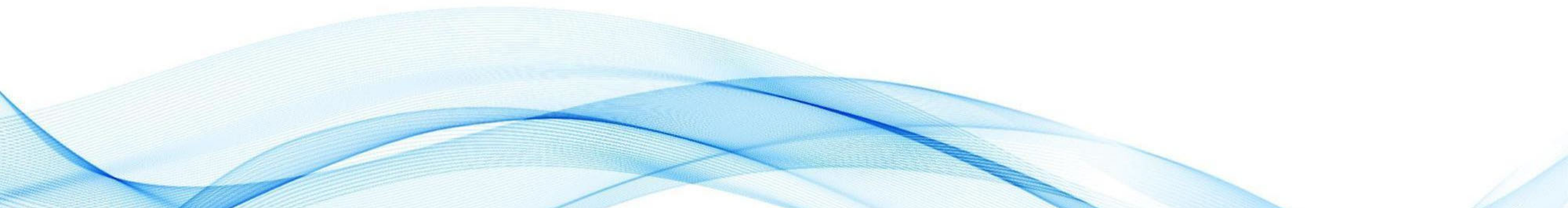# IEEE CN Smart Cities Dalian China

PRESEENTED BY VIOTECH CONSULTING

December 14, 2023

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China Smart City

- Definition
- The China "Path"
- China Smart City Market
- Analysis

City of Dalian

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- Characteristic Features

One Network Unified Management

- Problems
- What is it?
- Construction of the system
- Advantages vs Disadvantages

China Smart City

Part. 01

What is Smart City

Smart city refers to the new concept and mode of using new-generation information technologies such as Internet of Things, cloud computing, big data, spatial geographic information integration, etc. to promote the wisdom of urban planning, construction, management and services.

China Smart City Market

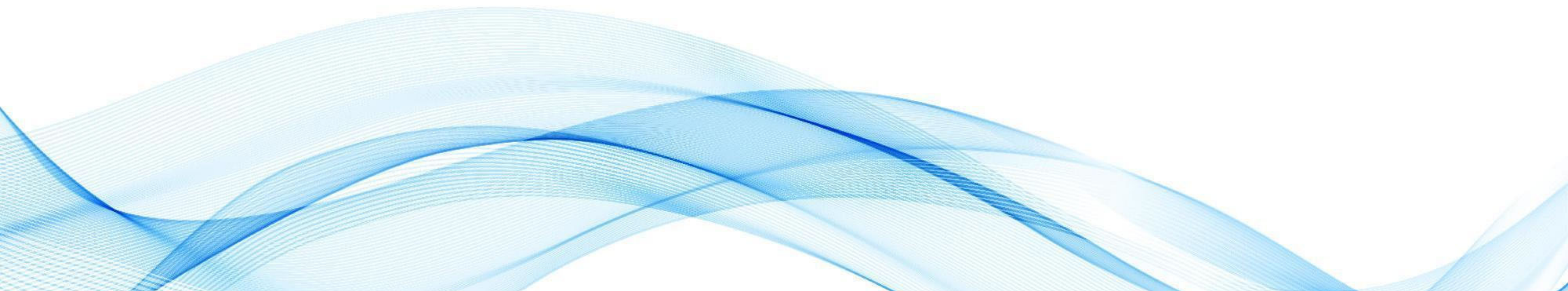Mapping of China Digital Twin City Technology Providers, 2021

Analysis

Based on IDC's market research,

- Smart city affected by urbanization process, district and county-level market potential to be tapped.
- Smart Cities Become Main Battlefield for Emerging Technologies, Technology. Convergence Breeds Innovative Scenarios
- Focus on the practicality and effectiveness of scenario-based applications.
- Increased focus on integrated planning and sustained operation of smart cities.

China Government-led Smart City Market Size and Forecast 2021-2026

Unit: Millions of dollars

IDC中国，2023
Software Hardware Service — — — ASP

City of Dalian

Part. 02

Dalian (大连市)

A prefecture-level city in Liaoning province, is located in the southernmost part of northeastern China, surrounded on three sides by the sea. As of 2023, the city has seven districts, one county, and two county-level cities under its jurisdiction, with a total area of 12,547 square kilometers. The city's population is about 6.1 million.

