Retraction

Retracted: Enterprise Management Resource Protection System Based on Digital Information Technology

Wireless Communications and Mobile Computing

This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

(1) Discrepancies in scope

(2) Discrepancies in the description of the research reported

(3) Discrepancies between the availability of data and the research described

(4) Inappropriate citations

(5) Incoherent, meaningless and/or irrelevant content included in the article

(6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

References

[1] W. Zhou, "Enterprise Management Resource Protection System Based on Digital Information Technology," *Wireless Communications and Mobile Computing*, vol. 2022, Article ID 3277750, 13 pages, 2022.

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Research Article

Enterprise Management Resource Protection System Based on Digital Information Technology

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Enterprise management resource protection is a system management activity in which an enterprise conducts comprehensive planning, allocation, utilization, and development of its resources, and it is the process of organizing, planning, coordinating, supervising, and controlling the allocation, utilization, and development of enterprise resources. The purpose of this paper is to analyze the system that digital information technology applies to enterprise management by constructing models and combinations based on digital information technology so that the built models and combinations have a more effective analysis and research. This paper first gives a general introduction to digital information technology, then analyzes the theory of enterprise management resource protection, then establishes a model for information technology to act on enterprise management, and finally analyzes the combination of information technology and enterprise management and compares the two through enterprise case analysis. The experimental results show that in the case of enterprise management in various regions, the efficiency of enterprise management based on digital information technology is obviously higher, and the enterprise resources can be better protected. From 2018 to 2021, the development of enterprise management resource protection in various regions is basically showing an upward trend; it increased from 3.443, 5.414, 6.473, 4.382, 2.997, 3.751, 0.506, and 2.974 in 2018 to 6.187, 7.658, 8.601, 7.518, 5.932, 6.516, 3.877, and 6.243 in 2021. This is a good demonstration of the effectiveness of the protection of enterprise management resources based on digital information technology.

1. Introduction

With the rapid development of the domestic economy, the protection of enterprise resources in enterprise management has become a hot issue in the current business circle. Many scholars believe that resources are an important factor that increases people's work pressure, which in turn affects people's physical and mental health. In recent years, scholars have paid more and more attention to the theoretical research of enterprise resource protection based on enterprise management. Digital information technology mainly uses geographic information system, communication network, and multimedia technology to build a digital system, so as to organize, process, transmit, query, and display the collected information, in order to assist the decision-making in enterprise resource protection in enterprise man-agement and comprehensively guide the progress of enterprise management resource protection.

Today, with the rapid development of Internet technology, the whole country is a "digital city." This paper uses digital information technology to provide a technical support for solving the problem of enterprise resource protection in enterprise management, provides a standardized and scientific information management for it, and builds an effective enterprise management system. This also has a very far-reaching impact on the development of the enterprise. The application scope of digital information technology is very wide, and the use of digital information technology can meet the comprehensive management of enterprises. But in recent years, the research on digital information technology for enterprise management is relatively less. Therefore, the application of digital information technology to the research

of enterprise management resource protection has certain theoretical and practical significance.

2. Related Work

With the progress of society, more and more people have studied digital information technology. Theis proposed that "Moore's Law" will open a new era, and the focus of information technology research and development will shift from miniaturization of time-honored technologies to coordinated introduction of new devices, new integration technologies, and new architectures for computing [1]. However, many such studies have emerged and may be lacking in innovation. Later, Habib studied the use of mathematical information automation technology to carry out a new management of higher education institutions and successfully provided experience to higher education academia [2]. However, this research system still has some limitations, and it has not been able to successfully identify the characteristics of the system. Wang studied the hypothetical association between digital birth and four common IT addictions. He employed a multidimensional digital information technology approach to compare the associations between specific attributes of digital soundtracks and each type of IT addiction [3]. However, it is clear that the final results did not reach the expected state, and further research is needed. Following this, Li studied the use of these modern information technologies in libraries for common applications through a case study of digital libraries in China. He concluded that artificial intelligence can improve the service level of existing digital libraries from three aspects: resource construction, information organization, and information service [4]. However, the cases he studied were too scattered to fully present his views. Based on research by academics, Given found that the digital technologies used by humanists support traditional ways of working within their disciplines, while also creating potential for new academic practices. The heterogeneous nature of the research practices of humanities scholars is explored and thus has implications for the design of digital tools [5]. However, his research does not take into account the practical significance and is too theoretical. Through his research results, Vanpoucke proposed the use of information technology and found that more and more companies exchange information with each other in order to better cooperate closely with supply chain partners. In his paper, he showed that information exchange was indispensable for business integration [6]. However, such studies are too complex to be appropriate as survey studies for small companies. Subsequently, Yadav studied the design of an optimal low-power digital phase-locked loop. DPLLs use modulators or demodulators in wireless or wired communications to compute fast speeds, low noise or jitter, large bandwidth, and very fast acquisition times [7]. However, this design is not yet complete and has not yet been applied in practice.

The innovation of this paper is as follows: (1) In the enterprise management resource protection project, digital information technology can be used to quickly collect, process, integrate and process resources, and then transmit and display them. It is convenient and effective to apply digital information technology to enterprise management, and it can also better conduct a comprehensive management of enterprises. (2) Creating two models for comparison to get better test results. In addition, the advantages and characteristics of digital information technology are deeply studied, and the effective function of applying it to enterprise management resource protection is found out, so as to obtain a better system combination of digital information technology and enterprise management resource protection.

3. Application of Digital Information Technology in Enterprise Management

3.1. Function of Digital Information Technology in Enterprises

3.1.1. The Meaning of Digital Technology and Information Technology. Digital technology is a science and technology that accompanies electronic computers. It refers to a technology that converts various information (such as picture, text, sound, and image) into binary numbers that can be recognized by electronic computers with the help of certain equipment and then operates, processes, stores, transmits, propagates, and restores the numbers [8]. It is also called digital technology, computer digital technology, etc., because it is necessary to use computers to encode, compress, and decode information in operations, storage, and other links. Digital technology is also called digital control technology. Information technology (IT for short) refers to the technology that expands human information functions under the guidance of the basic principles and methods of information science. Generally speaking, information technology is the sum of technologies that realize the functions of information acquisition, processing, transmission, and utilization as the main means of electronic computers and modern communication; it is also a general term for related methods, means, and operating procedures for the management, development, and utilization of information resources.

