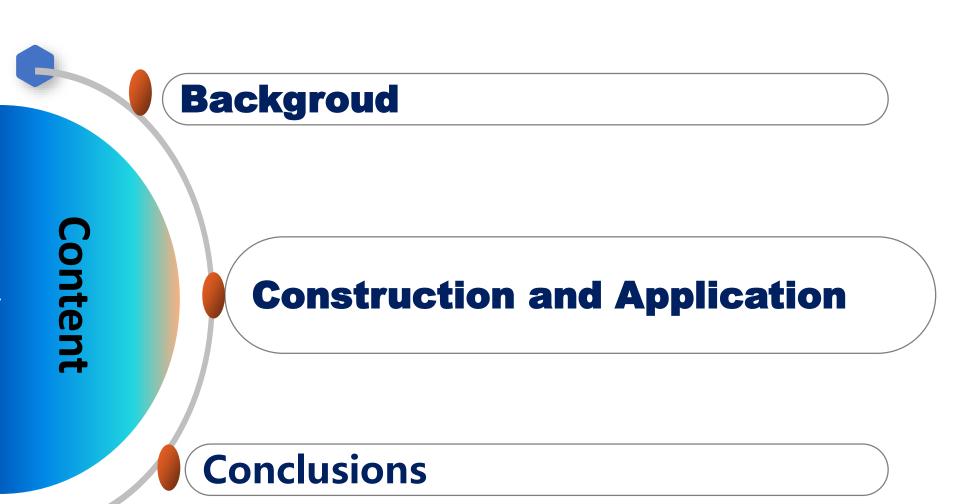
Construction and Application of Smart Land Administration in Wuhan

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.

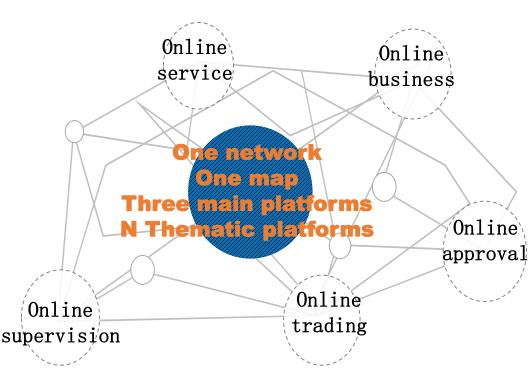




(1) General layout of the "smart land" in Wuhan

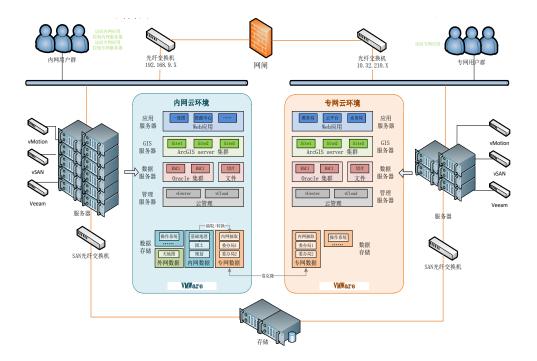
Component: "1+1+3+N" system

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..



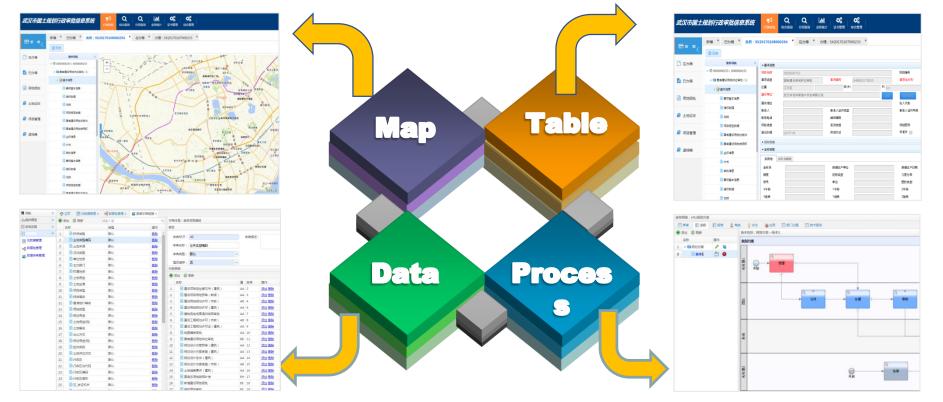


(3) Construction of e-government platform

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.

