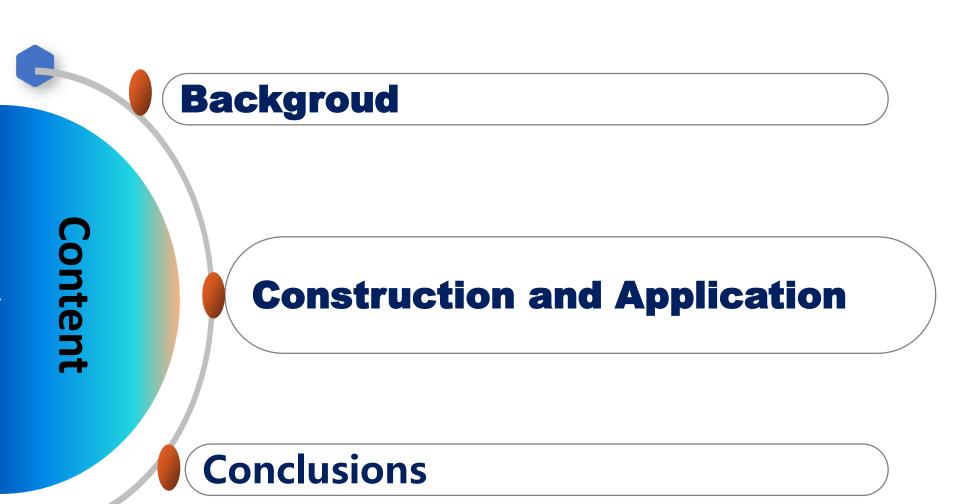
## Construction and Application of Smart Land Administration in Wuhan

Peng Mingjun, Luo Changlin Wuhan Land Resources and Planning Information Center Sep. 28th, 2018





## **1 Backgroud**



## (1) For State level: information technology has become an important means to promote the modernization of its governance capacity.

- The technology guidelines for the construction of the "Internet + government service" was released by the Sate Council in 2016.
- It's necessary to improve the government services on the Internet for all level management departments.





## (2) For Ministry level: informatization is an important method to improve the ability of land resources management and provide service to people's livelihood.

The general framework for the construction of land resources cloud was released by the Ministry of Land and Resources information center in 2016.

- Eliminating the isolated information of lands resources
- Expanding resource sharing
- Expanding the informatization service range for the whole business of land resources management.
- Ensuring the data of land resources are updated in real time.

### **1 Backgroud**

## (3) For province level: the department of land resources in Hubei province carried out the construction of Land Resources Cloud.

The notice on construction smart land resources cloud was released by the department of land resources management of Hubei province in 2016.

Constructing the cloud architecture service.

> Constructing the provincial, municipal and country administrative service platform for land resources.

> Completing the all-level cloud construction within two years.

## **1 Backgroud**

## (4) For municipal level: The land resouces and planning cloud of Wuhan is put farword in 2013.

Smart City's general planning and design in Wuhan

- Smart Wuhan spatiotemporal information cloud platform.
- Smart Wuhan land resources and planning cloud platform.

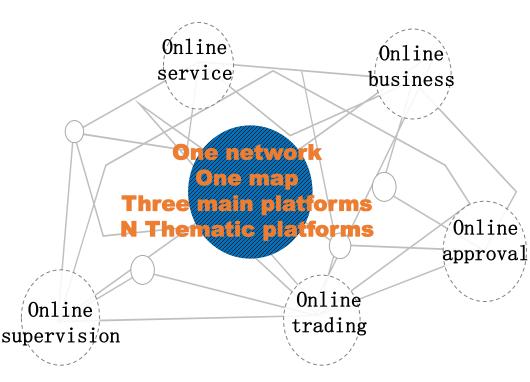




## (1) General layout of the "smart land" in Wuhan

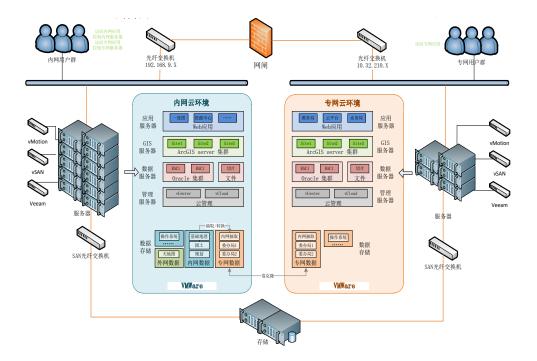
**Component:** "1+1+3+N" system

The goal: The governmental affairs and services of land resources and planning management are dealt with online office, examination and approval, trading, supervision and services etc..



