

# Online Software Implementation of Hospital Financial Personnel Training Based on Intelligent Social Demand Statistical Information Platform

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**Abstract**—Under the background of the intelligent social demand statistical information platform, this paper proposes a design scheme of the hospital financial management part based on the .NET platform, which provides strong support for the daily operation of the hospital. Put forward higher professional ethics requirements and professional level ability requirements for hospital financial personnel. In order to strengthen the financial management of the hospital, it is necessary to build a team with high professional level and excellent business. This is also the new direction of hospital financial development and reform. In modern software engineering, software architecture design is a key factor in reducing costs, improving quality, and delivering products on time and on demand. Therefore, in order to build reliable and interoperable logistics information platform.

**Keywords**—Online Software Implementation, Hospital Financial Personnel Training, Intelligent Social Demand, Demand Statistical Information

## I. THEORETICAL BASIS

With the continuous development of the hospital reform system, the requirements for hospital financial work have also changed. In order to maintain the public welfare of public medical and health care, promote fairness and justice, effectively alleviate the problems of rapid rise in medical expenses and excessive personal burden, and smoothly promote the medical reform process [1], the government has decided Determined to relieve the people's worries, break the original interest pattern, and focus on the operation system of public hospitals. As a service-oriented institution in my country, hospitals undertake their own work of helping the world, treating diseases and saving people, but hospitals must survive and develop in a market economy environment [2], which requires the hospital to solve the problems of survival and development while taking into account the public welfare.

As a service-oriented institution in my country, hospitals undertake their own duties of helping the world, treating diseases and saving people, but hospitals must survive and develop in a market economy environment [3], which requires hospitals to solve the problems of survival and development while taking into account the public welfare. In this paper, I try to use the general ledger model in Chuandu 8 13 version: the general ledger model in the software, and Blank gives some experimental analysis on the dynamic degradation of digital chaotic systems [4-5]. 'Wonzhou, to realize the cost accounting of hospital departments. As a result, I have made a few {financial software} experiences to share with you.

Provide data support for the development and construction of hospitals. Therefore, the design scheme of the hospital financial management [6] system proposed in this paper mainly involves the financial management subsystem of outpatient charges, which aims to effectively improve the efficiency of the financial management of the hospital outpatient service and

provide high-quality services for patients [7]. The data volume of railway statistics has grown rapidly, accumulating massive amounts of structured, semi-structured and unstructured data. Entering the era of big data, in order to further meet the needs of railway big data statistics, solve various problems existing in railway statistics at this stage, and improve the level of statistical services [8], under the organization of the Planning and Statistics Department of China Railway Corporation (hereinafter referred to as the Corporation), the second is social Broad public participation. The supply and demand sides conduct transactions through the platform, the two groups attract and promote each other, and the network effect is amplified. The third is to optimize the allocation of social resources [9].

Natural resources are limited, and all kinds of idle resources should be re-integrated and allocated. The smart scenic spot is the product of the development of information technology and the innovation and combination of the management model of the scenic spot [10]. It is proposed by summarizing advanced experience and adapting to the new situation of the actual needs of the modern management of scenic spots. Building as the goal, some studies have shown that many digital chaotic systems based on limited computational precision are insecure [11-12].

Alvarez and Arroyo et al. discussed the basic criteria for establishing a chaotic-based cryptosystem, and also gave relevant elaborations on the dynamic degradation of chaotic cryptosystems [13]. It is possible to clearly grasp the evolution of the logistics information system to a higher stage. It is an inevitable trend of logistics informatization to promote resource sharing and collaborative work among logistics enterprises. There will also be many problems and challenges in this process. Fridrich proposed an encryption algorithm based on two-dimensional chaotic map on the basis of analyzing and summarizing the characteristic degradation problem of chaotic functions [14]. Applications in different application contexts will have many differences, but their common feature is to provide tools to support human collaborative work.

