better strategic alignment, decision-making, and collaboration in digital governance initiatives. These findings underscored the crucial role of capacity-building programs focused on business knowledge to support digital transformation in the public sector. The research contributed valuable insights for policymakers and local government administrators aiming to accelerate digital governance through targeted employee development strategies.

| KEYWORDS

Business concept intervention, digital governance, local government

| ARTICLE INFORMATION

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1. Introduction

Digital governance is the emerging key component in the public sector for enhancing governmental efficiency, transparency, and citizen participation in glocal scope (Smith & Lee, 2021), In order to increase administrative effectiveness and optimize service delivery, Chinese local governments have made the adoption of digital governance frameworks a higher priority (Zhang & Chen, 2023). As such, Guangdong province, one of China's most economically active areas, is a great example of this trend because it has put a lot of money into digital infrastructure and e-government systems (Li et al., 2022). However, a growing number of people are realizing that digital governance cannot succeed without the proper technology as well as the abilities and mindsets of the public servants who must implement these novel concepts (Wang & Liu, 2024). In order to connect digital tools with good governance, there is a need for a strong interest in business concept interventions. Examples are training programs that teach government workers basic business skills and how to think strategically.

In spite of technological advancement, local governments still have a lot of work to do to ensure total advantage of digital management. One of the major problem is that government officials do not know much about business, which makes it hard for them to connect digital projects with strategic goals and manage digital transformation well (Chen & Huang, 2023). There are studies showing that many government workers do not know basic business concepts like how to create value, improve processes, and measure performance. This makes it tougher for digital governance projects to expand and work well (Yu et al., 2021). Furthermore, resistance to change, entrenched bureaucratic attitudes, and insufficient capacity-building initiatives impede the effective implementation of digital governance models (Zhao & Sun, 2024). These concerns are especially important in rapidly changing economic areas like Guangdong, where digital governance needs to quickly respond to complex stakeholder needs and new trends in innovation.

The difficulties present significant opportunities to enhance the execution of digital governance via focused business idea interventions. Liu and Zhang (2023) say that teaching government workers business principles can help them understand how to manage resources, provide customer-centered services, and evaluate strategic success, all of which are important for running digital governance projects effectively. These kinds of initiatives have helped workers in Chinese cities become better at dealing with change, accepting new ideas, and working collaboratively across departments (Huang et al., 2024). It's also possible for more flexible, responsive, and results-driven government to be achieved by combining business knowledge with digital skills (Wang & Liu, 2024) as this aligns administrative efforts with larger social and economic goals. These actions make it clear for Guangdong's local governments, which are under a lot of pressure to stay competitive and earn the public's trust, how to improve digital governance frameworks.

This study empirically investigates the impact of business concept interventions on the implementation of digital governance within local government in Guangdong, China, thereby contributing to the expanding body of research in this area. It transcends technology or policy assessments by emphasizing human capital development as a crucial determinant of digital governance success. This research incorporates perspectives from business education into the discourse on public sector digital transformation, in accordance with the recommendations of public administration experts like Zhang and Chen (2023) and Wang and Liu (2024). The study, based on a survey of 500 government employees, presents substantial evidence that improved business acumen leads to better digital governance outcomes, providing actionable recommendations for policymakers and administrators aiming to enhance digital innovation via workforce development. The results have broader implications for analogous local governments in China and beyond, underscoring the essential importance of capacity building in sustainable digital transformation and public sector innovation.

1.1 Business Concept Intervention

A number of business acumen topics, such as performance measurement, customer-centric management, process optimization, and strategic planning, are taught in government-run training and development programs (Liu and Zhang, 2023). These efforts are a reaction to calls from the public administration sector, say Wang and Liu (2024), which stress the need to train workers to adapt quickly to technological change.

Huang et al. (2024) conducted research that provides empirical evidence for specialized business idea training programs. Their findings indicate that government personnel's problem-solving abilities, innovation integration, and collaboration capabilities are improved. They argue that business acumen fosters a more proactive approach to technology utilization by incorporating innovation into corporate strategy, rather than viewing technology implementation as solely a technical endeavor.

