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Proposal of a Model for Co-processing of Real Estate Mortgage Registration in China's Internet Environment

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Abstract

In this paper, based on the real estate registration model in the Chinese internet environment, we propose a model for the joint business of banking collateral registration. This is to increase the efficiency and service level of the real estate mortgage registration process. And it can solve the problems that in the process of registering a mortgage loan, difficulty of data sharing between the real estate registration agency and the bank, and ordinary users and bank clerks duplicate unnecessary work. In addition, it realizes joint processing and data sharing of real estate registration work with real estate registration agencies and banks, increases the efficiency and level of government affairs services, and offers an optimized solution to realize a one-stop service for real estate security registration. The results of this study are expected to provide theoretical support for the application and innovation of the Internet environment real estate registration model.

Keywords: IoT, A.I, Real Estate Mortgage Registration, Government Service Cloud

1. Introduction

In recent years, the Chinese government has greatly developed the construction of a real estate registration model in a digital government and Internet environment, and has released various policy documents to accelerate the simplified decentralization across the country. Through this system, business processing time was shortened, real estate registration was convenient, and efficiency and service levels were improved, and the convergence of offline service centers and online service platforms was promoted. In addition, it has made great strides in simplifying the screening process, improving work experience, improving work efficiency, providing quality services, and providing data sharing application. However, there were problems such as the part where data cannot be shared during the real estate mortgage registration process and unnecessary duplication of work by general users, and this caused inconvenience to the security registration and loan. In particular, when dealing with real estate mortgage loans and bank loans, both the business manager and the

bank clerk had to travel back and forth between the bank and the real estate registrar several times. In addition, the processing period of the mortgage registration work was long, inefficient, and problems such as several visits and lack of experience occurred, seriously hindering the improvement of the level of real estate registration service and the development of the real estate registration model in the Internet environment.

The bank joint business process model of real estate security registration is based on the establishment of a real estate registration system in the Internet environment, and expands the real estate security registration business to the banking network through the characteristics of the location of the bank branch and the rational operation of the bank clerk. In addition, by simplifying the approval process and strengthening data sharing, users' unnecessary work is reduced, and data can work more so that real estate mortgage registration can be processed at one time at a nearby bank branch.

2. Real Estate Mortgage Registration Bank Joint Business Processing Model Implementation

For the real estate security registration bank joint business processing, the real estate registration financial management platform is placed in the government affairs cloud and securely shared with the real estate registration information basic management platform data of the real estate registration management agency to report and approve the basic mortgage registration business, it performs functions such as issuing a certificate. At the same time, the real estate registration certificate is issued through the identification card and facial recognition comparison verification at the real estate registration self-service terminal, and the certificate number is registered in the real estate registration management system through OCR recognition, make it possible such as safe issuance of bank certificates and data return during the mortgage registration process.

Model building is divided into two parts as follows. The first is a real estate registration financial management platform, which is deployed in the political affairs cloud. This provides functions such as real estate security registration inquiry, report, reception, licensing, and document management to the person in charge of business. The second is a self-service device for real estate registration certificates installed in banks, which provides printing and issuance services for real estate registration certificates for banks and the public.

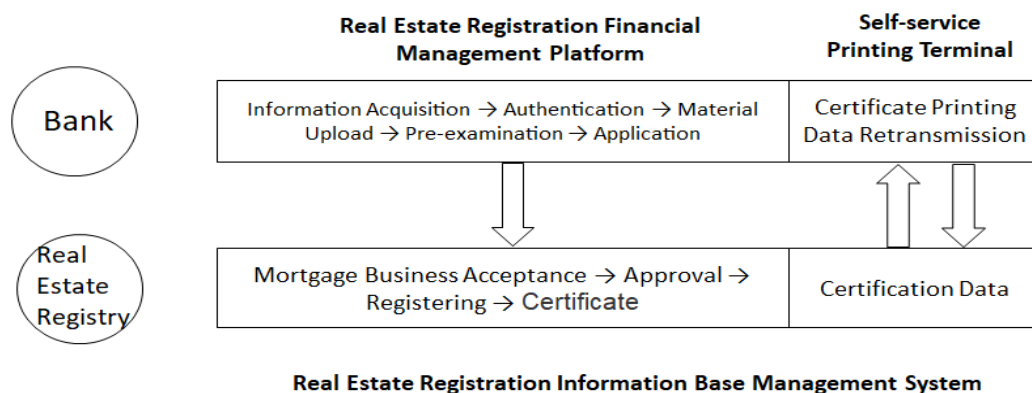Figure 1. is shown real estate mortgage registration bank joint business processing model.

Figure 1. Real estate mortgage registration bank joint business processing model

2.1 Real Estate Registration Financial Management Platform

2.1.1 Functional Design and Implementation

Banking customers set account numbers and usage rights, log in to the real estate registration financial management platform, start the registration process, collect and verify the identity information of the right holder, and then input and upload the received data. A preliminary review of the submitted data, such as application approval and mortgage property data, is conducted, and if all required data is uploaded, it is submitted to the real estate registration system for approval of the application. The real estate registration center practitioner approves the data submitted on the financial management platform, and after passing it, proceeds to issue a real estate registration certificate, and the related data is reflected in the financial management platform bank manager and the real estate registration self-service device. The bank selects shared data as needed or prints the certificate on a dedicated sheet of paper in a self-service machine. After the related work is completed, bank loan business is executed to the user.

2.1.2 Development and Operation Environment

The development languages of the real estate registration financial management platform are C++ and JAVA, and the development environments are VS2003 and Myeclipse2013. The databases are Oracle10G and Oracle11G, and the GIS platform is KqGIS platform 3.0. The system operation support environment is JDK 1.7, Tomcat7, and WebLogic 10 or higher. The server uses a Windows Server 2003 or higher operating system, and the client uses a Windows 7 or higher operating system.