3.1.2. Judgment Formula of Digital Information Technology. The use of digital information technology can make a comparison and evaluation of things in the enterprise and achieve the standard of fuzzy comprehensive evaluation. Generally, the formula for dealing with multilayer comprehensive evaluation problems is as follows:

$$P = Q \bullet W = Q \bullet \begin{bmatrix} Q_1 \bullet W_1 \\ Q_2 \bullet W_2 \\ \vdots \\ Q_M \bullet W_M \end{bmatrix}. \tag{1}$$

Among them,

$$W_1 = \begin{bmatrix} Q_{1_1} \bullet W_{1_1} \\ Q_{1_2} \bullet W_{1_2} \\ \vdots \\ Q_{1_M} \bullet W_{1_M} \end{bmatrix}, \cdots, W_1 = \begin{bmatrix} Q_{M_1} \bullet W_{M_1} \\ Q_{M_2} \bullet W_{M_2} \\ \vdots \\ Q_{M_N} \bullet W_{M_N} \end{bmatrix}. \tag{2}$$

While,

$$W_{1_1} = \begin{bmatrix} O_1 \\ O_2 \\ \vdots \\ O_o \end{bmatrix}, \cdots, W_{m_n} = \begin{bmatrix} T_1 \\ T_2 \\ \vdots \\ T_t \end{bmatrix}. \tag{3}$$

In the formula, O is the overall comment set on which the judgment is made; $Q; Q_1 \cdots Q_M; Q_{M_N}$ is the weight matrix of each layer; $W_1 \cdots \cdots W; W_{1_1} \cdots \cdots W_{M_N}$ is the judgment transformation matrix of each layer [9].

Since,

$$Q_1 \cdot W_1 = Q_1 \cdot \begin{bmatrix} O_1 \\ O_2 \\ \vdots \\ O_7 \end{bmatrix} = (0.1, 0.1, 0.1, 0.1, 0.1, 0.3, 0.2)$$

$$\cdot \begin{bmatrix} 0.6 & 0.2 & 0.1 & 0.1 \\ 0.5 & 0.4 & 0.1 & 0 \\ 0.2 & 0.2 & 0.5 & 0.1 \\ 0.3 & 0.5 & 0.2 & 0 \\ 0.2 & 0.4 & 0.3 & 0.1 \\ 0.3 & 0.4 & 0.2 & 0.1 \\ 0.8 & 0.1 & 0.1 & 0 \end{bmatrix} = (0.3, 0.3, 0.2, 0.1),$$

$$\tag{4}$$

$$Q_2 \cdot W_2 = Q_2 \cdot \begin{bmatrix} D_1 \\ D_2 \\ \vdots \\ D_7 \end{bmatrix} = (0.1, 0.1, 0.2, 0.2, 0.1, 0.3)$$

$$\cdot \begin{bmatrix} 0.6 & 0.5 & 0.2 & 0.1 \\ 0.5 & 0.3 & 0.2 & 0 \\ 0.4 & 0.3 & 0.3 & 0 \\ 0.3 & 0.4 & 0.3 & 0 \\ 0.3 & 0.4 & 0.3 & 0 \\ 0.4 & 0.3 & 0.3 & 0 \\ 0.5 & 0.4 & 0.1 & 0 \end{bmatrix} = (0.3, 0.3, 0.2, 0.1).$$

$$\tag{5}$$

Similarly, it can be calculated as

$$Q_3 \bullet W_3 = (0.3, 0.2, 0.2, 0.1). \tag{6}$$

So then, it can get

$$O = Q \cdot W = Q \cdot \begin{bmatrix} Q_1 \cdot W_1 \\ Q_2 \cdot W_2 \\ Q_3 \cdot W_3 \end{bmatrix} = (0.5, 0.2, 0.3)$$

$$\cdot \begin{bmatrix} 0.3 & 0.3 & 0.2 & 0.1 \\ 0.3 & 0.3 & 0.2 & 0.1 \\ 0.3 & 0.2 & 0.2 & 0.1 \end{bmatrix} = (0.3, 0.3, 0.2, 0.1).$$

$$\tag{7}$$

This result is normalized to obtain $O = (0.33, 0.33, 0.22, 0.11)$.

After a calculation of the set digital informatization formula to the enterprise evaluation system, the final result O is obtained. Overall, the application of informatization to enterprises is very effective [10].

3.1.3. Digital Information Technology and Enterprise Management.
In the new era, enterprises are facing the challenges of intensified competition and accelerated innovation. In this context, mastering digital information technology becomes more and more important. First of all, digital information technology can expand the information sources of enterprises and enrich the innovation resources of enterprises. This effect is not only reflected in technology, but also in the market, and this is the key point that enterprises value most. As shown in Figures 1 and 2, the logical structure of digital information technology highlights the characteristics of enterprise innovation management mode after using digital information technology.

From this, it can be seen that the application of digital information technology in enterprise management has a very high value. Digital information technology has the function of innovation and integration of different professions.