According to Chen and Huang (2023), several local governments experience challenges with strategy alignment and change management during the implementation of digital governance, which are predominantly due to a lack of business literacy among personnel. Their work encourages interventions that foster a business mindset, enabling employees to critically evaluate digital investments, anticipate hazards, and improve workflows.

1.2 Digital Governance in Local Government Context

Digital governance refers to the utilization of information and communication technologies (ICT) to enhance government operations and citizen interactions. It encompasses e-government services, open data initiatives, digital transparency, and participatory tools (Zhang and Chen, 2023).

Local governments in China have made significant advancements in digital administration as part of statewide modernization initiatives (Li et al., 2022). Guangdong province demonstrates rapid digital infrastructure development and governmental efforts to extensively implement digital governance. However, the pace and caliber of implementation vary significantly across jurisdictions and agencies (Yu et al., 2021).

Zhao and Sun (2024) recognize organizational inertia and resistance as significant barriers to the implementation of digital governance, attributing this reluctance partly to inadequate staff training and a deeply rooted bureaucratic culture. Their findings reveal a substantial need for skill development, including the refinement of business ideas, to overcome institutional obstacles.

Liu and Zhang (2023) also give case studies that show how local Chinese governments can achieve more sustainable and user-centered digital governance when they combine business idea training with ICT adoption. They stress the importance of training in improving strategic ability, making it easier for departments to work together, and creating innovation ecosystems.

1.3 Impact of Business Concept Interventions on Digital Governance

More and more people are paying attention to how business idea intervention and digital government are coming together. A study by Wang and Liu (2024) looked at different Chinese cities and found that business-oriented training is a strong indicator of good digital governance implementation. This includes better service delivery, more openness, and happier citizens. Their study shows that people have two important roles to play: they need to be able to master digital tools and make sure that digital governance processes are built into strategic frameworks.

Huang et al. (2024) also found that business concept treatments lead to a shift in culture from rigid, procedure-based administration to flexible, strategic management. This fits well with the agile principles that make digital governance work well.

Chen and Huang (2023) also say that teaching workers business concepts helps them handle digital change better, encouraging resilience and innovation, which are important for developing digital governance in uncertain environments over time.

1.4 Challenges and Responses in Local Governments

Although there are obvious advantages, there are still difficulties. According to Yu et al. (2021), a significant number of local government units, particularly those located in rural areas and cities of a medium size, do not have sufficient resources to conduct comprehensive business idea programs. This lack of resources restricts the accessibility of training and makes it more difficult to effectively disseminate digital governance.

In addition, Zhao and Sun (2024) identify cultural difficulties, which include ingrained bureaucratic attitudes and fragmented organizational structures. These challenges decrease the impact of business concept initiatives if they are not accompanied with wider institutional reforms.

Peer coaching and leadership mentoring are examples of responses that have been proposed in response to these problems (Liu & Zhang, 2023; Huang et al., 2024). Blended training methods combine online instructional modules with in-person workshops. Furthermore, according to Wang and Liu (2024), a number of pilot projects are with the intention of incorporating business concepts into frameworks for continuous professional development that are related to performance measures.

1.5 Research Objectives

The study aimed to determine the effect of business concept intervention to the implementation of digital governance in local government of Guangdong, China.

The specific objectives of the research are the following:

1. To assess the current level of business concept understanding among local government employees involved in digital governance.

2. To evaluate the extent of digital governance implementation within local government units.

3. To examine the impact of business concept intervention on local government employees' attitudes toward digital governance.

4. To analyze how business concept training influences employees' digital governance skills, including strategic planning, process optimization, and service delivery.

5. To provide recommendations for policymakers and local government administrators on integrating business concept interventions to enhance digital governance.

2. Methodology

2.1 Research Design

This study utilized a quantitative research design to systematically quantify the relationships between business concept interventions and digital governance implementation among local government employees. The quantitative approach allowed for objective measurement and statistical analysis of variables such as business concept understanding, attitudes toward digital governance, digital governance implementation levels, and skill development related to governance tasks.