## (1) Construction of network facilities

The three levels of network system, such as internal network, government affairs network and public internet, are constructed.



### (1) Construction of network facilities

There are 2280 computers, 280 servers and 126 network equipments in Wuhan Land Resources and Planning Bureau, and the data

amount reaches 1 Pb.

 They can provide smart government services and unique and universal geographic information service.



### (2) Construction of one map

The comprehensive map of land rescoures and planning was developed.

There are 1296 categories geographic data, including topographic maps, investigation and evaluation, planning, approval management, supervision, geology and mineral resources, economic and population, etc.







## (2) Construction of one map

- By developing the comprehensive map system of land resources and planning in the business, public and mobile editions.
- ◆ It provides data support for the application of query, approval and decision-making etc..



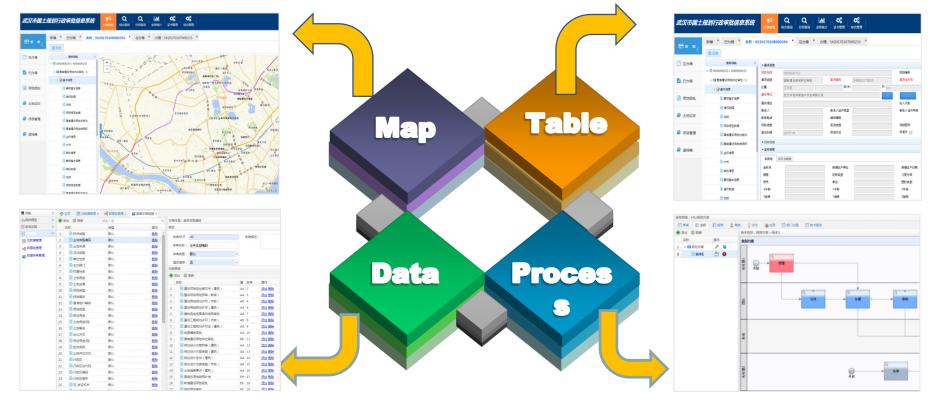


## (3) Construction of e-government platform

Since 1999, the e-government platform has been updated 4 times. Over the past ten years, we have continuously applied new technologies and concepts to meet the needs of business management reform, effectively supporting the "Internet+Innovation in management".



### (3) Construction of e-government platform



## (4) Construction of public service platform

- The smart land resources and planning service website is constructed.
- It provides perfect government information services for the public.



## (4) Construction of public service platform

Opened the "Wuhan land planning" wechat public account, providing public information service as a new window by micro-portal, micro-services and micro-matrix.

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## (4) Construction of public service platform

The Wuhan portal of map world was constructed, the massive online spatial geographic information data services and functional smart technology services, to provide timely and authoritative geographic information services for the public.



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## (5) Real estate registration management information platform

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## (5) Real estate registration management information platform

#### Setp 1

Basically completing the integration of information, the development of registration and certification system, and completing the remittance of real estate registration information in

#### ③ Step 2

Constructing the reak estate one map system, real estate data analysis system, expanding the real estate registration information sharing.

#### ①Step 3

We will establish a working mechanism for data updating, sharing and exchanging, and the application of the information platform, and constructing a first-class information platform for the unified registration of real estate.

