



Design and Implementation of Integrated Management Platform for Oilfield Company Based on SCS Theoretical Framework

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Abstract

Comprehensive management is an indispensable part of the daily management of oil field companies. Scientific and effective comprehensive management can enhance the overall strength of the company, and at the same time play a good role in promoting the safety, reliability and efficiency of the company's information supervision. Based on the SCS theoretical framework, this paper builds an integrated management platform for oilfield companies that integrates multiple business streams, integrates three levels and five services, forms an operating mechanism of the integrated management platform with information sharing, clear responsibilities and work coordination, strengthens the effective management of business and data scheduling and control, and effectively promotes the improvement of the management level of oilfield companies. The construction of integrated management platform is an inevitable requirement for the development of oilfield companies, and the corresponding theory and practice are the only way to make the world first-class and promote the modernization of governance system and governance capacity.

Keywords

SCS theoretical framework, Integrated management platform, Oil field company, Management level

1. Introduction

The construction of the integrated management platform is a continuous system project, which needs to be based on the overall management of the company, and promote the implementation of the system concept, ecological theory and engineering thinking in stages. First of all, the top-level design stage should fully integrate the company's medium - and long-term strategic planning, covering the comprehensive management of key business processes and important control nodes. Secondly, in accordance with the management level from top to bottom, it is necessary to ensure the participation of managers at all levels in the whole process and strive for the broadest recognition and recognition. Third, the integrated management platform needs to reserve enough external "interfaces" to ensure its openness and expansion, so as to further integrate innovation and achieve more functions. Finally, to establish a complete and effective feedback, analysis, rectification mechanism, and strictly implement, the construction of comprehensive management can not be achieved overnight, need to be polished and improved in continuous practice.

In order to comply with the development trend of today's society and meet the objective requirements of improving management and striving for first-class status, Chinese oil field companies have begun to gradually establish a comprehensive supervision platform. In terms of theoretical research, Zhao Zhanning (2016) believes that the construction of management platform is an effective way and an inevitable development trend for companies to improve efficiency, return to the nature of management, reduce and avoid repetitive work, and improve the company's risk prevention and control ability [1]. Deng Xiaoqian believes that the purpose of establishing comprehensive management is to eliminate information silos, and makes it clear that institutional integration is the foundation of comprehensive management [2]. Li Qingsheng et al. sorted out the goals and steps of the integration of management systems and pointed out that the integrated management system is to integrate the goals and requirements of various professional management systems into a unified integrated management system, so as to realize the comprehensive coverage of the company's business by one management system [3]. In terms of practical application, Daqing Oilfield has promoted the integration of eight professional comprehensive management such as quality, environment, occupational health and safety, and further explored and realized management innovation [4]. Petrochina Qinghai Oilfield Company summarized the principles and operation plans to be followed in the comprehensive management construction [5].

On the whole, there are many theoretical studies on the construction of integrated management platform in Chinese oil field companies, but most of them focus on the integration of document system, seldom mention other businesses of integrated management, and there are few studies on the development direction and business realization of integrated management platform put into use. In order to promote the construction of oilfield company supervision information system, this paper innovatively proposes the application of SCS theoretical framework to the construction of integrated management platform. Through the integration of data system management, system assessment management, system audit management, personnel management and training management, the comprehensive management platform makes the comprehensive management from complex to simple, from scattered to gathered, and realizes the deep integration of traditional management and modern management. Through the development, connection and integration of relevant systems, oilfield companies can gradually shape the core competitiveness in management that can meet the needs of high-quality development of modern energy companies.

2. SCS theoretical framework enabling comprehensive management platform construction

With the continuous development of information technology, the business management of oilfield companies is also developing in the direction of digitization and integration, which effectively promotes the process of informatization of oilfield companies. This paper mainly uses the thought of integrated management theoretical framework (SCS) as the guidance. In other words, based on the premise of System integration, Conjugate ecological theory and Systems engineering, an integrated management platform for oil field companies will be established. Further unify standards, share resources, and work together to optimize the company's management and data governance capabilities.