2.2 Respondents and Sampling

The respondents comprised 500 government employees drawn from various departments across Guangdong's local government units. A stratified random sampling technique was used to ensure representative coverage of different departments, job roles, and geographic locations within the province. This sampling method enhanced the generalizability of the findings across diverse local government contexts in Guangdong.

2.3 Data Collection Instrument

Data collection was conducted via a structured questionnaire designed to measure three primary constructs:

Part I. Understanding Business Concept
Assessing employees' knowledge of key business principles such as strategic planning, process optimization, customer orientation, and performance management.

Part II. Attitudes Toward Digital Governance
Measuring perceptions, motivations, and openness to adopting digital governance initiatives.

Part III. Digital Governance Implementation Extent
Examining the degree to which employees' units have adopted digital tools, e-services, and transparency mechanisms.

The questionnaire employed Likert-scale items, and self-assessment skill indicators, ensuring comprehensive coverage of the research objectives.

2.4 Data Analysis

The data were properly collected and were analyzed using:

Descriptive Statistics. In summarizing the respondents' characteristics and central tendencies of business concept understanding, attitudes, and digital governance implementation levels.

Correlation Analysis. In examining the relationships between business concept knowledge and digital governance variables such as attitudes and implementation extent.

Regression Analysis. In determining the predictive effect of business concept intervention on digital governance implementation outcomes, controlling for demographic factors.

Statistical analyses were performed using software such as SPSS to ensure accuracy and reliability.

2.5 Ethical Considerations

The study adhered to ethical standards including voluntary participation, informed consent, and confidentiality of responses. Data were handled anonymously and securely.

3. Results and Discussions

This study surveyed 500 government employees from multiple departments within local government units in Guangdong, China, to investigate the effect of business concept intervention on the implementation of digital governance. The analysis focused on the following dimensions aligned with the research objectives: understanding of business concepts, attitudes toward digital governance, digital governance implementation levels, and digital governance-related skills.

1. *Business Concept Understanding*. Descriptive statistics showed that respondents have a moderate to high level of understanding of core business concepts. On a 5-point Likert scale, the mean score for overall business concept understanding was 3.82 (SD = 0.61). Respondents demonstrated the greatest familiarity with strategic planning (M = 3.95) and process optimization (M = 3.89), while concepts related to performance measurement (M = 3.56) scored the lowest, indicating room for

improvement.

2. *Extent of Digital Governance Implementation*. The extent of digital governance implementation was assessed across multiple indicators, including the use of digital platforms for service delivery, online citizen engagement, and data transparency initiatives. The average implementation score was 3.60 (SD = 0.67). Implementation was highest for digital service platforms (M = 3.82) and lowest for data transparency mechanisms (M = 3.28).

3. *Attitudes Toward Digital Governance*. Attitudinal measures reflected generally positive perceptions. The mean attitude score was 3.75 (SD = 0.58). A majority of respondents agreed that digital governance improves administrative efficiency and public service quality. However, about 28% expressed concerns about adapting to new digital processes and the adequacy of their training.

4. *Digital Governance Skills*. Skill levels relevant to digital governance such as digital tool proficiency, strategic decision-making, and cross-departmental collaboration showed moderate proficiency with a mean score of 3.67 (SD = 0.62). Problem-solving related to digital technology and service delivery scored relatively lower, suggesting skill development opportunities.

3.1 Statistical Analysis

Pearson's correlation coefficients indicated significant positive relationships between business concept understanding and each of the digital governance measures.

Table 1. Correlation Analysis

Variables	r	P-value
Business Concept and Attitudes	0.57	< 0.001
Business Concept and Implementation	0.63	< 0.001
Business Concept and Digital Skills	0.55	< 0.001

This suggests that better mastery of business concepts aligns strongly with more positive attitudes, greater implementation, and enhanced skills in digital governance.

Multiple linear regression was conducted to examine the predictive effect of business concept understanding on digital governance implementation, controlling for age, education, and job role.