Commercial Standing and Development

在《大连2049城市愿景规划》中
大连湾被纳入
"超级湾中心连绵带"
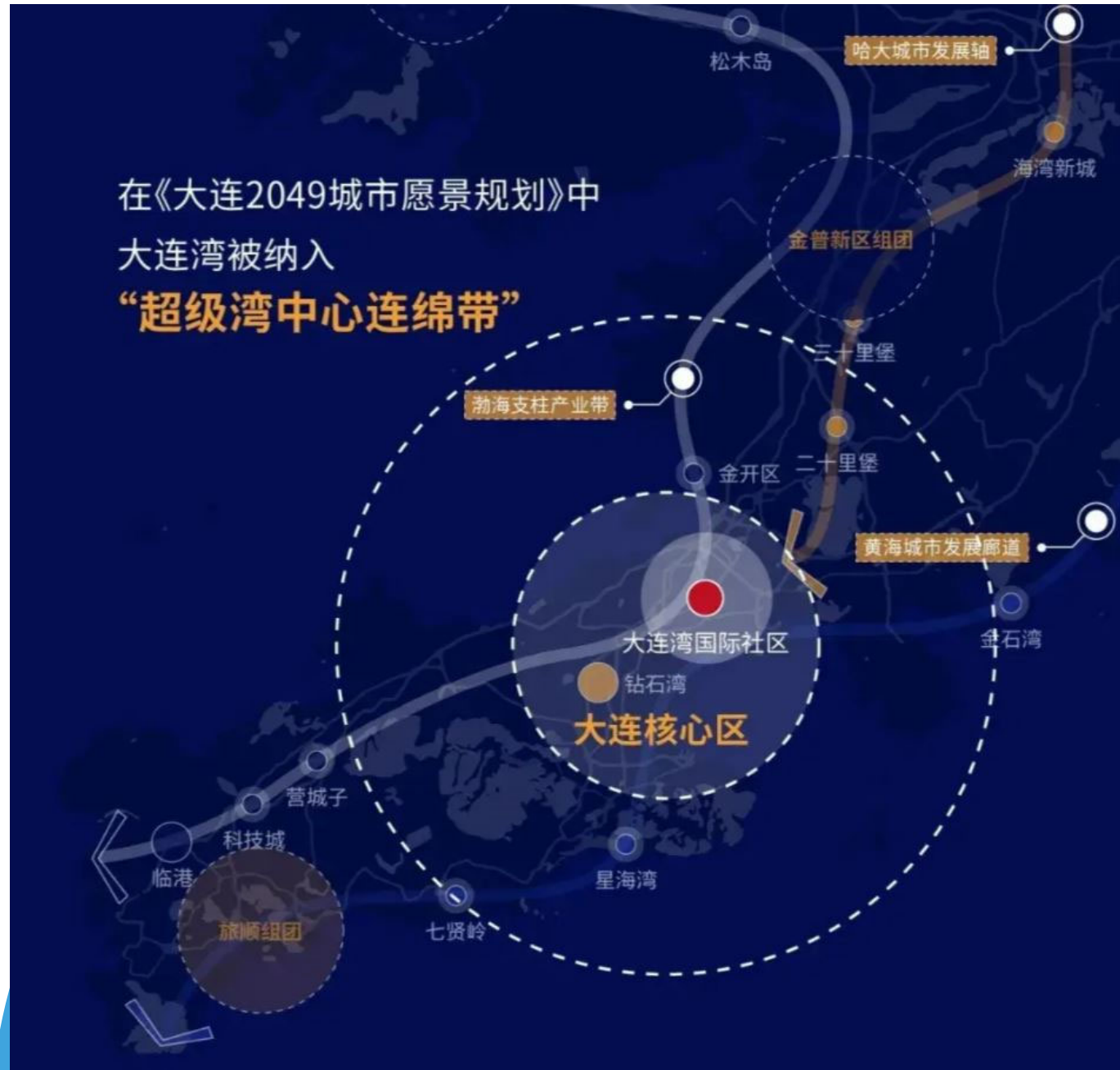
Key Data