2.1 System Integration (S) Consolidate the foundation construction of the integrated management platform

The construction of the integrated management platform takes the theory of system integration as the starting point, uses various technologies and scientific and technological achievements, all functional departments and all business subsystems involved to carry out organic cooperation, realize business interoperability, and achieve integrated and comprehensive management, so as to optimize the overall benefit of the company's management and effectively complete the purpose of handling and controlling various situations. System integration can help oil field companies to summarize, investigate and analyze relevant data results during the service cycle of the integrated management platform, use various qualitative factors to compare the degree to which the system objectives have been achieved, conduct comprehensive evaluation on alternative schemes, and select the best feasible schemes for reference and implementation by managers and decision makers.

2.2 Conjugate Ecology (C) to ensure the ecological balance of the integrated management platform

Conjugation means that the two sides of contradiction complement each other and cooperate with each other. The concept of conjugation comes from ecology, which refers to the balance of social services and ecological services, the

balance of economic production and natural production, and the coordination of temporal correlation and spatial correlation. The theory of conjugated ecology emphasizes the dynamic and dialectical symbiosis and the spiraling evolutionary process. It systematically regulates the development, utilization, protection and restoration activities of the ecological support system that human beings depend on from the five aspects of time, space, quantity, structure and order according to the principles of ecology as a whole, synergy, circulation and self-creation. The structure, pattern, process and function of the complex ecosystem can run efficiently, harmoniously and sustainably. The main purpose of applying the theory of conjugated ecology in integrated management is to achieve dynamic balance through the regulation of conjugated ecology, and to coordinate the conjugated relations between staff and system, resources and environment, extension and endogenous.

2.3 System engineering theory (S) supports the smooth operation of the integrated management platform

SCS theoretical framework takes systems engineering theory as the underlying support of integrated management, so that all levels of entities at the company level can participate in the information cycle. System engineering theory is mostly applied to organization management. First of all, the object or project management problem to be studied is regarded as a whole composed of many interrelated and mutually restricted components, and then the theory and method of operations research and electronic computer technology are used to analyze, predict, evaluate and finally synthesize the components of the system, so as to achieve the optimal system. Its fundamental purpose is to give full play to the advantages of human understanding, analysis, reasoning, evaluation, creation and other abilities through the cooperation of human and computer, while making use of computer high-speed computing and tracking capabilities to ensure that the least amount of human, material and financial resources in the shortest time to achieve the goal of the system. Aiming at optimal management, system engineering theory tracks, calculates and comprehensively analyzes all levels and key elements of the company, which is the operation cornerstone of integrated management.

3. The construction basis of the integrated management platform of oil field companies

3.1 Design and implementation based on SCS theoretical framework

As an important application focus of information supervision, the construction of integrated management platform is the most distinctive embodiment of this system project. Through the use of SCS theoretical framework, on the premise of system synthesis, on the basis of conjugate ecological theory, and on the technical support of system engineering, new connotation and implementation logic are given to each business, and various business requirements are taken into account. At the same time, the whole process of planning, design, construction, implementation, operation and maintenance of the integrated management platform should simultaneously consider the overall requirements of the company's information construction, incorporate data exchange, application support, and system coordination into the overall construction plan of the integrated management platform, and realize the intelligent transformation of the company through big data and other technical support, so as to provide data and resource support for oilfield companies to realize information management.

3.2 Connecting with various data resources of the company

Taking into account the integration, openness, expansibility, compatibility and advancement of the new development system of each business, the construction of the comprehensive management platform must be guided by the top-level design, realize the docking, mutual linkage and data sharing with the existing system, and carry out real-time linkage and information sharing with the self-built system of the second-level unit. Realize interconnectivity, integration and sharing of company data resources across regions, levels and time. Therefore, the development and integration of each new business system should be taken into account, and the business information management method and data standards of the system should be unified to achieve all data access to the "data lake". Through the timely screening and classification of data, analysis and integration and regular maintenance, to achieve the "one filling, multi-module sharing" statistics, analysis, and reporting needs, the comprehensive management platform truly achieved the comprehensive integration of data and information, and centralized management of data, personnel, and systems.