3.2. Enterprise Management System

3.2.1. Concept of Management System.
The enterprise management system mainly stipulates the functional scope, responsibilities, authority, and working procedures and methods of management of various management departments, management positions, and various professional management businesses [11]. The value of enterprise management lies in enabling different employees to work together to achieve enterprise goals; the management system can be regarded as the sum of the rules for regulating and coordinating the behaviors of various departments and personnel, integrating resources, and constraining and adjusting various behaviors and their relationship with resource elements in business management activities [12].
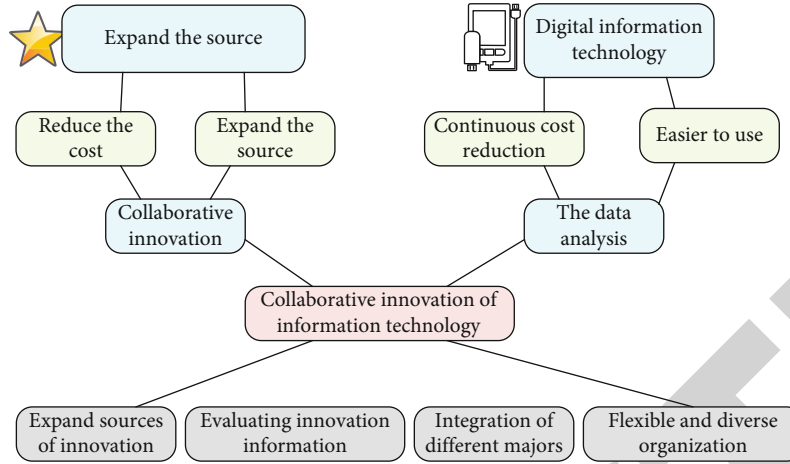
FIGURE 1: Schematic diagram of digital information technology innovation management model.
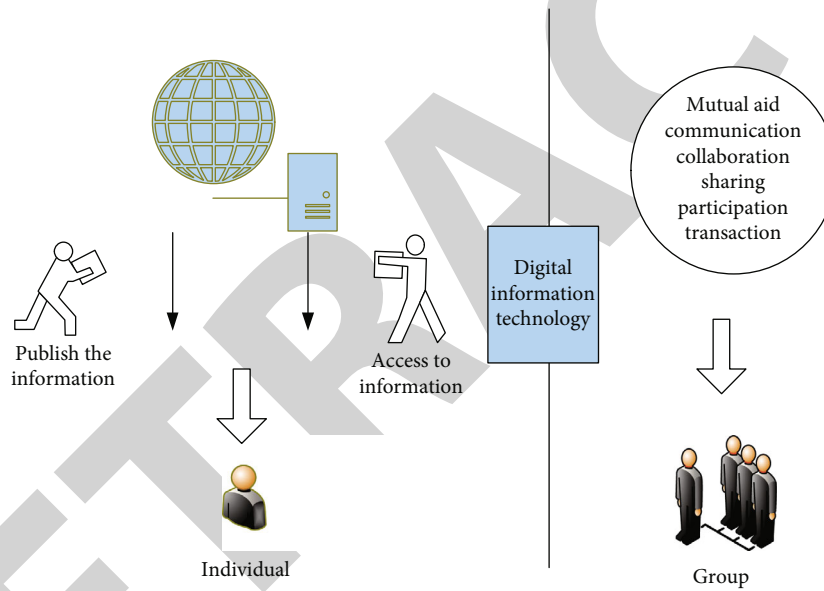

FIGURE 2: Digital information technology applications.

The management process is also an indispensable part of the enterprise, and the management system can co-evolve with the management process as shown in Figure 3.

The management system is more dependent on the vertical level of the organizational structure, and the process operation is more inclined to the horizontal coordination between departments. The two are parallel in the management system and do not conflict. In practical applications, the two are often combined.

3.2.2. Management system. In the management system, it is assumed that Y and X are two topological spaces; $Z : Y \longrightarrow Y, V : X \longrightarrow X$ are the self-maps of Y and X, respectively. If there is a homeomorphism c from Y to X: $Y \longrightarrow X$, make $c[Z(T)] = K[c(T)]$; then, Z and K are said to be topologically conjugated, denoted as $Z \sim K$. If the inverse $c^{-1}(T)$ of $c(T)$ is substituted into the above

formula T, we have

$$c\{Z[c^{-1}(T)]\} = K\{c[c^{-1}(T)]\} = K(T), \tag{8}$$

So it can be concluded that

$$c^{-1}[K(T)] = c^{-1}\{Z[c^{-1}(T)]\} = Z[c^{-1}(T)]. \tag{9}$$

It can also be proved that

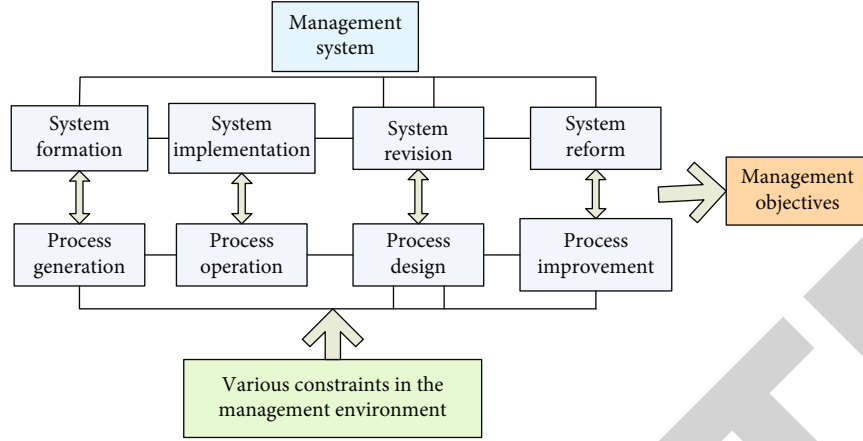$$c[Z^2(T)] = c[Z(Z(T))] = K[c(Z(T))] = K[k(c(T))] = K^2[c(T)]. \tag{10}$$

Figure 3: Co-evolution of management system and management process.

The implementation of management system can play the functions of planning, organization, leadership, control, etc. to coordinate organizational resources and improve overall performance and the process of implementation and effectiveness of management system, that is, the process of coordinating and planning the various elements of the enterprise and their interrelationships [13]. Supposing $P = [R_1(A), R_2(A) \cdots R_M(A)]^E$ is the operation of various resource elements of the enterprise, A represents time, and B_X represents the many ways in which the management system coordinates and integrates various resources of the enterprise. Then, the following differential equations can be obtained:

$$\frac{SR_X(A)}{SA} = B_X[R_1(A), R_2(A) \cdots R_M(A)]. \tag{11}$$

Assuming that the function on the right-hand side of the equation is considered in a system of m-dimensional constant coefficient linear differential equations, assuming that B is a 22-constant square matrix, and Y is simplified to a two-dimensional columnwise number, we can obtain

$$\frac{SY}{SA} = BY. \tag{12}$$

Then, the solution that satisfies the initial condition $Y(0) = Y_0$ is

$$Y = W^{SA}Y_0 = \varnothing(A, Y_0). \tag{13}$$

Not only that, $\phi(A, Y_0)$ also has the following properties:

$$\varnothing(A_1 + A_2, Y) = \varnothing(A_2, \varnothing(A_1, Y)). \tag{14}$$

For the convenience of analysis, we consider a two-dimensional constant coefficient dynamical system. Assuming that the system matrix $B = \begin{bmatrix} Q & W \\ E & R \end{bmatrix}$, Y is simplified to $Y = \begin{bmatrix} y \\ x \end{bmatrix}$; the plane constant coefficient homogeneous differential equation can be obtained:

$$\begin{cases} \dfrac{RY}{RA} = QY + Wx \\ \dfrac{Rx}{RA} = EY + Rx \end{cases}. \tag{15}$$