Table 2. Regression Analysis

Predictor	B	SE	β	t	p
Business Concept Score	0.48	0.05	0.57	9.60	< 0.001
Age	0.02	0.01	-0.08	-1.60	0.11
Education Level	0.15	0.04	0.21	3.75	< 0.001
Job Role (Manager=1)	0.12	0.06	0.11	2.00	0.046

The model was significant ($F(4, 495) = 58.4$, $p < 0.001$) and accounted for 32.5% of the variance in digital governance implementation. Business concept understanding was the strongest predictor ($\beta = 0.57$), indicating that employees with higher business acumen were more likely to facilitate digital governance initiatives effectively. Education and managerial roles also contributed positively.

The study's findings strongly support the hypothesis that business concept intervention positively influences digital governance implementation in local governments, echoing recent scholarship emphasizing human capital as critical in digital transformation (Wang & Liu, 2024; Liu & Zhang, 2023).

The moderate to high levels of business concept understanding among employees indicate that prior or ongoing capacity-building efforts have been somewhat successful. However, relatively lower performance in performance measurement skills suggests a target area for further training. Inadequate mastery here may impede rigorous evaluation of digital governance outcomes, a challenge noted by Chen and Huang (2023).

Digital governance implementation scores demonstrate that Guangdong local governments are actively adopting technology for service delivery but still lag in transparency initiatives. This gap may reflect organizational or technological constraints, consistent with Yu et al. (2021), who highlighted data management challenges as a barrier to maturation in digital governance.

Positive attitudes toward digital governance and their significant correlation with business concept understanding align with Huang et al. (2024), emphasizing that strategic orientation increases employee receptiveness to digital tools and processes. Nevertheless, the expressed training concerns underscore the need for tailored educational programs addressing employee anxieties and skill gaps.

The strong correlation between business concept understanding and digital governance skills supports Zhou et al. (2024), who identified integrative training as key to bridging conceptual knowledge and practical application. The regression model further confirms business concept understanding as a powerful predictor, suggesting that strategic business education should be a central pillar of digital governance capacity-building.

Education and job role effects imply that non-managerial and less educated employees may require increased support and that leadership development could magnify digital transformation success (Li et al., 2022). The non-significant effect of age suggests that business concept intervention's positive impact transcends generational divides.

These results make clear the importance of embedding business concept interventions within digital governance capacity-building strategies. Training programs should emphasize strategic planning, performance measurement, and process optimization, tailored to the local government context. Greater focus on transparency and data governance capabilities is warranted, along with mechanisms to alleviate employee anxieties concerning digital change.

Emphasizing cross-level training, from front-line employees to leaders, will enhance holistic governance transformation. Furthermore, continuous evaluation and customization of training content will ensure responsiveness to evolving technological and organizational needs.

4. Conclusion

This study substantiates the critical role of business concept intervention in enabling effective digital governance implementation in Guangdong's local governments. Employees equipped with strong business acumen possess more positive attitudes, advanced skills, and a greater capacity to deploy digital tools strategically. Education level and managerial experience augment these effects, underscoring the need for inclusive and leadership-focused training programs.

The findings advocate for policy and administrative emphasis on comprehensive, contextualized business concept training as a foundational element of sustainable digital governance. This will ultimately enhance government transparency, efficiency, and citizen engagement, contributing to the digital transformation goals of China's local governments.

4.1 Recommendations

The following recommendations are based on the findings and conclusion of this study:

1. *Institutionalize Business Concept Training.* The local government should integrate structured business concept education into their ongoing capacity-building frameworks, focusing on strategic planning, performance measurement, and process optimization to strengthen digital governance outcomes.

2. *Focus on Leadership and Inclusive Training.* The local government should design differentiated training programs targeting managers and front-line employees alike, ensuring leadership development while building broad-based digital governance competencies throughout local government units.

3. *Boost Digital Governance Transparency Initiatives.* The local government should address the relative lag in transparency mechanisms by combining business concept education with specific training in data governance, open government practices, and citizen engagement tools.

4. *Provide Continuous Support and Change Management Resources.* The local government should complement training with resource centers, mentorship, and change management frameworks to alleviate employee resistance and facilitate smoother digital transformation processes.

5. *Leverage Data-Driven Program Improvement.* The local government should implement real-time evaluation systems to monitor the impact of business concept interventions on digital governance metrics, allowing for data-informed adjustments and resource allocation.

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