3.3 Integrate the company's operation and management business

All the business management involved in comprehensive management uses the new generation of information technology such as big data, cloud computing and artificial intelligence to connect with the original relevant business systems, ensure the implementation of comprehensive management on the premise of unified management and improve efficiency, and realize the whole process integrated management of statistical analysis and comprehensive judgment as one. Comprehensive management mainly involves the system audit, performance assessment and personnel management, training management and system management of the business setting modules, real-time sharing, to facilitate all levels of policy, system timely learning, while understanding the gap with other units. The integrated management platform involves more operations and puts forward higher requirements for technical support and operation maintenance. In the system design, advanced, integrated, safe and reliable technologies should be adopted, and changes in functional requirements and continuous innovation in application technology should be taken into account, so that the system performance is open, standardized and scalable. To ensure that it always has advanced technology, practical and reliable, economic and reasonable intelligent comprehensive management capabilities.

4. The overall design of the integrated management platform

4.1 Construction objectives

The goal of the comprehensive management platform construction includes three aspects: First, build an integrated dynamic management mode, use emerging technologies, and strengthen the application of personnel data, business attribute data, and file data under the guidance of business planning plans. On "one map", you can view the detailed information of all kinds of data; The second is to build the company's database access group "data pool" to collect, integrate, process and store all kinds of business items and personnel data according to different dimensions, topics and levels; The third is to build a comprehensive management platform to achieve all kinds of business process management, whole process control, data display, query and statistics, and provide auxiliary decision support for business management.

4.2 Full cycle data management process design

Comprehensive management controls the overall life cycle of all the company's data, taking full account of various internal and external factors, based on the principle of risk control, to grasp all the trends of data, systems and personnel at each stage. With the continuous development and progress of the company, along with the upgrading of the system, the development and improvement of the system and the optimization and agglomeration of personnel, these have higher demands for the construction of the integrated management platform in a timely and intelligent manner. Based on the holistic and cyclic principles of ecology in the SCS theoretical framework, from the construction of an integrated management platform to the integration and development of existing system resources to the application feedback at all levels, the whole-life cycle control can help companies formulate appropriate management strategies according to whether the current development of various businesses is in a state of growth, maturity, decline or other states to meet the needs of business supervision.

4.3 Multi-level management

The oilfield company can implement the three-level management system of supervision information, that is, the company level, the plant level and the operating district level. Three-level management is conducive to the overall leadership and command of the company, and is conducive to the tracking supervision and timely feedback of the factory. The implementation of "top to bottom" implementation decision combined with "bottom to top" adjustment management plan management mode is conducive to the unity of the objective of comprehensive management. Hierarchical management gives full play to the advantages of the system engineering theory in the SCS framework, which is convenient for managers to carry out related work such as evaluation summary and audit analysis, and compacts responsibilities at all levels, so that responsibilities are truly implemented to people.

4.4 Frame design

According to the overall design idea of the platform, the framework structure of the platform is designed, including

the five core layers, the corresponding standards and specifications, and the security and information security system, namely, the infrastructure layer, the data resource layer, the service layer, the application layer and the user layer. The structural design diagram of the platform frame is shown in Figure 1.