く 返回 关闭	武汉国土规划	•••
	市国土资源和规划局 and Resources And Planning Bure	
	* 11	
	三届全国少儿手绘地的	图大赛 ■■■■■
	三届全国少儿手绘地開	图大赛 ■■===
工作动态 市国土规划 人做事	三届全国少儿手绘地的 局汉阳分局:"十忌	
工作动态 市国土规划 人做事 2016-07-28 "美丽中国"拿		十悟"成就做





(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.



天神氏・衣	这	<u>e</u>		0 0 0
Q 82.0700				
特色服装 CHAR	ACTERISTIC SER	VICE		87 108
		191人为年1+ 年代经主要的投始 2010年夏秋秋老竹评価小信用2	na, ogiðvið Haland	88225 808032 52250 88832 5236
0	(300)AUS 8- 5.578	11年11日2日第44上 - 第二7 単刊 11日1日日 - 第二7 単刊 11日日日 - 第三日日日 - 第三日日日日日日日日日日日日日日日日日日日日日日日日	1014年6日、新兵、分析来校 1人口空间分布进行新址。	ampiga anala Anala Sinuta
Jan Barris	TINADIN THE ATT	一十年第7世命,但于,人口 一十年5月1日年11日,月月1日 1月1日(月月1日)日,月月1日 1月1日(月月1日)日,月月1日 1月1日(月日)日,月1日(月日)日 1月1日(月日)日,月1日(月日)日 1月1日(月日)日,月1日(月日)日 1月1日(月日)日)日,月1日(月日)日 1月1日(月日)日)日,月1日(月日)日 1月1日(月日)日)日,月1日(月日)日 1月1日(月日)日)日,月1日(月日)日 1月1日(月日)日)日,月1日(月日)日 1月1日(月日)日)日,月1日(月日) 1月1日(月日)日) 1月1日(月日)日) 1月1日(月日)日) 1月1日(月日) 1月11日(月日) 1月111(11)(11)(11)(11)(11)(11)(11)(11)(11	1、位立3項は均上也再升限 2内非1年14人口計10時時193	Rext) Rese
al .	Material Alternation	2次に加上の第4440年中4年1 年四月日の公司「新聞業務会工 「使用中日」	運動に設定するために 単型の連合体は予想の後	8201 82010
		timout		
Rudiesten Rudiest Rudies Rudies	8328(1)が明確 以上市は気が上さう が上市国主点日本所有限 が上市国主点日本所有限 の上市有限		医原始了20時間 第七9年11時間本原則 第七章立用本語を改善力 第七章指上成長行 第七章指篇的	00086794 835-532 97983652405
				NUMBER STAT

(5) Real estate registration management information platform

Registration agency Registration book Registration basis Information platform The unification of information platform is the most important thing.

	中华人 B linistry of Land ar				
↑ 首页	■ 机构	晅 新闻	♀ 公开	8. 办事	
当前位置:政务公	公开 > 通知公告				
国土资源	<u> </u>	无法支资过度	: El AS TEL EL SOL	77 / zh 11	
	· 12/241 1 2 441.	下幼产豆记信 通知	息官埋基础	平台建议上位	作
	一中人 1 政贝 /			平台建位工作	IF I
		通知) 103号		rf i
		通知 国土资发(2015 :源:地籍管理司 【)103号 大中小1【打印】【9		ne i
	2015-08-06 未	通知 国土资发(2015 :源:地籍管理司 【)103号 大中小1【打印】【9		IFI
	2015-08-06 未	通知 国土资发(2015 源:地路管理司 (13 部门,新疆生产建设)103号 大中小1【打印】【9	(河) 放军土地管理局:	IFI



(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:

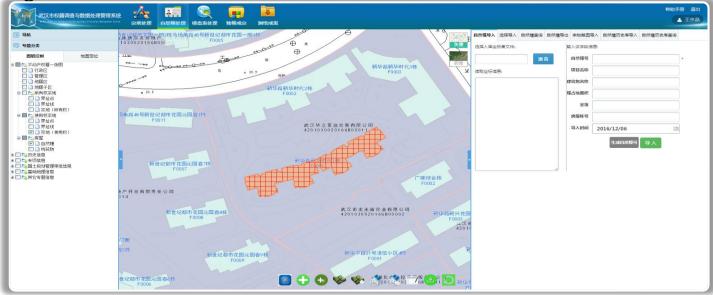
mainly for 13 categories, 63 small categories of real estate registration business types,We will implement the management and operation of receiving, accepting, registering and archives of all kinds of real estate registration business.