Obviously, $\begin{cases} y = 0 \\ x = 0 \end{cases}$ is a singular point, (QW - ER $\neq$ 0), which is a non-singular matrix. It can be concluded that

$$\begin{bmatrix} y \\ x \end{bmatrix} = K \begin{bmatrix} \aleph \\ \mu \end{bmatrix} = \begin{bmatrix} t_{11} & t_{13} \\ t_{12} & t_{14} \end{bmatrix} \begin{bmatrix} \aleph \\ \mu \end{bmatrix}. \tag{16}$$

Then, Equation (15) can be transformed into

$$\frac{R}{RA} \begin{bmatrix} \aleph \\ \mu \end{bmatrix} = K^{-1} \begin{bmatrix} Q & W \\ E & R \end{bmatrix} K \begin{bmatrix} \aleph \\ \mu \end{bmatrix}. \tag{17}$$

A non-singular matrix K can be taken such that

$$K^{-1} \begin{bmatrix} Q & W \\ E & R \end{bmatrix} K = P. \tag{18}$$

The management system also has the characteristics of multidimensionality and diversification. Due to various disturbances from the outside of the enterprise, it coordinates various elements and resources of the enterprise in a relative space as a high-dimensional vector field. The dynamic

TABLE 1: Manage business process design content.

Scholars	Concept	Definition
Davenport and Short	BP redesign	Analysis and design of workflow or various processes within or between organizations
Morrow and Hazel	BP redesign	Examine activities and information flows in key processes for simplification, cost reduction, quality improvement, and flexibility
Short and Venkatraman	BP redesign	The restructuring of internal business processes to improve customer, product distribution, and delivery performance
Short and Venkatraman	BN redesign	Restructure some of the critical products and services that are part of the larger enterprise network
Johansson et al.	BP redesign	It is the means by which an organization obtains radical changes in cost, cycle, service, and quality. It requires a multitool approach with an emphasis on customer-facing core processes
Krajewski and Ritzman	BP redesign	The selection of input elements, resources, workflows, and methods needed to transform inputs into outputs
Kaplan and Murdock	CP redesign	A fundamental rethink of how the enterprise is run, a simultaneous and integrated redesign of workflow, decision-making, organizational, and information systems
Loewenthal	Organizational redesign	To focus on the core competitiveness of the enterprise, the fundamental thinking and redesign of the enterprise process and organizational structure, in order to achieve a huge improvement in organizational performance

equation in the previous section is slightly expanded to get:

$$\frac{RY}{RA} = Q(A)Y. \tag{19}$$

The meaning of the letter remains unchanged, except that it changes from Q to Q(A), and the institutional constraints become a function of time rather than the original constant matrix, which is more in line with the actual situation [14]. Its formula can be:

$$J(A) = \begin{vmatrix} Y_{11(A)} & \cdots & Y_{nl(A)} \\ Y_{\ln (A)} & \cdots & Y_{nn(A)} \end{vmatrix}. \tag{20}$$

Then, Formula (19) has a general solution:

$$Y(A) = \sum_{O=1}^{M} E_O Y_O. \tag{21}$$

3.2.3. Management Process Design. The definition of process design is mentioned in the literature review part of this paper, and some are listed in Table 1. The management business process realizes the implementation of most management systems through the content decomposition of the specific business process and the objective description of the time and space requirements. The research on the management process design must focus on the actual problems in the implementation of the enterprise management system, clarify the role and characteristics of the management process on the realization of management functions, and then explain its formation mechanism and related influencing factors. Based on these interpretive studies, a methodological study of management process design was carried out [15].

TABLE 2: The clear situation of employees at all levels of P company on their own job responsibilities.

	Ordinary	In the middle	At the top
Very ambiguous	3.85%	0%	0%
Not clear	7.69%	8.23%	33.3%
More clear	23.08%	63.20%	66.7%
Very clear	65.38%	28.57%	0%

3.2.4. Employees' Awareness of the Management System. The compilation of management system is the main form of management system. For example, Company P is an enterprise with only a few hundred employees, and its system compilation is complex, with 15 articles, 154 chapters, and more than 400,000 words, and it is ready to be further expanded. Such a compilation of management systems, even corporate executives may not have the patience and time to read them through [16]. The employees' attention and understanding of the management system also determine its performance effect. The survey results in Table 2 show the degree of clarity of employees at all levels in the company's system to their own-related job responsibilities:

3.3. Theory of Enterprise Resource Protection

3.3.1. The Theoretical Significance of Resource Protection. The theory of resource protection means that enterprises maintain, protect, and gather resources with all their strength and the threat that enterprises face is that they will lose or lose these precious resources. Assuming that the enterprise faces the threat of resource loss, lacks resources, and does not get the corresponding resource return after investing a lot of resources, it will promote the psychological pressure of employees [17]. However, other resources can be used to offset the negative impact of the lack of resources,
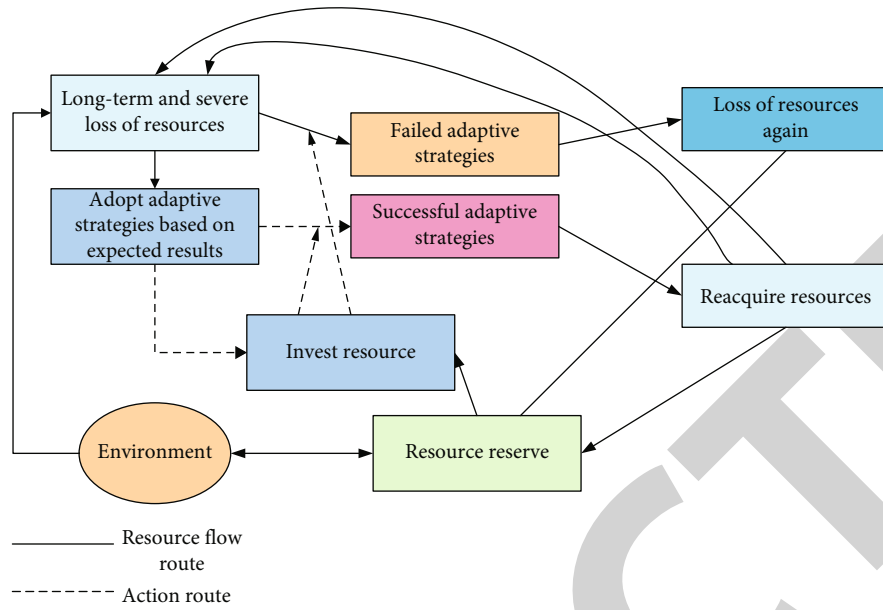
FIGURE 4: Resource protection model.

and enterprises can replace resources. For example, reemployment of people can greatly reduce the feelings of depression and anxiety caused by long-term unemployment. If people cannot directly replace the resource, indirect or symbolic replacement methods can be used.