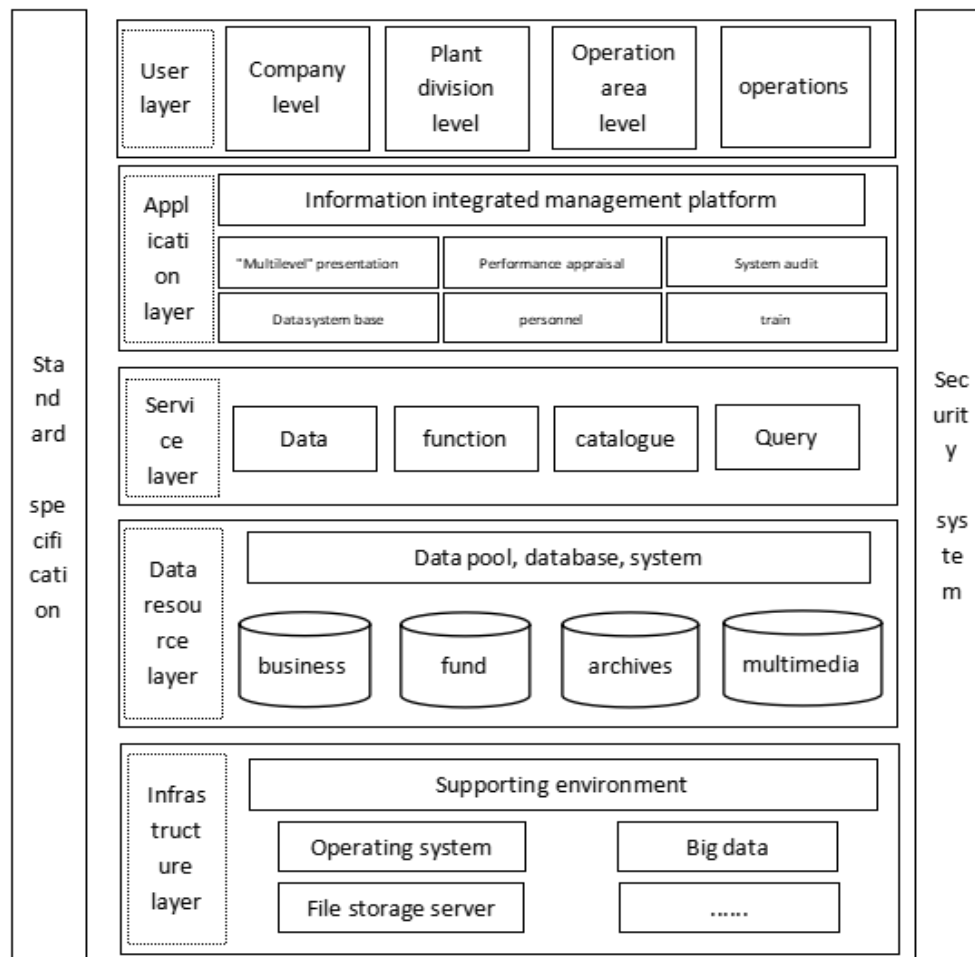


Figure 1. Framework design of integrated management platform.

The infrastructure layer is the platform running support environment, including hardware and software support, and adopts the idea of cloud environment construction to realize the virtualization of various hardware resources, including operating systems, spatial storage servers, and file storage servers, and deploy various software, such as security software and database software. The data resource layer includes business database, capital database, archive database and multimedia database, etc., jointly build the company's management database, and provide a unified data resource access interface application program interface to provide data services for the service layer; The service layer includes data services and functional services, such as catalog services, query services, etc., to provide services for the application layer of the platform; The application layer is the display window of the platform, including "multi-level" display, data system database management, performance assessment management, personnel management, system audit management and training management. The user layer is the user of the platform, including company-level personnel, factory-level personnel, district-level personnel and operation and maintenance personnel.

5. Realization of platform business functions

5.1 "multi-level" display

Through comprehensive management of data system database, personnel management, performance assessment,

system audit and training management, the integrated management platform realizes regular supervision and comprehensive analysis of static information by modules on "one map". Relying on the infrastructure construction of the platform, unify the company's space-time benchmark, standardize data coding, share management 3D data and entity data, establish a comprehensive management 3D base map, form a data system that meets the needs of comprehensive management, meet the needs of big data analysis, and provide data support for the company's decision-making.

The "one map" of the integrated management platform should contain key indicators such as personnel qualification, performance assessment, system audit, management traceability, quantitative assessment, professional distribution of audit problems, and the hierarchy of audit problems. In addition, it should also include charts such as the distribution of problems and management traceability, as well as the quantitative assessment of each assessment department, as well as the number of bonus points, total scores, total points deducted, scoring rate and other contents, including the full elements of comprehensive management.

5.2 Data system database management

The data system materials of the oil field company are not only the true record of the development course of the oil field industry, but also an indispensable precious resource for the company's operation and development, which contains huge economic and social value, and is the core content of the current comprehensive management. It is necessary to establish a set of complete, standardized, comprehensive and in line with the requirements of The Times document system to do a good job in the archives of petroleum companies. At present, with the increasing variety and quantity of data systems, the increasing demand for utilization and the wider application of asset management systems, it has become a very important and urgent task to establish and perfect database management. In view of a series of problems such as incomplete files, non-standard accounting documents, and delayed access to data and information, oil companies can start from six aspects such as laws and regulations, system documents, query statistics, content indexing, system sharing and analogy analysis, and combine the specific conditions at all levels to improve the management of data system database, so that comprehensive management can step on a new level.