In order to simplify and guide the development of application systems, it is necessary to summarize the common collaborative work characteristics of various application systems [15]. Therefore, it is necessary to train excellent hospital financial personnel to use professional professional judgment and skilled business skills to adapt to the continuous introduction of medical reform supporting policies and policies [16]. It has become a very important issue facing the current deepening of the reform of the medical system. These new requirements have resulted in an unprecedented increase in the financial workload. In particular, the hospital has a large number of income items and internal departments, and the manual preparation of accounting vouchers in the past cannot complete the arduous task. Therefore, it is very meaningful to

study the application of financial software in primary public hospitals [17].

**II. GROUND STUDY**

Pareek et al. proposed a new online training software architecture. The initial parameter values and control parameters of the chaotic function are no longer used as keys, but an external key with a maximum length of 128 bits is used to generate them [18].

Saxén et al. divided the existing prediction models into two categories: linear and non-linear, for the prediction of statistical information indicators of the needs of intelligent society [19].

**III. THE PROPOSED METHODOLOGY**

**A. Intelligent Social Demand Statistical Information Platform**

Clearly reflect the hospital's financial revenue and expenditure and the form of economic activities, and collect and monitor relevant data, which will better fulfill the supervision and management responsibilities, thereby promoting the hospital's financial reform and bringing a more efficient management model for the hospital. Data Collection is to collect data from accounting reports. Hospital accounting reports include balance sheet, total income and expenditure table, medical income and expenditure detailed table, cash flow statement, financial subsidy income and expenditure statement, and can also customize the report, such as custom business income. Support schedule, various workload reports, etc. The patient's personal name, gender and age were entered into the system database.

No.	Strategies	Suggested tools	Smart pedagogy
1	Engage students in problems to enhance solving-problem and critical thinking skills by playing roles or communicating with foreigners and record them to assess.	Window Movie Maker, iMovie or photo-to-video as Proshow Producer,	Experiential learning, Collaborative learning
2	Encouraging students to be engaged in online experience and join local virtual field trips outside classroom through the software and webs as an experience and reflection	Microsoft OneNote, Google earth VR, Flyover	Experiential learning,
3	Letting students join in the activities as a team or club with the same ideas and purposes to together implement a plan, or a project, etc. for more collaboration and (self)assessment.	Todoist, Social network: Face book, Zalo, Instagram, twitter,	Social Learning, Project-based learning
4	Asking students to take part in social activities using English as main language and call the participation from the other group or via social networks as a channel for exchanging experience, training skills and practicing reflection.	Social network, Moodle, Soundtrap, Skype, Class craft, zoom, Newsela, Pear Deck, Facebook, Padlet, Microsoft teams,	Social Learning
5	Using the visual aids such as clips, advertisements, films to explain and introduce the topic and knowledge related to lesson to build a diverse learning environment and have lively reflection.	Notability, online lecturing systems, projectors, Moodle, Vclass, Teachertube, Haikuteds,	Evidence-Based Teaching

Tab. 1. Intelligent Social Demand Statistical Information Platform

The outpatient registration module includes general outpatient number and expert outpatient number. The system automatically calculates the registration fee according to the department selected by the patient and the grade of the attending doctor. By investigating the 11 major business systems related to transportation statistics (passenger station marshalling system, depot passenger car Management information system, passenger train responsibility information system, station luggage system, passenger ticket 5.0 system, Internet platform economic statistical survey subjects and lack of directories. The types of Internet platform economic activity transaction subjects can be divided into: individual to individual, individual to enterprise, enterprise For individuals, enterprises to enterprises. Smart scenic spots are not a new topic, but on the road of smart scenic spots, there are not many places that have gone well and gone far. Through the construction of smart scenic spots, Jinfo Mountain provides tourism information. The level of transformation will go up a notch.