Based on Statistics of 2022,

- Total annual import and export amounted to 66.71 billion U.S. dollars.
- 346 new foreign-invested enterprises for the year.
- Annual actual use of foreign capital 2.03 billion U.S. dollars.
- The top six trading partners are Japan, Saudi Arabia, South Korea, the United States, the UAE and Russia.
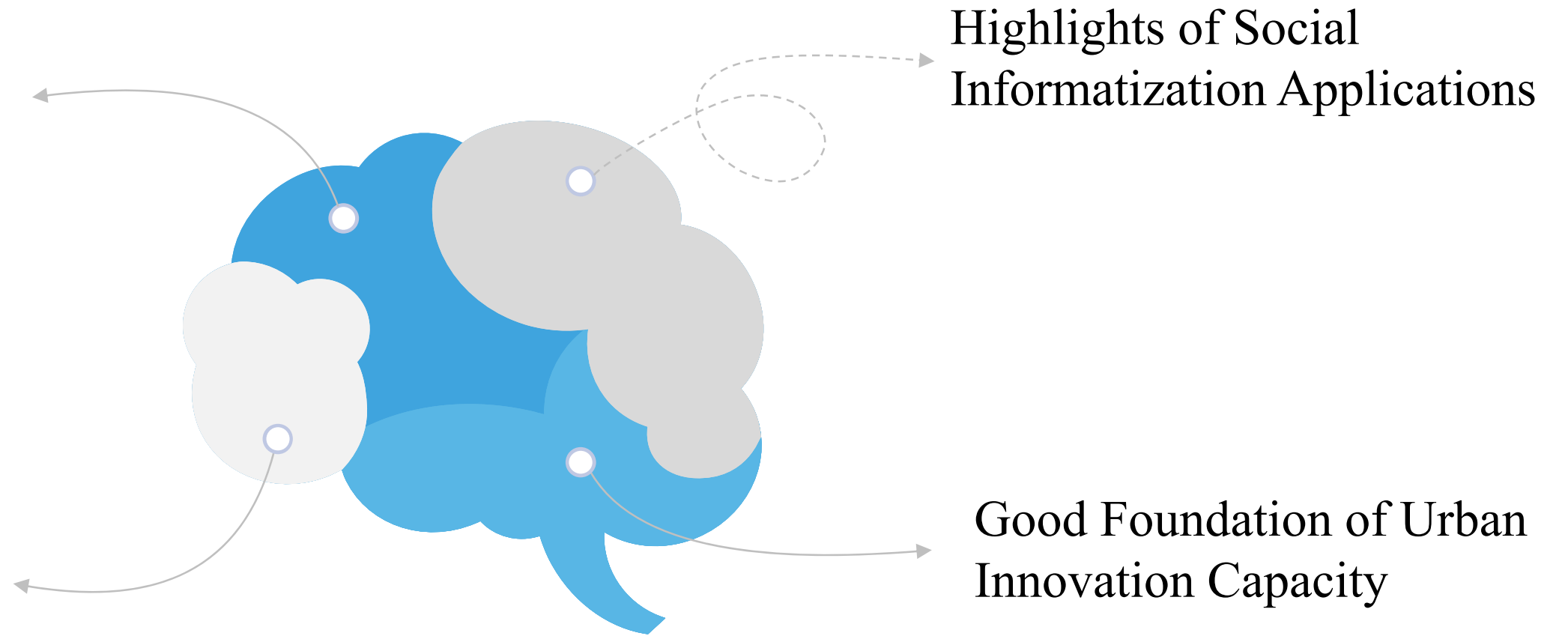
Dalian Smart City Construction