The management system of data system database of oilfield company should include the basic principles of management, management system and other macro levels, but also should include clear management responsibilities, basic requirements of each management link and other micro levels. The establishment of the data system database must further implement the principle of "unified leadership and hierarchical management", in accordance with the Archives Law, the Measures for the Implementation of the Archives Law, the Copyright Law of the People's Republic of China, and other relevant laws and regulations, under the overall planning, organization, coordination, supervision and guidance of the State archives administrative department, and according to the actual work of the unit. Establish a data system management system with the characteristics of the unit, and standardize the formation, collection, archiving, preservation, utilization and other aspects of data. By establishing a search system that integrates indexing, sharing and analysis, that is, the system query system, and by timely uploading the relevant laws and regulations of the oilfield issued by the superior level, the spirit of the study documents of important leading cadres and the "two volumes" and other documents, the oilfield company will organically unify the individuals at the three levels of the operation area, the plant and the company, break the "data barrier", and facilitate the inquiry of employees and managers. Improve labor productivity and economic benefits, ensure the smooth production and operation activities, facilitate efficient management, and ensure the sustainable development of oil field companies.

The overall construction of the data system database of oilfield companies should be guided by summary analysis, combine the operation characteristics and requirements of the company's management system, follow the "two-level system, hierarchical management, coordination and unification, and overall promotion", and integrate the risk control measures requirements of all levels of production and operation activities into the business control process and rules. Form a set of legal compliance, business led, up and down supporting, close connection, complete system, continuous improvement of the simple system management system. Under the new situation, the construction of data system database is a process of constantly updating and perfecting existing system contents and constructing a set of feasible system by relying on new technology and management methods. Scientific, standardized and perfect data system database management is an important support to realize the scientific management of oil field companies, and an important system guarantee to promote the smooth development of oil field companies.

5.3 Performance appraisal management

In the development process of the oilfield company, it is necessary to continuously optimize and improve the

top-level design, according to the overall planning concept, clarify the development strategy of the oilfield company, and lay a solid foundation for the development of the company. Oilfield companies should scientifically divide business types and development directions, plan business from two aspects of function positioning and classification, shorten the management chain of the company and improve the operation efficiency of the company. Oilfield companies need to provide important guidance for performance assessment, which is conducive to the formation of a systematic operating performance assessment mechanism, so that performance assessment work becomes clearer and simpler. Oilfield companies can divide the assessment management business into three parts: process assessment, system audit and control index. When adjusting the performance assessment mechanism, the company's development strategy should be integrated into it to form a suitable assessment and evaluation model. Oilfield companies take performance assessment as a closed-loop management of the company's development strategy, which can improve the managers' cognition of the company's business strategy and promote the company to integrate its own interests with the company's development.

The performance appraisal management of oil field company can be divided into three steps: first, make the performance appraisal management plan in advance, and prepare the management information in the early stage according to the needs of performance management. Second, according to the actual operation of each department and personnel of the unit, a variety of evaluation methods are to evaluate the actual work performance of each department and personnel. Third, according to the performance evaluation implementation results, compared with the performance target at the beginning of the year, assess whether the plan at the beginning of the year has been completed, and according to the actual implementation results, implement incentive policies for all departments and employees, and feedback and adjust the performance target setting of the next phase, so and so, forming a closed-loop management. The key of performance assessment management is to determine the scoring mechanism and reward and punishment mechanism at all levels, and the operation of the reward and punishment mechanism should be both "reward and punishment", which corresponds to the performance assessment management, that is, to parallel score and deduction. Therefore, the score deduction of each area should be displayed on the integrated management platform, and displayed in the form of bar chart or scatter chart to realize the sharing of evaluation information.