* E0:8510										
登记发证						人员	环节	操作	时间	内容
		事项查询	房产查询 地籍查询 不动产			刘比何同女子		创建	2016-12-08 15:43	[姚佩妤][创建]了任务
		事项查询: 不动产单元号, 证件号, 8		日本市の	2. 查询	约兆(司文予	受理	提交	2016-12-08 15:53	在<受理>环节,[姚佩妤][提交]了任务给[陈骥
			登记类型					今页耳汉		
		- 🗖		, a ,			初审		2016-12-08 16:12	在[初审]环节,[尹松平][领取]了任务
	首次發记	この	转移登记	「」	長押登记	尹松平	初审	提交	2016-12-08 16:18	在<初审>环节,[尹松平][提交]了任务给[尹松
		SCIENCIC	1019 10.0	AT THE ME HE	SUPPLIE OF	尹松平	登簿	领取	2016-12-08 16:26	在[登簿]环节,[尹松平][领取]了任务
	(?)	G	0			尹松平	登簿	提交	2016-12-08 16:27	在<登簿>环节,[尹松平][提交]了任务给[]<归
	异议登记	預告登记	查封登记	日本	換证量记					
						不动产登记	-房			
		1.							δ	1 K
	依申请更正	依职权更正	其他登记				1	1	× A ×	
							受理	++	初审 +→ 复审 +	→ 核定 → 登簿 →→ 缮证
	(1)在"事项直询"中封	变更、注销、更正、补证、换证等 (到历史案件; (2)在查询结果=	中勾选"数据提取"; (3)选			田田 一				
	备注:包括抵押、预告、	异议、查封等的转移、变更、更正	、补证、换证、注销。							

(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.

区城	₫ 东湖高新 マ	文件编号									事项查试) 房产查询 地籍查询				业务	5		报备单位	法定代表人	营业执照	金融许可证号
2	文件上传 查测						项目	1919) Mill	建房屋批次号	1000000	建房地次日		证书统计	+		HBA2016	000090		中国工商银行股份有限公司武汉新洲支行	胡国祥	914201177227292667	B0001S242900021
-					展市	局 输入局份证			•			诸威人产权证号	☑ 版本管理	ŧ		(HBA2016	000089		兴业银行股份有限公司武汉分行	曾晓阳	91420000739119544C	B0013B242010001
				权限信用				MLHE (30)) 110天(田田(7		7屈的林	请输入房屋坐落				(HBA2016	880000		华夏银行股份有限公司武汉经济技术开发区支行	徐辉	91420100757035782J	B00085242010007
a:	文件编号	文件名	1H	設の					6			Ċ	🖞 银行备案	• ~		(HBA2016	000087		华夏银行股份有限公司武汉江岸支行	彭应国	91420100773929356W	B0008S242010008
8	2016070100276	2016登422 武汉皖科光纤激光技术股份	X :		U RE	CYE RE	CN B	8度 6码 业1	·务关型 志	权证的	权证号 码	房屋坐面	Q _{查询}			(HBA2016	000086		华夏银行股份有限公司武汉洪山支行	司德明	91420100662288621W	B0008S242010009
1	2016070400282	2016 <u>日</u> 0177(実用)	房产	~ 7	1 20		36 0	110 其他胡	#屋京更登 # 记 注	周囲5 有权3	60107					HBA2016	000085		华夏银行股份有限公司武汉水果湖支行	肖刚	91420100685444420E	B0008S24201001
	2016070500288	武汉皖科光纤撒光翻技术有限限责任公!	De R					173	54		42-2	t de la companya de l	🖞 住房信息	. ~		(HBA2016	000084		华夏银行股份有限公司武汉汉口支行	汪俊	91420100780913627A	B0008S242001000
				~ 6	7 20		46 0				市201 60057 07	汉阳区五里嗽街汉阳大道5 元7层1室	_			(HBA2016	000083		华夏银行股份有限公司武汉汉阳支行	肖志勇	914201053037124510	B0008524201002
	2016120700574	2016至422 武汉锐科光纤激光技术股份	庵3		1 20	14 11		8 110 南島	iolo é	REA	市201		合力事項	页		(HBA2016	000082		武汉农村商业银行股份有限公司东湖风景区支行	余俊华	914201006918953674	B1029S24201009
					1 2		03 2	239 186 8	13 13 14	有权证	40090	光谷新世界中心8地块5栋;	Q 查询			(HBA2016	000081		招商银行股份有限公司武汉分行	文行赤	91420000877585797Y	B0011B242010001
				~ 1	1 20		21 2	110 南副 257 555 7	1.977 * 12 14	府雇用 有权证	市201 60107 61-1	洪山区洪山乡卓刀原村(博建) 陶边)各都花园陶区一期512桥 元8层1室	11单 权持 传	4201041 9760927 1216	武汉城投房3 开发有限公		2362	016-110 I-11025 5557				
				~ 2	2 20	15 11 6	45 2	110 6至河道 243 404 4	直用用实典 非 注 研	房屋月 有权证	市201 50166 38	江岸区诺家机兴盛路201号城开 兴花园209标2单元4层1室	K220 (K	9820710	此汉城开房的 开发有限公 35集记录	司 66	22-20 4164 < 1/2×20	015-110 5-11024				

