Research of Performance Management System Based on Web Services

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Abstract: With the speeding up of the trend of performance management informatization promotes the established strategy oriented performance evaluation system is put forward. This paper proposes a method, which is by the Web service technology, develop performance management integration, promotion and management of financial, business and other organizations and cooperation level. Analysis of enterprise performance management and the problems existing in the informatization, introduces the Web management system and related services technology, system architecture and function of the system is discussed in the end, as well as other key problem to be solved and.

1. Introduction

With the rapid development of science and technology, information technology is widely applied in the management process, more and more organizations hope that through performance management informationization to improve business efficiency and work efficiency, improve the enterprise management mode, accelerate the development of organization, and to apply the traditional performance appraisal to the extreme. Performance management information based on the mature network technology and application, is to help enterprises solve performance management to the ground to implement an effective tool, can improve the effect of performance management. At present, most companies use the performance of the software, the incomplete information collaboration of business support, ignoring the performance management and the overall strategic target of organic connection, between performance management and strategy implementation, lack of beforehand control, real-time monitoring, calibration, unable to establish an effective performance management system. As the core of human resource management, performance management is important but difficult, the enterprise application model based on Web service gradually realize the informatization of enterprise performance management requirements.

2. Performance management concepts and related theories

Performance management is refers to between managers and employees agree on goals and how to realize the target, on the basis of through incentives and help employees achieve good performance so as to realize the management methods of organizational goals.

2.1 Performance management to solve the problem

① the target and how to reach the target need to reach a consensus.
② is not a simple task management, performance management, it especially emphasizes the improvement of communication, coaching and staff skills.
③ performance management is not only emphasizes the result oriented, and pay attention to the process of achieving goals.

Covers a lot of performance management, it is the problem to be solved mainly includes: how to determine the effective goal? How to make the target agreed between managers and employees? The goal of how to guide employees in the right? How to achieve the goal to monitor the process? How to evaluate the implementation of performance and to improve the performance targets? the performance appraisal is only a link in the process of performance management. Performance
management is through constant between managers and employees to manage the business cycle, realization of performance improvement, adopted by the method of PDCA cycle:

Fig.1 PDCA cycle of performance management

2.2 The performance management process

2.2.1 The inspection plan.

① to focus on the purpose of the assessment and the object.
② select the assessment content and methods.
③ determine the inspection time

2.2.2 Technical preparation.

Performance appraisal is a very strong technical work. The main technical preparation including evaluation standard, select or design evaluation methods, and training evaluation.

2.2.3 Selection and evaluation.

When choosing the inspection personnel, should consider two aspects of factors: Through training, can make the inspection personnel to master the inspection principle, familiar with the inspection standards, to grasp the method of examination, to overcome the common deviation. When choosing personnel, according to the above mentioned two factors, usually consider various examination candidates.

2.2.4 Collect information.

Collect information to establish a set of evaluation index system of related system, and take various effective ways to achieve.

2.2.5 Make analysis and evaluation.

① determining the level of individual and score.
② the results of the comprehensive assessment on the same each source.
③ on different project comprehensive evaluation results.

2.2.6 Evaluation result feedback.

① the significance of the assessment results feedback.
② the assessment results feedback interviews. Set up the interview several aspects of the relationship between harmonious; to provide information and accept information, feedback technique.

2.2.7 The use of the assessment results.

The use of the assessment results, also can saying is into the performance management process.

3. Web services research techniques

Web services based on interoperable distributed application of the new platform, is a standard application in a Web environment to achieve interoperability definitions, on the Internet or LAN by using standard XML protocol and message format to achieve business application services. Web
service information performance management as the organization of information platform, not only on the function is used to record the process of performance management of the data, also has the fast information transmission and information processing and correction function, At the same time also have complete information to remind function, strengthen the integrity and scientific organization system.

3.1 Web services architecture.

Web services architecture is service-oriented architecture (SOA). You can see from Fig.2, there are three roles in the SOA structure:

Fig.2 Web services architecture

① Service Provider (service providers) : Provide services and publishing services information by registering.
② Service Broker (Service agent) : Publishing and location of provision of services, typically UDDI.
③ Service requester (service requester) : Through the service agent queries the service, and binding services provided through the service.

3.2 Application integration based on Web service technology.

Web services are interoperable distributed applications, create a new platform's main goal is a cross-platform interoperability. Powerful performance management by using modern information technology, the evaluation scope covers performance and capacity assessment, personnel range ordinary employees and managers at all levels, for application integration, b2b integration and reuse of code and data, as well as the client and the server through the network BBS. Make every employee involved in the assessment, really realize the ability of the staff.