2015-2016

2016-2017

2017-2018

#### (5) Real estate registration management information platform 不动产档案 生产与管理 系统 不动产众源 不动产数据 公众服务系 分析系统 6大 不动产信息 共享交换系 不动产权籍 调杳与数据 处理系统

## (5) Real estate registration management information platform

Real estate registration and certification information system:

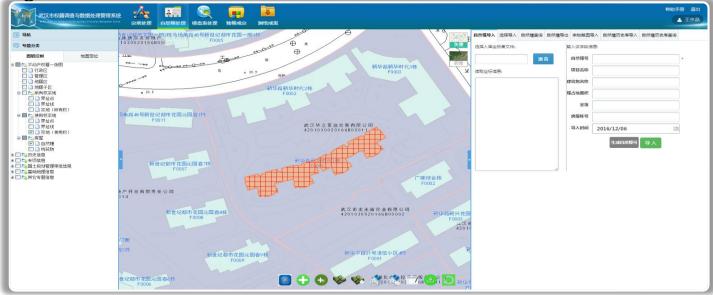
mainly for 13 categories, 63 small categories of real estate registration business types,We will implement the management and operation of receiving, accepting, registering and archives of all kinds of real estate registration business.

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## (5) Real estate registration management information platform

**Right investigation system:** to realize the integrated management of real

estate investigation information in Wuhan.



## (5) Real estate registration management information platform

**Information sharing system:** to real-timely share real estate registration information at all levels of land resources, construction, agriculture and forestry and other departments.

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## (5) Real estate registration management information platform

#### Crowsource public service information system: the public to

provide real estate registration information online declaration, progress inquiries, wechat





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## (5) Real estate registration management information platform

**Real estate archive management system:** to provide real estate registration archives scanning, integration, archiving and other integrated management.

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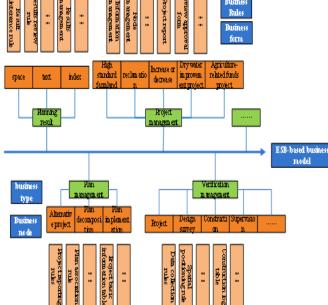
## (5) Real estate registration management information platform

**Data analysis system:** the real-time supervision of registration work is realized. Through the comprehensive comparison and analysis of multi-source data, it provides the support for macro-decision.



## (6) Online supervision information platform for land consolidation

Based on the framework of cloud, network, spatial data analysis and system integration, have we developed the online regulatory information platform for land consolidation including projects, professional version, mobile version and public version.





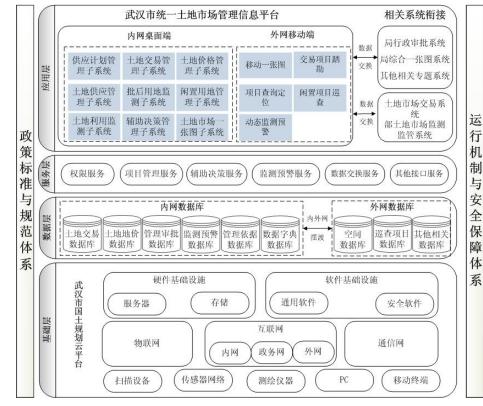
## (6) Online supervision information platform for land consolidation

It's realized the network of project declaration, standardization of management, standardization of examination and approval, and dynamic supervision of the whole elements and whole process of land consolidation management across platforms and terminals.

It can meet the requirements of seamless docking and real-time exchange of information at the four levels of provinces, cities, districts and projects, as well as scalable and extensible multi-scene applications.

### (7) Land use management information platform

Realizing the dynamic monitoring of land transaction, quantity, scale, layout and price of land by year, by region, by type and by use, And early warning and decision support from land life cycle monitoring.



## (7) Land use management information platform

- Overall management of land use in the whole city
- City land transactions to supply, start and complete the life cycle monitoring early warning;
- ◆ Analysis of real estate market regulation in Beijing;
- Evaluation of land conservation and intensive use; Update of base premium.



## **3 Conclusions**

## **3 Conclusions**

The construction and application of smart land will play an active role in protecting land resources, economizing and intensive use of land resources, and striving to safeguard the rights and interests of the masses.

- Deepening the cloud technology system of land planning
- Establishing and perfecting the system of investigation, monitoring and supervision of land and resources
- Perfecting the smart management, decision and service system of land management



# Thanks for your attention!