3.3.2. Resources in the Theory of Enterprise Resource Protection. Enterprises will seek the resources they need according to the order of physical resources, social resources, and psychological resources. Through the resource conservation theory, maintaining and gathering resources is the main purpose of the enterprise. Therefore, enterprises will not only protect the resources because of the value generated by the resources themselves, but also because the resources help enterprises obtain and protect other meaningful resources. In the theory of "resource protection," resources include physical objects, personal characteristics, identities, abilities, and other resources that employees value, as well as physical objects, personal characteristics, situations, or abilities that enable employees to obtain precious resources [18]. According to the relevant data, the resource protection model can be drawn as shown in Figure 4. It can be seen that a successful enterprise adaptability strategy is to make a circular input in resources to obtain resources.

4. System Demonstration of Enterprise Management Resource Protection after the Application of Information Technology

4.1. Information Technology Panel Model

4.1.1. Ordinary Panel Model. The ordinary panel model can be used to test the linear impact of information technology on enterprise resources. However, the impact of information technology on total factor enterprise resources is not a sim-

ple linear relationship and may show a nonlinear relationship with the changes of heterogeneous factors such as the level of information technology and human capital of enterprises in various regions. In order to further judge whether heterogeneous factors such as information technology level and human capital level will cause the influence of information technology on total factor productivity to be nonlinear, this paper uses the panel threshold model to test [19].

There are many variables in the model, such as the degree of opening to the outside world (FDI), the level of marketization (Mar), the level of human capital (Huma), and the level of industrialization (Indu). The descriptive statistics for these variables are shown in Table 3: It can be seen that the marketization level (Mar) has the highest average value of 1.636, indicating that it is most deeply influenced by information technology.

The panel regression results of information technology on the technical efficiency of enterprise resource protection are shown in Table 4. Model (1) and model (2) examine the impact of information technology on technical efficiency under fixed effects and random effects, respectively [20]. And according to the test results, the choice of model (1) is more suitable. From the results, the elastic coefficients of the degree of opening to the outside world, the level of marketization, and the level of industrialization are 0.0002, 0.0007, and 0.0017, respectively, and they all passed the 5% significance test. This shows that the degree of opening to the outside world, the level of marketization, and the level of industrialization have a significant positive impact on technical efficiency.

The impact of information technology on the technological progress of enterprise resources is shown in Table 5. The test results also indicate that model (1) is more suitable. From the results, the elasticity coefficient of information technology after introducing other influencing factors such as the degree of opening to the

Table 3: Descriptive statistics of variables.

Variable	The mean	The standard deviation	The minimum value	The maximum
Total factor productivity (TFP)	0.005	0.011	− 0.015	0.037
Technical efficiency (TEC)	− 0.003	0.004	− 0.013	≤0.001
Technological progress (TCH)	0.011	0.012	− 0.014	0.045
Information technology (IT)	4.792	2.197	− 1.937	9.399
Openness (FDI)	− 4.361	1.069	− 8.232	− 2.606
Marketization level (mar)	1.636	0.322	0.267	2.328
Human capital level (Huma)	0.556	0.096	0.302	0.862
Industrialization level (Indu)	− 0.802	0.222	-1.697	-0.488

Table 4: Panel regression results of information technology on the technical efficiency of enterprise resource protection.

Variable	(1) FE	(2) RE
IT	− 0.0016∗∗∗ (− 18.484)	− 0.0022∗∗∗ (− 13.075)
FDI	0.0003∗∗ (2.262)	0.00045∗∗∗ (3.407)
Mar	0.0008∗∗ (1.974)	0.0008∗∗ (2.224)
Huma	(0.798) Indu 0.0018∗∗∗	(2.338) 0.0021∗∗∗
Constant	(3.493) − 0.0092∗∗∗	(3.386) 0.0109∗∗∗
F/Wald test	347.32	1132.27
Hausman test	188.61∗∗∗	
Observations	390	390
R-squared	0.8304	0.8246

Note: ∗, ∗∗, and ∗∗∗ represent the significance levels of 0.1, 0.05, and 0.01, respectively.

Table 5: Panel regression results of information technology on the technological progress of enterprise resource protection.

Variable	(1) FE	(2) RE
IT	0.0006∗ (1.708)	− 0.0012∗∗∗ (− 13.074)
FDI	− 0.0001∗ (− 0.362)	0.00054∗∗∗ (3.436)
Mar	0.0049∗∗∗ (1.983)	0.0009∗∗ (2.234)
Huma	(0.797) Indu 0.0017∗∗∗	(2.439) 0.0020∗∗∗
Constant	(3.462) − 0.0092∗∗∗	(3.395) 0.0138∗∗∗
F/Wald test	347.33	172.28
Hausman test	188.61∗∗∗	
Observations	390	390
R-squared	0.8603	0.6249

Note: ∗, ∗∗, and ∗∗∗ represent the significance levels of 0.1, 0.05, and 0.01, respectively.

outside world is 0.0005, and its impact on technological progress is significant at the 10% level. It can be seen that this is very different from the above. This shows that information technology can change the impact of technological progress on enterprise resources by coupling other factors. From this, it can be concluded that improving absorptive capacity will help to improve technological progress through opening to the outside world [21].

5. Three-Threshold Model

This paper starts with a complex three-threshold model using Stata software. As shown in Figure 5, the P values of the single threshold and the double threshold are both 0.008, and they have passed the 1% significance test. However, the P value of the three thresholds is not significant at the levels of 1%, 5%, and 10%, so the double threshold type should be used [22].