Part. 03

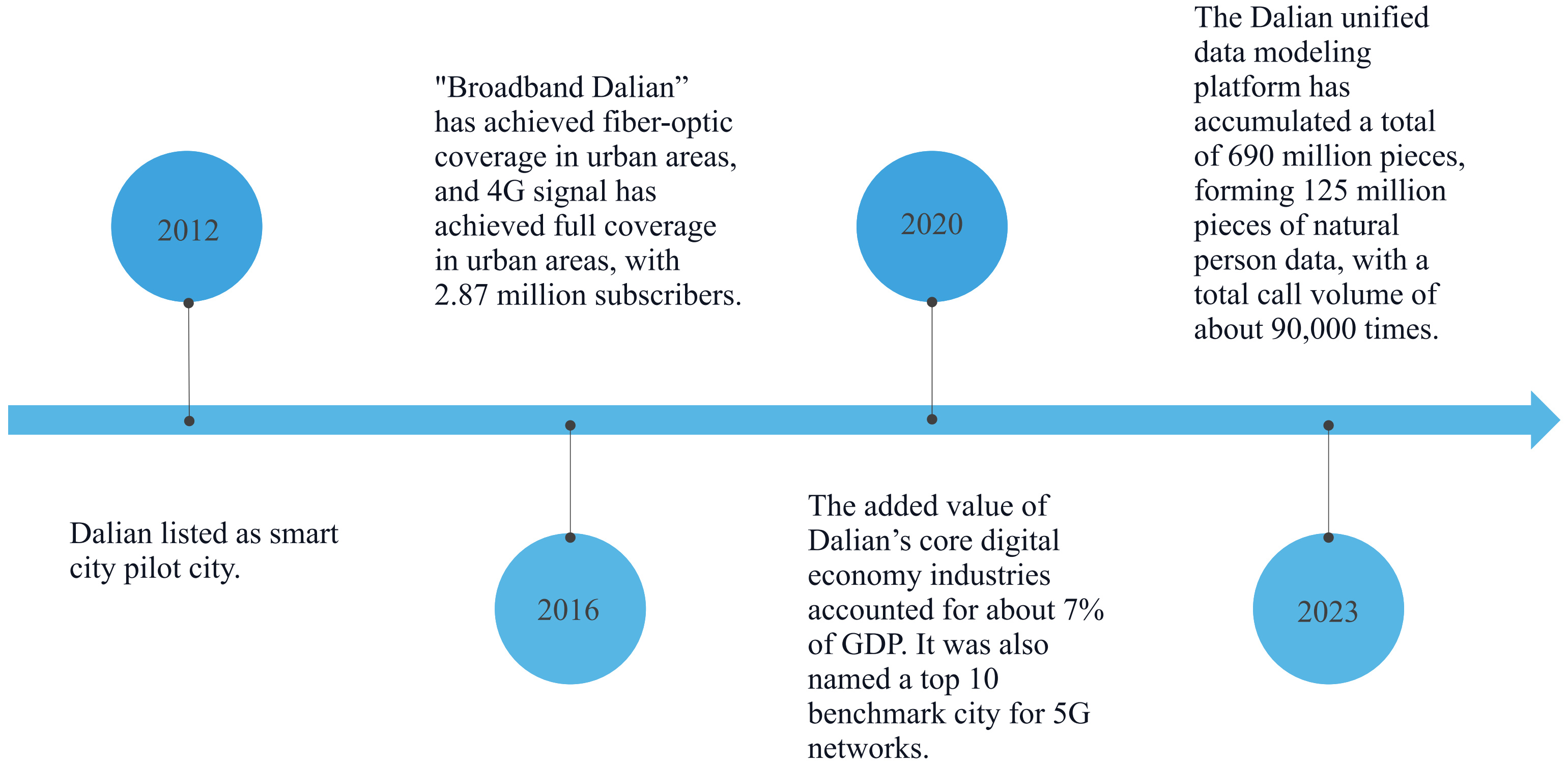# Background

Better Condition of
Information Infrastructure

Highlights of Social
Informatization Applications

Software and Information
Service Industry maintains
High Growth

Good Foundation of Urban
Innovation Capacity

Timeline

2012

Dalian listed as smart city pilot city.

"Broadband Dalian" has achieved fiber-optic coverage in urban areas, and 4G signal has achieved full coverage in urban areas, with 2.87 million subscribers.

2016

2020

The added value of Dalian's core digital economy industries accounted for about 7% of GDP. It was also named a top 10 benchmark city for 5G networks.

The Dalian unified data modeling platform has accumulated a total of 690 million pieces, forming 125 million pieces of natural person data, with a total call volume of about 90,000 times.

2023

Main Tasks

03

Promote the intelligent construction of economic development and the high-end of urban industry

02

Promote the intelligent construction of livelihood services and enhance the sense of well-being of urban residents.

01

Promote the intelligent construction of public management and enhance the integrated nature of urban operation.

Public Administration

Through the efficient integration of information-supporting government sharing and collaborative resources and application systems, we have realized smooth channels for government information disclosure, convenient government services, accurate and efficient management in the fields of urban management, transportation, environmental protection, security and other areas, and the level of intelligence has been comprehensively upgraded.