4. Performance information system architecture

Performance management information system based on Web services, common ground outside the management module of management process in the form of Web services, special offers a standard interface to connect to other business subsystem, the business system of subsystems such as salary system, responsibility, performance appraisal, etc., will be the development strategy of human resources management into the organization, focus on strategic target realization Real-time performance of the generated data, the basis of business data. Informatization evaluation, through the application of information technology in the performance appraisal, more convenient and quick to collect relevant information, data, and timely sharing and application of managers and management object can timely find problems and improved, so as to improve the timeliness and effectiveness of the management.

5. The function of performance management information system performance analysis

5.1 The function of the system structure.

Performance management information system based on Web services in Visual Studio. Net development tools, reception and a large database Microsoft SQL server2000 as the data management tools, combined with the characteristics of Web service development. Its features
include: data processing, report management, performance analysis, dynamic compensation and capital movements, data query module, as shown in figure 3, it covers the enterprise financial module in the public institutions basic functions required for the needs of all department performance management.

5.2 The data access layer.

Mainly responsible for the data access layer and close the connection to the database and interact with data from the database, use stored procedures to obtain data, can use ADO. The network to send data to the database, return database operations or the query results. SJCW software system of data access layer. SLNS files detected data access in the project implementation solution.

5.3 Web service layer.

Web service layer of the software system is composed of a set of core services, based on the mature network technology and should be Use is to help enterprises solve the performance management and implementation of an effective tool, can improve the effect of performance management. Web service layer is responsible for receiving data request level Web interface, the necessary business logic to check their permission (including inspection, etc.), then the request is decomposed into different database operations is made up of the data access layer calls the appropriate method to deal with, and will deal with the results back to the interface layer. Web services are based on net framework and the common language runtime, all business components service according to the different modules can be divided into different packages, isolation module through the department, to avoid the interaction between modules, and easy to implement. Using Internet technology at the same time, make the enterprise internal personnel can quick and easy to share information and work together efficiently, compared to manual office way more than in the past to achieve quick, all aspects of information collection, information processing, make enterprise management more convenient.

5.4 The network interface layer.

Main function is to receive the user interface layer instruction or data input, involving multiple is closely related to the enterprise service content. Can master the ability of these interfaces, Enterprise on personality, accurate service and interactive communication will no doubt more give prize. Verify the legitimacy of the data and evaluation of the form content and scope of data values, if not sutra in the business logic layer and data processing according to the results to the user. What we call the interface, the description is to allow a level and another level requests and responses between a set of characteristics. Logic layer, data layer and system interface includes the original
data storage and extraction. Interactive logic layer and system logic layer interface includes changes to specific types of data sources. Interface defines only a level how to send a request to another level, require it to perform a task, regardless of how to perform this task. Data validity checking part of the customer, to avoid illegal transfers data to the server authentication, can reduce network traffic, thereby reducing the load on the server.

5.5 The safety of the software system design.

Performance management information system based on Web services support multi-level security controls, safety review needs corresponding properties of the system, so the public performance system level information in business network, can be effectively shared and corresponding secret, secret and confidential classification level to provide the corresponding countermeasures. Application system security is made up of multiple levels, application system security level, function level, data domain is business related, specific to deal with. How to assign permissions to users, different applications have different authorization model, authorization model and organization model have great relevance, need to fully consider the organization characteristic of the application system to decided to choose what kind of authorization model. And means we need to use advanced information technology, network, break the bottleneck of various suitable for modern high-speed development, actively provide service, improve efficiency and improve the performance of the works to provide more types of leadership, to help lead the information they need to make decisions, to provide more high quality information service performance.

6. Summary

Actual operation of the current state of the enterprise performance management informatization has many problems, the use of information technology to manage and develop the performance management system is one of the most practical method. Performance management based on Web service technology is mainly used for management and processing information used by the various the floorboard of the technology. Web service technology provides a distributed application integration, the information platform independent operation mechanism, the system design and function implementation can be done in a more flexible way, on the basis of the mature network technology and application, accepted by more and more organizations and application. Web service technology of performance management will be advanced technology used in human resource management, improve the status of human capital in the organization operation, simplify the procedure of performance management work, enhance the professional human resource management, and the realization of the strategic objectives for the organization provides the technical support.

References