Oil field companies set up performance assessment module under the integrated management platform, especially follow the principle of timely feedback, and build a "better and better" management closed loop. First of all, it is necessary to compare the past data with the present and forecast analysis, so as to ensure that the development direction of the company is consistent with the development direction of the whole society, and ensure that the plan is better executed. On this basis, the security of information system can be further enhanced to ensure the correctness of historical data. Secondly, in the process of operation, it is necessary to maintain continuous and effective communication with lower-level employees, so that the business performance can be continuously improved and the recognition of lower-level employees. The company shall hold a symposium on performance management on a regular basis, with the participation of the heads of all departments, collect information on performance management and report it to the company management. Through the establishment of the performance evaluation mailbox, to achieve two-way and positive communication between managers and employees, and to continuously optimize the feedback in the matter. Finally, after the completion of a stage of performance implementation, a specialized and professional performance analysis team should be established to conduct a post-analysis of the problems in the performance assessment management process in the past year, the degree of deviation from the strategic goal, the causes, etc., and provide timely guidance for the next step.

5.4 Personnel management

The construction of personnel qualification and ability management system of oil field company should be enriched and improved continuously according to the goal of "setting good standards, keeping good customs and using good people". Through the establishment of personnel qualification and ability management system and associated with the human resources system of the group company, the personnel of all units are entered into the system to achieve electronic, unified and centralized management, and effectively improve the efficiency of human resources management. Personnel management system construction mainly focuses on the recruitment and training of key personnel and other personnel, such as occupational health management personnel, environmental statistics personnel, etc., and the implementation and implementation of management regulations of key employees for group companies and oil field companies. At the same time, it is also necessary to organize the corresponding audit staff to re-train once a year according to the management system management methods of the oilfield company, and timely

update the status of the auditor's existence, withdrawal and cancellation.

In order to achieve personnel management through the construction of personnel qualification and ability management system, oil field companies must actively change the past management concept, fully explore the advantages of existing human resources, efficiently integrate the existing resources of various departments, and achieve the optimal management of the system when the existing human resources are competent. At the same time, a set of scientific and reasonable selection system should be established according to the specific situation of oil field companies. For a company, how to choose and retain excellent talents is an important factor related to the long-term development of the company. When selecting and hiring talents, appropriate selection and recruitment should be carried out according to the needs of different positions. In terms of personnel allocation, positions should be reasonably arranged based on employees' work performance and work ability, and employees' work talents should be fully utilized to optimize the company's human resource structure and improve the company's employment quality.

In addition, in order to facilitate the management of the company, the communication between the management and the internal personnel of the company should be strengthened. For example, timely disclosure of various decisions involving employees' personal interests, including important policies such as health care, education, and welfare. At the same time, provide employees with online question answering services, so that employees can get a good answer when they encounter problems. Hold regular web interviews to let employees speak freely. In addition, oil field companies can also establish an open interactive platform within the company, through which employees can communicate and feedback with their superiors to get responses, which can deepen the communication and exchange between the company and employees. In the process of effective communication, the company can better and more truly understand the true thoughts of the employees, so as to enhance the relationship with employees, so that they have more respect and recognition for the working concept of the oil field company, stimulate their work motivation, and create an efficient and harmonious working atmosphere.

5.5 System audit management

The audit scope of system audit management covers all the business of comprehensive management. Through the systematic and independent audit process and objective evaluation of the obtained audit evidence, it lays a solid foundation for information supervision and standardized management. System audit management adheres to the orientation of correcting problems, which is conducive to the discovery and improvement of problems. The oilfield company achieved full coverage of all business and information through audit summary and problem rectification verification, and achieved full tracking of due audit and post-audit problems. The comprehensive management platform can adopt a scoring system to carry out system audit management in the order of organization, planning, preparation, implementation, problem discovery and corrective measures.

System audit management should focus on on-site investigation of potential accidents, whether the statutory responsibilities of the main person in charge of the oilfield company are implemented in place, whether the production safety responsibility system matches the organizational structure of the company, whether the operating procedures are consistent with the industry standards and norms, and whether the emergency rescue plan is practical, and therefore the focus of the system audit should be considered. The first is to conduct compliance review, mainly compared with the relevant domestic laws and regulations, to find out the problems existing in the system and the problems of violations of laws and regulations; The second is to sort out the relevant national policies and the main system requirements of the company, and implement them to all levels of the company; The third is to review the status of the company's internal audit and form an evaluation report on the operation of the company's system, rather than a status report based on a list of problems. By strengthening audit efforts, the focus of supervision has gradually shifted from "running, running, dripping, leaking" and other hidden dangers on the spot to system improvement, management processes, system standards and other aspects.