01 Coordinate and promote the synergistic development of e-government.。

02 Establishment of an all-round intelligent transportation system

03 Building an integrated smart city management system

People's Livelihood Services

Building a Smart Health Service System

Creating Smart Community living environment

Building an Intelligent Educational Service System

Enhancing Tourism Service Intelligence

Economic Development

- Actively promote the innovation and development of the wisdom industry
- Enhancing Core Competitiveness of Industrial Enterprises through Intellectualization
- Promoting the breakthrough development of e-commerce
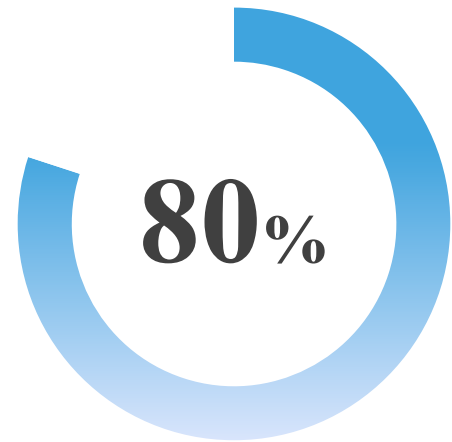- Promoting the intelligent development of the logistics industry

Liaoning Dalian Data Lake Industrial Park Demonstration Lake Project
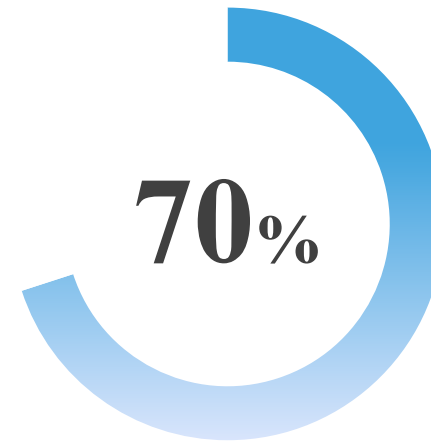
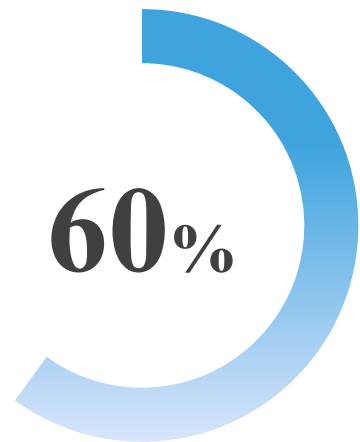# One Network Unified Management

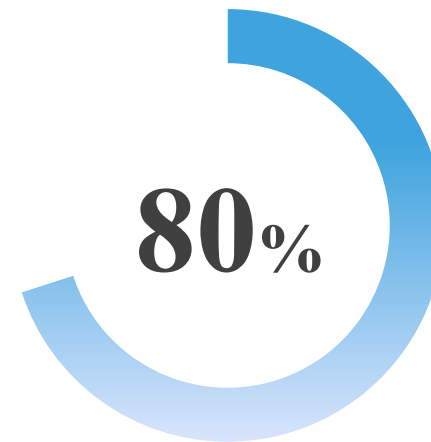Part.04

Problems

80% The late introduction of top-level design programs has affected the speed of smart city construction

70% Trend of weakening capacity to deliver talent

60% "Smart City Evaluation Indicator System" is not yet perfect

80% Barriers to data sharing exist

What is it?