According to the threshold value test results in Figure 6, when the enterprise management resources are used as the threshold variable, the estimated values of the double thresholds are 0.486 and 0.578, respectively, and both have passed the LR test. Based on the double threshold value, the sample is divided into three regions: low level of management resources, medium level of management resources, and high level of management resources [23].

According to the use of the threshold model, it is possible to conduct threshold research on enterprises in different regions. Figure 7 reflects the development of enterprise management resource protection by region from 2018 to 2021. Basically, there is a rising area, from 3.443, 5.414, 6.473, 4.382, 2.997, 3.751, 0.506, and 2.974 in 2018 to 6.187, 7.658, 8.601, 7.518, 5.932, 6.516, 3.877, and 6.243 in 2021. From the average point of view, the highest enterprise management resources in each region are the eastern coastal areas.

5.1. Information Technology Centralized Verification of the Implementation Effect of Enterprise Resource Protection.
Information technology can promote technological progress by accelerating the speed of technology introduction and diffusion [24]. The rapid development of information technology has greatly accelerated the speed of information exchange between enterprises and strengthened the technical exchange and cooperation between enterprises. The development of information technology provides a platform and channel for the introduction and diffusion of technology so that enterprises in less developed areas farther away have the opportunity to contact and learn advanced technology and increase exchanges and learning in technology, so as to help narrow the differences in the technical level of enterprises between regions and achieve balanced development. The operation of centralized accounting of information technology also helps to strengthen the management and
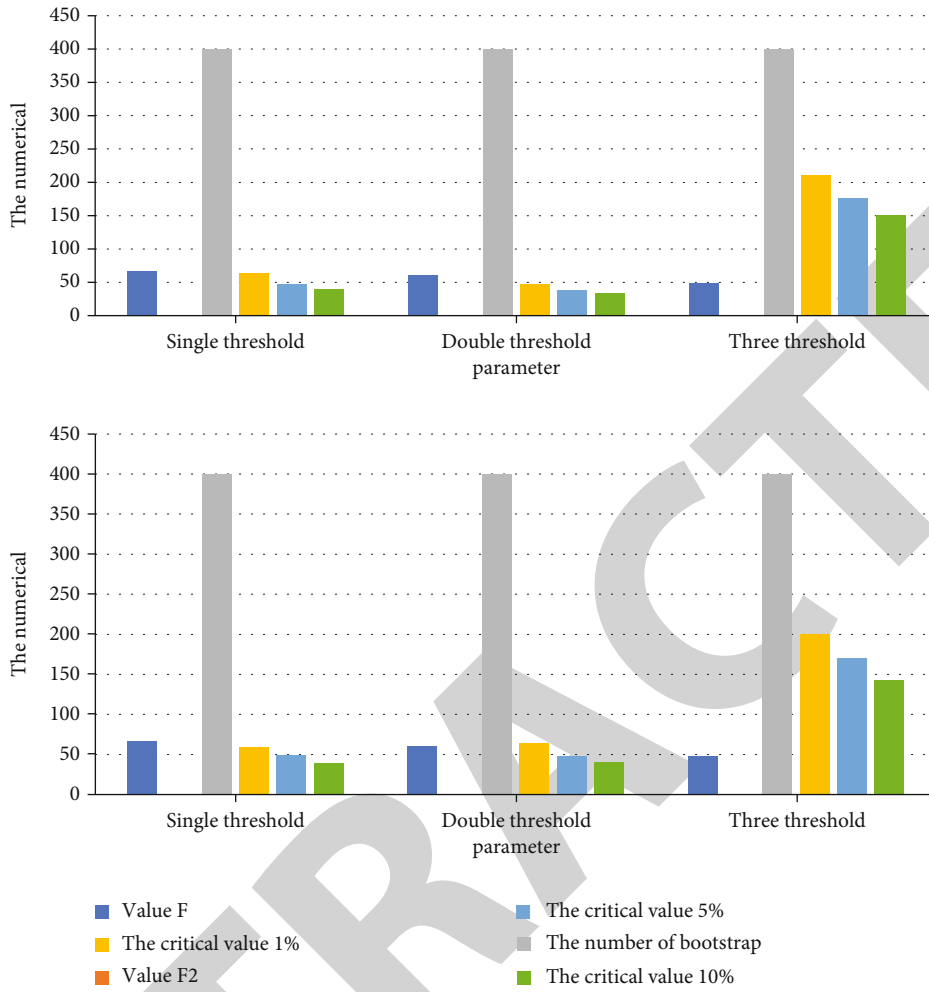
Figure 5: Test results of the three-threshold model and the two-threshold model.
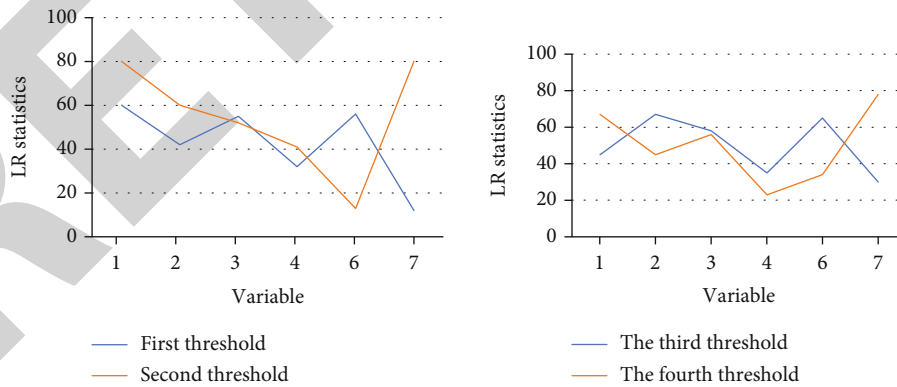

Figure 6: Threshold test (taking enterprise management resources as the threshold variable).

effect of the head office on the prefecture and city branches. Compared with before operation, the leaders of the head office can conduct pre-examination of large-amount matters in information technology accounting and increase supervision and control. At the same time, the financial information system can automatically generate vouchers, and the information technology only needs to check whether the auto-

matically generated vouchers are correct, and there is no need to manually enter the account and amount, which reduces the subjective error of vouchers and improves the quality of enterprise resource accounting.