At the same time, the most important point to achieve accurate audit is to grade and classify the audit, and implement differential supervision, which is also an important method to solve the low efficiency and low quality of the audit. This requires oil field companies to carry out annual full-factor quantitative audit work, change the past "one-size-fits-all" single rigid model, and gradually reduce the formalism caused by insufficient audit findings. At the same time, oilfield companies should insist on diagnostic evaluation of the audit system every year, audit by evaluation, upgrade the system audit to guidance evaluation, and follow the model of "one company one program, one unit one group of experts, one site one set of forms". A detailed analysis of the contradictions between the system audit management problems and the safety and environmental protection system mechanisms involved in various de-

partments of the company can effectively prevent the key units from going deep and the key problems from being dug out because of the average force, abandon the programmed and formalized audit activities for many years, and promote the system audit to a deeper level of development.

5.6 Training management

The oilfield company realizes the common progress of the company and its employees by establishing the training management mechanism oriented by strategic development. In the final analysis, the competition between modern companies is the competition of human resources; its core is the competition of talents, so the establishment of training management system is particularly important. Training management is an important part of human resource management system, training can improve the professional ability of employees, help the company to obtain competitive advantages, help to improve the quality of employees, and meet the needs of employees to achieve self-value. Effective training management will promote the continuous progress of employees in knowledge, skills and attitudes, and maximize the matching of employees' functions with current or expected functions, so as to improve work performance.

For employees of oil field companies, on-the-job training, professional lectures, practice training and other different ways can be adopted to implement classified training, practice training and on-the-job training in parallel. In terms of technical personnel, they should be trained in professional knowledge and skills, so that they can understand and master the most advanced technology, so as to improve their own quality, so that their work level has been continuously improved; For manufacturing personnel, they must receive training on manufacturing quality and manufacturing process. Therefore, the human resources department should formulate different training plans and training contents for different employee groups, and take good comprehensive ability as the necessary condition for holding the corresponding post, deeply implement the staff training work, and build a high-quality human resources team. First of all, in the process of personnel training, we should pay attention to capacity building. In the personnel training, it is necessary to strengthen the development of talents, pay attention to the selection and training of applied talents, so that the professional skills of employees will be continuously improved with the development of the company. At the same time, it is necessary to actively build a vocational training system that meets the needs of individual development of employees, and provide high-quality vocational training for employees with a certificate as the starting point. Secondly, the training content and mode should be innovated according to the social development needs and the actual business needs of oil field companies. For example, the combination of personal learning and classroom training, induction training and continuous training, theoretical training and practical training and other training methods are adopted to ensure the diversity and effectiveness of training forms.

The training management of oil field companies should be based on the current performance of the company's personnel and establish a dynamic training program as a management means. The training program should be dynamic and can not form a set of thinking. It is necessary to comprehensively score employees according to their ability and performance, and arrange suitable positions for them according to their scores, so as to truly make the best use of people and match talents with virtues. Under the background of the rapid development of market economy, the previous development model can no longer meet the development needs of oil field companies, and more attention should be paid to the cultivation of talent innovation ability. Oil field companies should strengthen the cultivation of innovative talents to enhance competitiveness. In the development of talents, we should be good at using a variety of scientific means to awaken and mobilize the working power of employees, enhance the innovation ability of talents, and provide a steady stream of vitality for the development of the company.

6. Conclusion

The construction of integrated management platform is an inevitable requirement for the development of oilfield companies, and the corresponding theory and practice are the only way to make the world first-class and promote the modernization of governance system and governance capacity. Based on the SCS theoretical framework, the integrated management platform provides data management and maintenance, comprehensive information query, user interaction, numerical analysis, data charts and other functions, and realizes the digitalization, computerization and networking of data collection, storage and processing. The platform also provides various interfaces for functional expansion with the development of computer technology and the growth of user needs. The development and use of the integrated management platform has largely reversed the previous "decentralized" and "slow" management state, and can simplify complexity, repair the gap between information transmission and comprehensive management at the

fastest speed at hierarchical levels, promote resource sharing, and effectively enhance the resilience, vitality and motivation of oil field companies at all levels. It has accelerated the pace of standardized, specialized and modernized management, which is of great significance to the further refinement and deepening of management work.

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