提出城市治理   提出一网统管

The 14th Five-Year Plan and government reports in 20 provinces and cities proposed a network of unified management
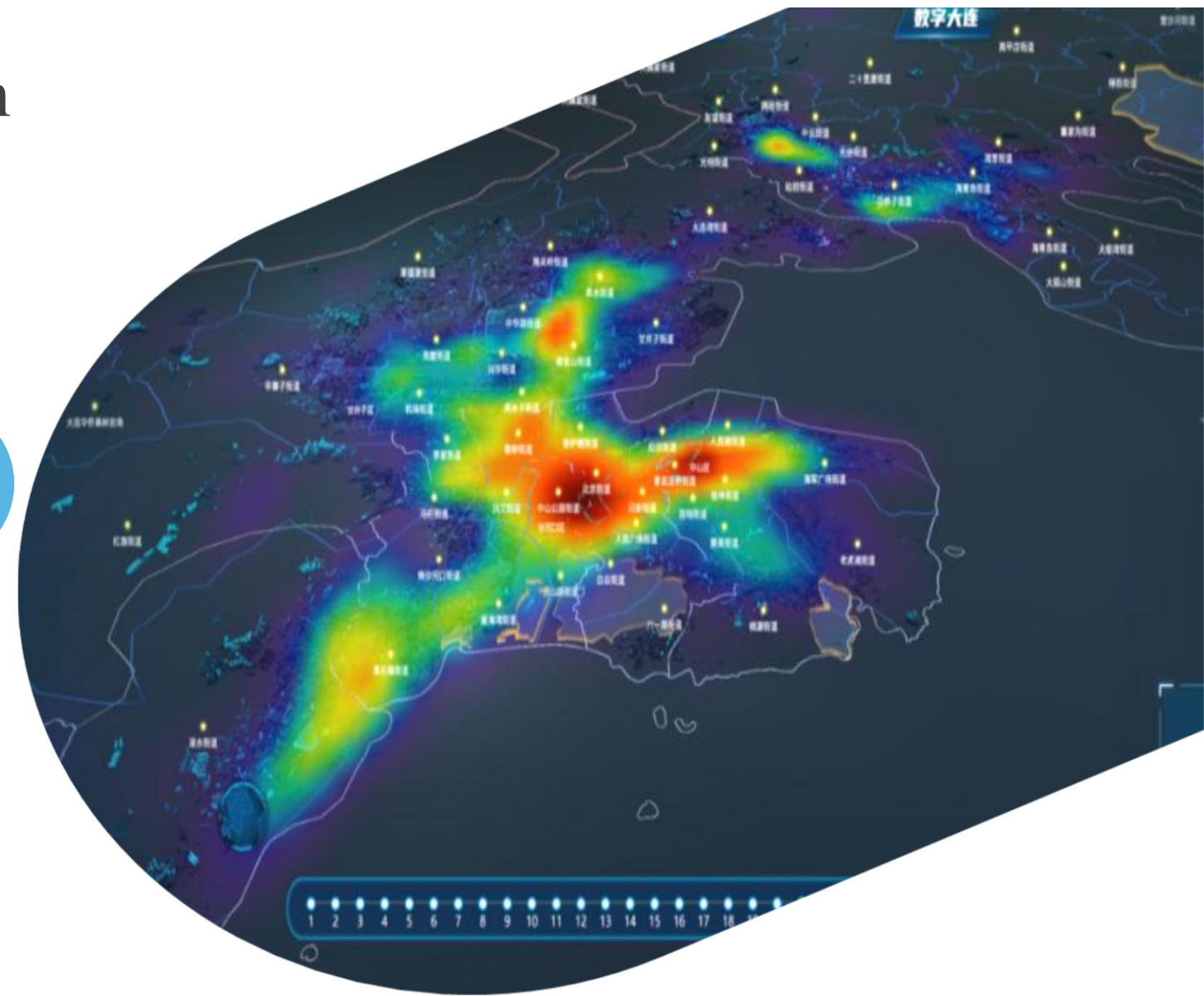
One Network Unified Management

One network unified management is a practical way to modernize the urban governance system and governance capacity. Through process change, technological support, online and offline synergy, it enhances the "smart governance" of the city and continuously identifies key customer issues.

One Network Unified Management Construction

Building a Data Harbor

The "one network unified management" operation command center application system aggregates more than 40 types of data from multiple sources, such as government affairs, time and space, video and the Internet, with more than 220 million entries.

01

Building a "Smart Brain"

One network unified management" in accordance with the "1 +1 + 1 + N" architectural model, to create a "smart center" that can think independently, that is, a perception network, an intelligent digital base, N innovative applications.

02

One Network Unified Management Construction

03

Equipped with "Smart Eyes"

Based on the 27,000-channel video resources converged by the "one network", the "one network unified management" urban operation command center creates a centralized urban perception system and enhances the overall perception capability of the city.

04

Building "Overpasses"

To build an integrated operational management system based on the "efficient handling of one matter" and to realize cross-disciplinary and cross-sectoral operational synergies and linkages by building an "overpass".