According to the model system created above, we investigated the data of Company P from 18 to 21 years before and after the implementation of centralized accounting,
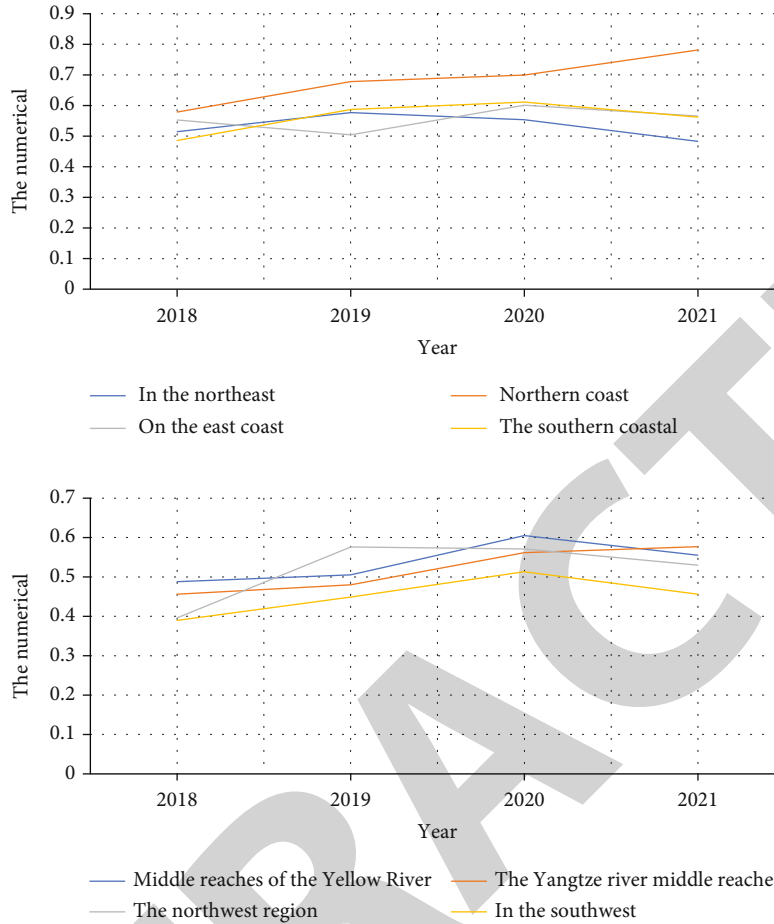
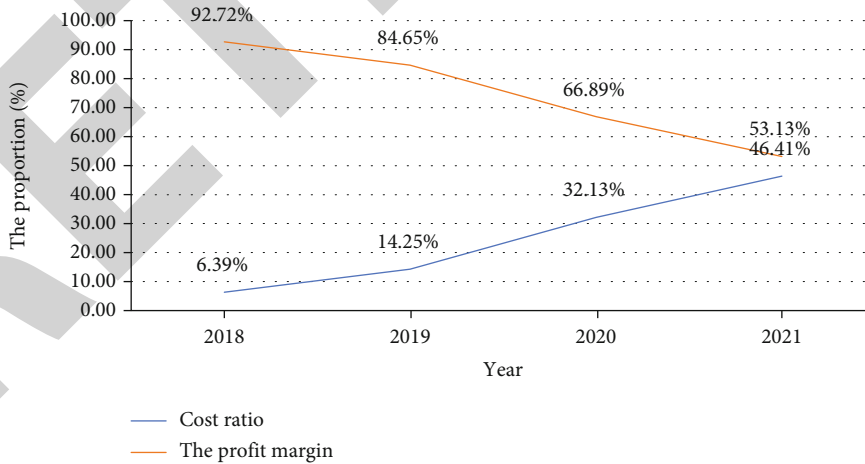Figure 7: Development of regional enterprise management resources from 2018 to 2021.

Figure 8: The cost ratio and profit margin of Company P in 2018-2021 year.

and obtained Figure 8 and the conclusion: Since 2020, when the centralized accounting of information technology was implemented, the cost and expense ratio of Company P decreased from 66.85% in 19 years to 53.4% in 20 years. For a company, it is not easy to reduce the cost and expense ratio by 15 points. This also shows from the side that com-

pany A has greatly improved its cost control after implementing centralized accounting of information technology.

In addition, we can also find from the comparison of receivables and income and their growth rates in Figure 9: After the implementation of centralized accounting of information technology in 2020, the growth rate of receivables will
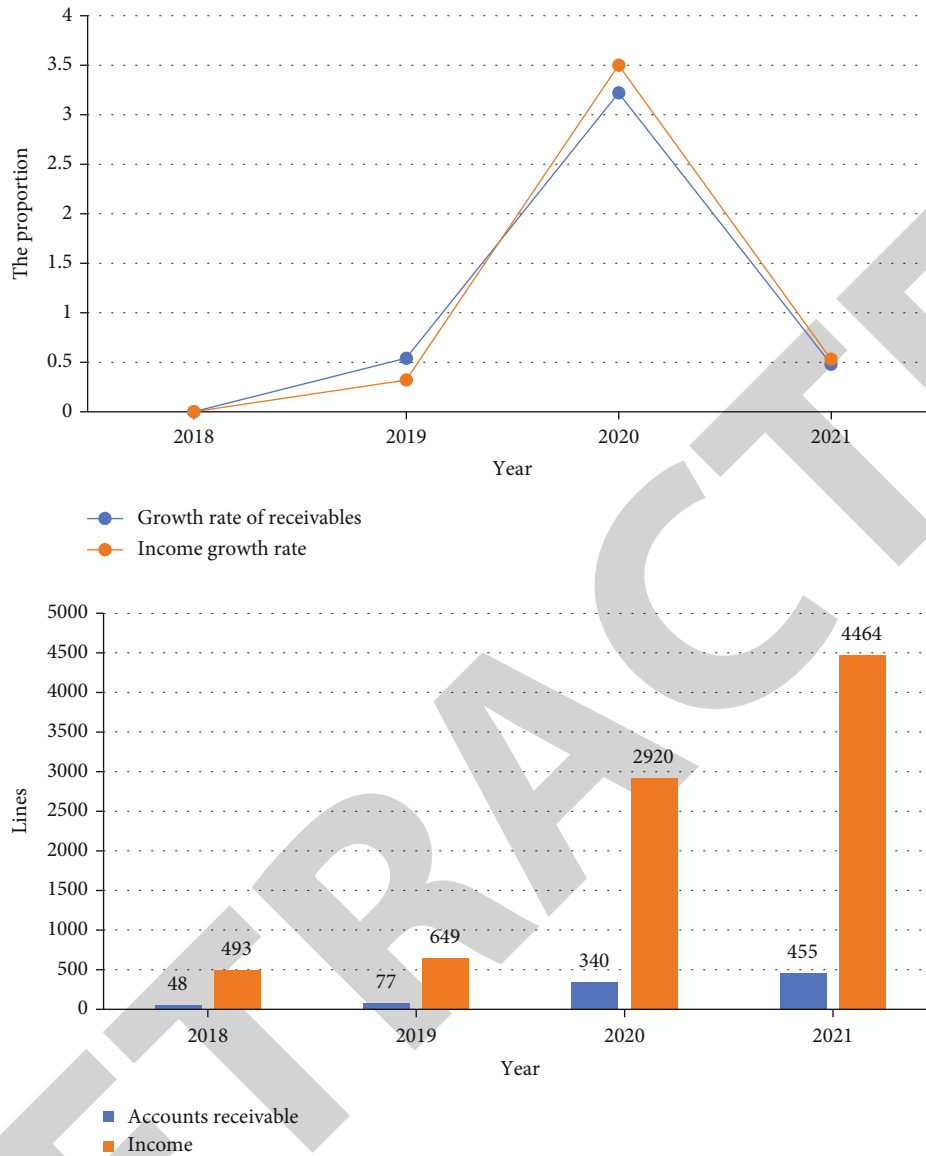
FIGURE 9: Receivables and revenue growth rate and revenue data graph.