(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





(返回	办事	进度查询		•••
办事进度查讨	8			
请输入受理	通知书上的重	〔 询编号:		
SX1608090000	18			
		查询		
查询结果: 查询编号	SX160809	000018		
项目编号	AB201502	97		
	武汉地铁集	集团有限公司		
建设单位				
建设单位工程名称	轨道交通2	号线北延线管	委会站工程	Ŧ
	轨道交通2 0 ⁰ 0		委会站工	RE Di

(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.

80.00	BCRAGE TO	a			o:						-
nena C	2010 * most * a	a wadaaa	* 179429								
1000	\$10 Ray *32	100 20		Quees if the	NEU GODEN						
1511812	##58 ·					10		A DA COLLEGE AND	1001		
ana .		10.0	(excernent)	448	18108	T		前 利	* *		
	- Belleut	881	H-1-1	0.018	2010/07	BOD B			10.00		
Classifier 1		eneg	Hadisessing.	120.045		80.4	1	ABIDESTRUCTOR, TRAFT			
	Bellighting A	-	11100					1.421578788882222, 284 8257240.			PLLARTYN.
50 8 8	E forminarm. in A	- ##EN/-B					1	8458	47.1	1.8.1	
	Losso A	55.487	HIGHLIGHT	HAT		and the second se		*#\$C#8252*#3.4.54	24	108	
	E-Her A	991.82	144	- 9790A.N		1010(1000)		PRAPER, PRESS, REPR.	0.8	DR.	
	Ball-mode mov-A	Unit	Roma	214	the second secon	****		***********	100	CA.	
	Energies (mar.A.	8155		· atra.		**	1	RARALS, PRESSARERS	64	100	
	Esetes terres &	****				10000	H	intere .	1148	048	AU. 00 (881) 8
	Distantion and A	THEFT						RWERK.	ORR.	1	809944
	I -BEITING ALL	48.15	****				H		1544	24	*****
	L-second and A	ANES						ABARAN COMPLEX	C1.0 C8.F	3	定式有关计约 确例社会基本
	Exection A						-	ST. ASTA DA TTALES	0.84		154.
	Exaction of A					· · · · · · · · · · · · · · · · · · ·		CREPLER MIRESCORES	1290. *1	1/200	15.681
	Sectors A							LEAST-CONTRACTOR	0444	1199.8	
	Rentas A	-						8101428747977	0148	0748	
	Landsmut A	18.448	1.0	284.83	4.4.	110.0	4.5	BBRACES.			
	(BENE)	-	atic			854.5					
	I stort in the A	-		Area and		antes .		出入之上直接的新学校的基本书。 的复数书 记录节代:			-
	Tanah consistent A	ares.		1861		_		FRANCERLI PER	181,100	411 4	19 18





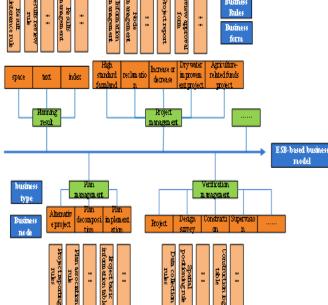
(5) Real estate registration management information platform

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.





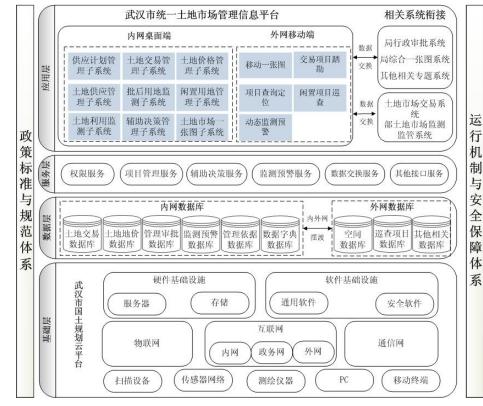
(6) Online supervision information platform for land consolidation

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!