At the same time, the characteristic public service channels of Jinfo that can effectively serve tourists will also increase. When the specified accuracy cannot meet the safety requirements, a very short cycle occurs in the period of the chaotic function. As shown in Figure 2-1, when the precision of the logistic map is 2, and the number of iterations is less than 15, the track presents a certain randomness. When the number of iterations exceeds 15, the orbits show obvious periodicity. In some offices, there may be only one computer that can enter consignment notes, etc., so it is unrealistic to establish a network environment in such offices, and such offices may use dial-up Internet access, which is slow. and unstable.

**B. Realization of Online Software for Hospital Financial Personnel Training**

Integrity is the foundation of being a person and doing things, and it is also a necessary quality for excellent financial personnel. Many hospitals put "integrity" in the most important position of hospital culture. As a requirement for employees, the direct cost table of each department of the hospital is compiled to analyze the clinical service, medical technology, medical auxiliary and administrative logistics of the hospital. The direct cost (medical cost) status of each department in the fourth category, most of the direct cost is the controllable cost of the department.

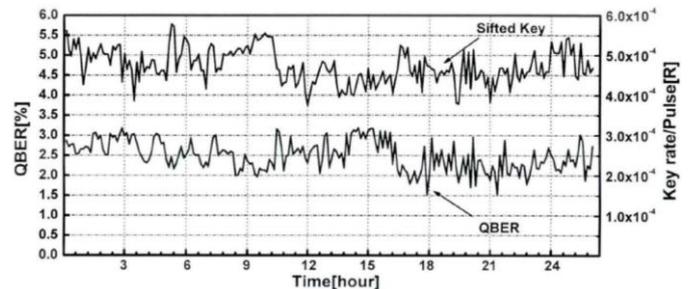


Fig. 1. Online Software for Hospital Financial Personnel Training

The intelligent financial analysis system is an effective tool for processing big data, and it has obvious advantages over the traditional manual analysis mode: First, it is easy to use. The highly integrated financial analysis template is simple to compile, but has powerful functions, which is conducive to popularization and use, and realizes "expertized management and fool-like operation". If the patient is an old hospital number, you need to add outpatient registration information; if the patient is a new hospital number, you need to recreate the patient's electronic medical record and issue the hospital medical record book to the patient. It is expected that by the end of 2020, the total storage capacity of the data warehouse system will be 100TB of uncompressed data space.

$$V = \frac{I_{\max}}{I_{\min}} \tag{1}$$

where  $y_i$  is the true value,  $\hat{y}_i$  is the model predicted value, and  $n$  is the sample size.

$$RMSE = \sqrt{\frac{1}{n} \sum_{i=1}^n (y - \hat{y}_i)^2} \tag{2}$$

The business systems involved in statistical raw information are far more than these. In the process of railway informatization development, a large amount of semi-structured and unstructured data has also been accumulated. It mainly includes self-operated e-commerce sales, self-operated e-commerce purchases, non-self-operated e-commerce transactions, platform transaction service fees, Internet

advertising revenue, and the transaction volume of goods or services to units and individuals. The platform is ultimately provided for users to use. The isolation of user information between application platforms will lead to the inability to establish a unified visual interface, information sharing is difficult, and even information security cannot be guaranteed. According to the design, the system should include a unified user management module to create a unified and reusable user management system.

**C. Intelligent Social Demand Statistics Platform and Financial Personnel Training**

It makes sense that many hospitals adopt "team spirit" as their hospital culture or staff code. In today's hospital survival and development environment, the complexity of financial work and the high intensity of tasks. Second, the work is greatly reduced. Free the financial staff from heavy financial analysis activities and focus more on decision-making and management. Third, to improve the efficiency and quality of financial analysis, both the breadth and depth of the analysis have been significantly enhanced. Drug refund and fee refund services can be handled for patients. The operator can delete the patient's information by entering the patient's personal bill number.

$$MAE = \frac{1}{n} \sum_{i=1}^n |y_i - y| \tag{3}$$

where  $y_i$  is the true value,  $y\hat{}$  is the model predicted value, and  $n$  is the sample size.

$$MAPE = \sum_{i=1}^n \left| \frac{y_i - y}{y} \right| \tag{4}$$

At the same time, it is also necessary to call up the relevant database tables of the hospital outpatient pharmacy. In the context of railway big data, the role of statistics is changing, and the original statistical system based on report preparation and reporting can no longer adapt to modern enterprise management and operation. In order to meet the needs of various information statistics of higher-level units, the grassroots station section. The cloud-based platform (PAAS mode) is an open and interconnected application service platform. According to the development and changes of needs, a variety of applications can be quickly developed and deployed on the platform; at the same time, the organic combination of these applications can be guaranteed to maximize benefits.