be smaller than the growth rate of revenue. And the company's management of outstanding payments has improved.

But how to evaluate the impact of information technology centralized accounting on enterprise resource protection? Operating income and profit are two important metrics, which we can see from Figure 10: From 2019 to 2020, before and after the implementation of information technology centralized accounting, the main business income increased by 52.67%, and the pre-tax profit also increased significantly. It is true that the growth of revenue and profit is influenced by many factors, such as market conditions and employee compensation. But the impact of changes in financial management models on revenue, expenses, and profits cannot be ignored.

5.2. Application of Digital Information Technology in Enterprise Management Resource Protection. In the development process of enterprise resource management, informa-

tion technology and computer network technology are constantly expanding the scope of application, especially the application of digital information technology, which plays an irreplaceable role in the protection of enterprise management resource. In addition, the introduction of digital information technology has revolutionized the innovative way of enterprise management resource protection. By introducing digital information technology in the work, managers only need to control the relevant software and use convenient operation means to design the management model. Then, the information can be stored in the software system and the background database, which provides convenience for the later management, processing, and production. The use of digital information technology and the effective application of computer software technology can improve the efficiency and quality of enterprise work and overcome the shortcomings of traditional enterprise management models.
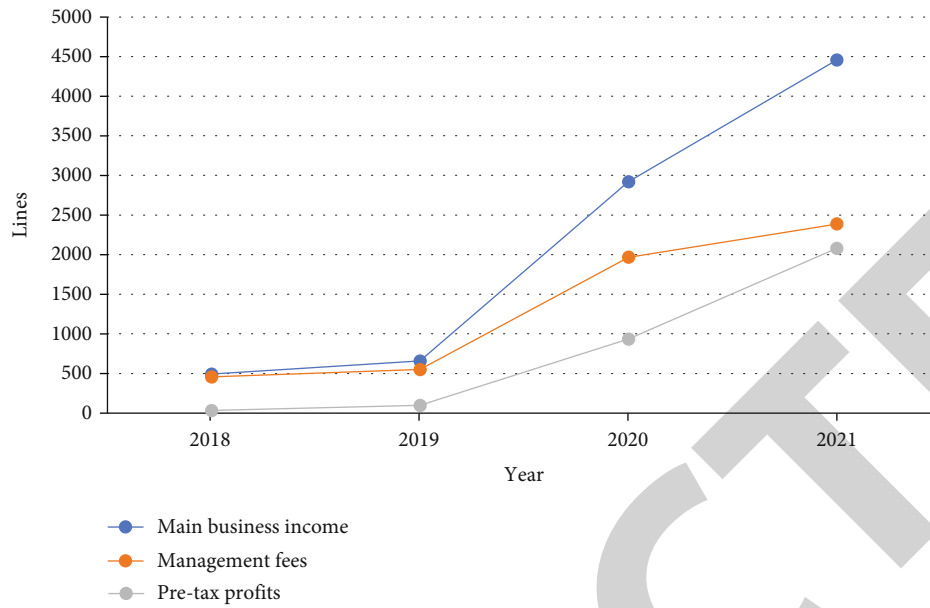
FIGURE 10: P Company income profit line chart.

6. Discussion

This paper is devoted to research and design based on digital information technology and applies it to the complex analysis and processing of enterprise management resource protection. For the research of digital information technology, this paper starts by introducing the concept of information technology, then establishes two models for comparison, and successfully combines improved enterprise management resources and information technology. In the stage of empirical analysis, the created model is used to analyze enterprise instances, and the results show that the obtained results are in line with the actual situation.

Through the analysis of this case, it is shown that the enterprise management resource protection combination based on digital information technology is more effective than a single type of resource management and enterprise managers apply digital information technology to implement management. In this way, the loss of enterprise resource projects can be greatly reduced, and optimization decisions of multi-project portfolios can be made. In the specific practical decision-making, develop the resource combination strategy of the enterprise, select the project reasonably and flexibly, substitute the information technology into the enterprise combination decision-making for calculation and analysis, and quickly obtain the information combination plan, so as to make the most effective management decision.

7. Conclusions

Through the case study, important conclusions were drawn: In the current enterprise management mode, using digital information technology, enterprise managers can more effectively prevent the loss of enterprise resources and better protect the cycle of enterprise management resources. As the

two models created in this paper, according to the change of enterprise resource parameters after the use of information technology, a more detailed study and quantitative analysis of the protection of enterprise management resources based on digital information technology are carried out, and it determines the role and way of introducing information technology. The project discussed in this paper is a research on the protection of enterprise management resources based on digital information technology, which successfully demonstrates the effectiveness and efficiency of information technology for the protection of enterprise management resources. However, the selection of projects is relatively limited, and large enterprises will often face many combinations of choices, so further in-depth research is required.

Data Availability

No data were used to support this study.

Conflicts of Interest

The authors declare that there are no conflicts of interest regarding the publication of this article.

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