2.1.3 Screen Design

The figure below is the login screen of the homepage of the real estate registration financial management platform based on the Google browser design and development.
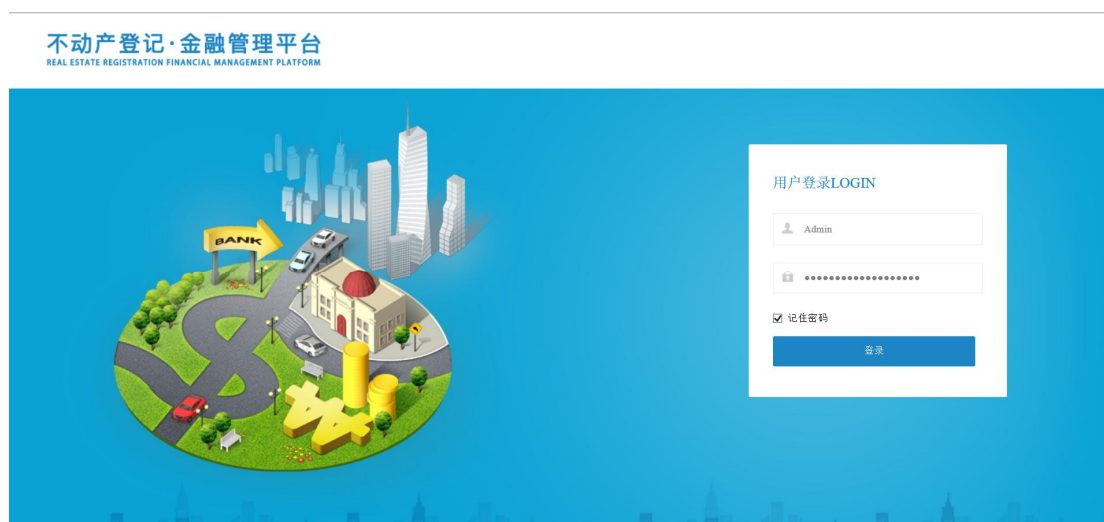

Figure 2. Real estate registration financial management platform screen

2.2 Self-service Device For Real Estate Registration Certificate

2.2.1 Functional Design

The functions of the real estate registration certificate self-service device are mainly face recognition photo taking, identification card recognition, personal information comparison, business QR code scanning, data inquiry, certificate output, electronic seal, OCR authentication number recognition and statistics, voice guidance, touch screen input, etc. Includes the features of. Also, the system is shut down on time.

2.2.2 Function Implementation

The bank employee checks the data such as the resident registration number and his/her photo in the ID card through a self-service device terminal, and takes a picture by recognizing a face with a camera, and proceeds with the identification of the person through the personal information system. After identity verification is complete, real estate security business and related registration information can be inquired through the QR code for business, and if you select Print, the self-service device prints the registration certification, electronically seals, and recognizes the OCR verification number to complete real estate registration information, it is automatically sent to the management system and the work approval is completed. Bank staff can process approved loans and other services for clients based on real estate registration certificate data. Figure 3. is shown flow char of self-service device for real estate registration certificate.
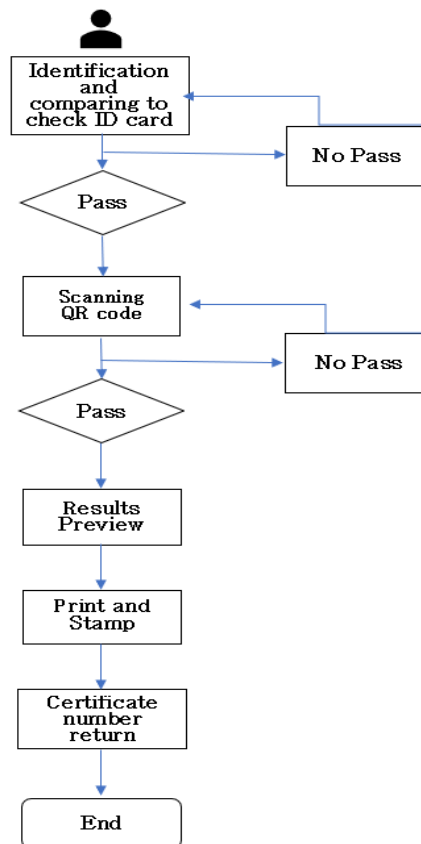

Figure 3. Flow chart of self-service device for real estate registration certificate

3. Conclusion

This paper analyzes problems such as data not being shared between the registrar and the bank in the process of registering real estate mortgage loans and unnecessary duplication of work by the public, and propose a business processing model. We proposed a smart real estate mortgage registration business solution that can be integrated online and offline through the combination of a real estate registration financial management platform and a real estate registration certificate self-service device. By applying technologies such as artificial intelligence to real estate registration under the Internet environment, it has improved the work efficiency and service level of review agencies and banking institutions in real estate mortgage registration, and provides convenient services to the public.

However, problems such as processing of sensitive data, security, legal regulations, administrative norms, etc. still remain due to the application of the real estate collateral registration bank joint business processing model. Therefore, further research to solve related problems will be conducted in the future to maximize the efficiency of the model for handling real estate mortgage registered bank joint business. In addition, with the development of related technologies, the use of smart approvals according to the era of "smart registration" of real estate is expected to expand, and the efficiency of real estate registration and the satisfaction of public affairs are expected to increase, thereby it could be increasing social and economic effects.

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