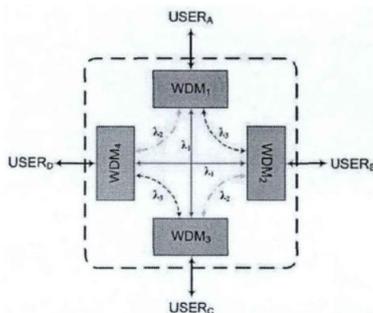


Fig.2. Intelligent Social Demand Statistics Platform and Financial Personnel Training

The design of e-commerce platform statistical report and the specific operation practice have positive reference significance for Nanjing to carry out the economic statistics of Internet platform. Based on the statistical work of e-commerce platform, this paper puts forward a preliminary idea on how to carry out the economic statistics work of Internet platform in combination with the actual development of Internet platform economy.

**IV. EXPERIMENT**

The online software for hospital financial personnel training is shown in the figure.

FRQC-103BC	PDI-1101	...	TI-102	FI-8
9954.7262	2.7911	...	-55.9000	28724.3183
9532.2919	2.6820	...	-54.4000	28600.6425
9453.5976	2.7309	...	-52.4000	28423.1582
9212.0712	2.6586	...	-53.7000	28923.3535
...	...	...	...	...
10677.2401	3.1468	...	-166.1999	31234.5859
10608.2236	3.2048	...	-165.6000	30866.8144
10597.3925	3.2113	...	-166.9999	31013.7441
10641.1232	3.6103	...	-165.6000	30706.5469

Fig.3. Online software for hospital financial personnel training

Virtualized Image Modeling Algorithms is shown in the figure.

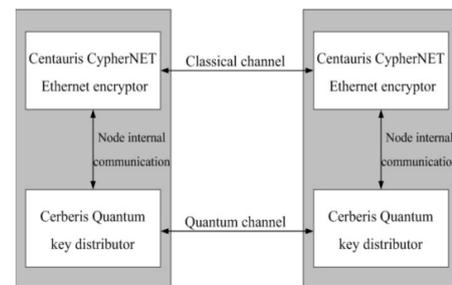


Fig.4. Virtualized Image Modeling Algorithms

Intelligent social demand statistics platform and financial personnel training is shown in the figure.

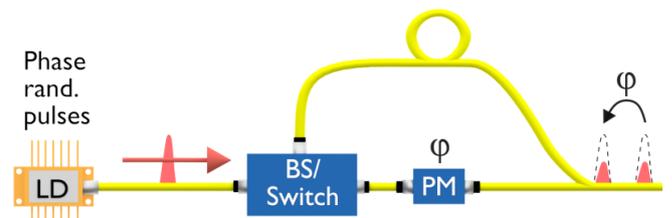


Fig.5. social demand statistics platform

**CONCLUSION**

Intelligent financial analysis condenses the wisdom of experts, provides strong productivity, better solves the difficult problem of financial analysis, and improves the level of hospital financial analysis. As a financial officer of the hospital, it seems that there is a long way to go. It is not only necessary to carry out refined management from the aspects of comprehensive budget, cost control, cost saving, waste reduction, and cost reduction to achieve optimal allocation of resources. According to the actual job responsibilities of the financial management department, a regular rotation system is implemented to make financial personnel better. Adapt to the general working environment, and at the same time increase the communication skills and teamwork coordination skills of financial personnel.

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