Awards

"One Network Unified Management" operation command center application system

- SCEWC 2022 "Living & Inclusion Award"Nominee
- People's Daily "2022 Pioneering Cases of Industrial Intelligence"

Advantage & Disadvantage

Advantage

- Aggregate multi-dimensional data
- Pulling the governance process through the issue closure loop
- Overall planning and synergies across sectors
- Facilitates future expansion of application scenarios
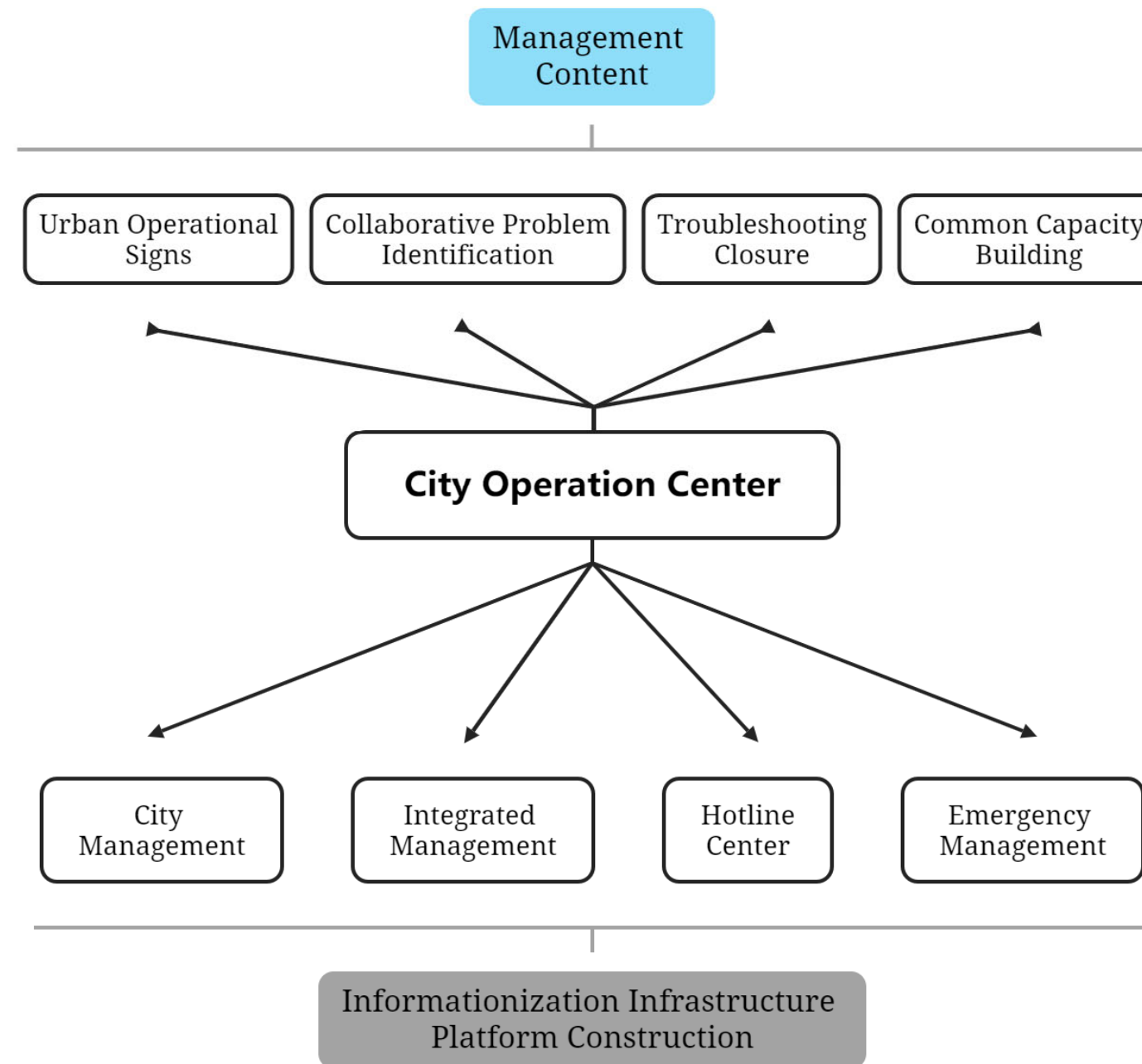
Disadvantage

- Unrestricted operational responsibilities
- No strong operational assessment in the departments
- Slow advancement of issues

Management Content

| Urban Operational Signs | Collaborative Problem Identification | Troubleshooting Closure | Common Capacity Building |

City Operation Center

| City Management | Integrated Management | Hotline Center | Emergency Management |

Informationization Infrastructure Platform Construction

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Market Entry

Profile the Market & Competition,
Provide On-Going Support

Sourcing

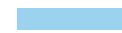Solve your Purchasing Problems,
Eliminate Last-Minute Surprise

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Thanks for Watching

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