

Iterative Analysis of Project Management Upgrading in the Context of

Digital Transformation

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Abstract: Against the backdrop of the current development of China's banking industry towards digitalization, the use of technology to empower banking business has become an inevitable trend. At the same time, the self-developed team and plans are also rapidly growing. In terms of team management, with the continuous expansion of team size, the demand for inter team collaboration ability, inter team member collaboration ability, and team efficiency is also constantly improving. From an engineering perspective, the delivery time, quality, and capability of a project are directly related to its operational efficiency and customer satisfaction. From the perspective of resource load, scientific and technological talents have always been in a bottleneck period of development. Relying solely on the expansion of technical talents will cause a significant burden on the investment in science and technology. Therefore, we are considering the possibility of introducing the concepts of flexibility and DevOps in R&D projects to address quality and efficiency issues.

Keywords: Digital Banking Business; Team Collaboration; Operational Efficiency; Resource Load

1. Introduction

In the context of Digital transformation, build an integrated team based on flexible ideas, use iterative plans to complete rapid demand transfer to customers, and use DevOps tool chain to improve the efficiency of R&D and operation. Deeply utilize digital methods to continuously optimize management activities for requirements, development, testing, and operation, in order to accelerate the delivery of requirements and continuously provide commercial value.

2. Pain points faced by project management transformation

With the continuous development of VUCA technology, the demand for products in the financial industry is constantly increasing, the content is constantly changing, the delivery cycle is constantly shortening, and commercial complexity is constantly increasing. The problem that troubles project managers is not only how to make a deliverable decision under limited human and material resources, but also a bunch of difficulties that need to be overcome:

The engineering plan deviates from the company's development strategy. In the process of advancing the project, the lack of strategic incentives has led to a shortage of engineering resources. In the company, due to the separation of business and technology, technical personnel were "urged" by companies, resulting in system redundancy, information isolation and even information silo, which led to the inconsistency of the company's internal technical system.

The division of labor is clear and it is difficult to work together. From the needs of users to the value of users, each task is divided by multiple different departments, which makes it difficult to coordinate between business, technology, and operations, making it difficult to achieve rapid online deployment. This is different from network companies that lack quick end-to-end response.

In the face of high production costs and the continuous emergence of industry regulations and new business technologies, traditional engineering is facing the problem of tight schedule. To achieve a balance of interests, a series of vertical mining systems

will be developed. On the one hand, the huge cost of capital brought about by structural imbalance, and on the other hand, the continuous increase in technical debt may also bring problems such as uncontrollability and quality decline.

We need to improve the level of refined management of resources. With the development of online finance, the management of project groups and project portfolios has become increasingly difficult. To meet the needs of project schedule, cost, and quality, it is necessary to finely manage the resources of production and research and development, which relies on the ability to measure numbers.

At the enterprise level, there is a lack of necessary methods and data support. This leads to the need for a large amount of manpower and material resources in the implementation process of engineering projects, which cannot be transformed into replicable, standardized, and fast-flowing processes. Through the analysis of pain points in the preliminary plan design of transformation, we found that the pain points of the above project management can be summarized as: the disconnection between enterprise strategy and project implementation, the lag of business demand response, the architecture problems caused by shaft development, the low utilization rate of production and research resources, and the lack of project group management ability. Therefore, in order to solve the above problems, a root cause analysis should be conducted first. After analysis, we found that these problems can be summarized as the lack of end-to-end value chain transmission mechanism, the division of business activities by organizations or departments, the lack of effective integration teams in organizations, the accumulation of technical debt in enterprise architecture, the lack of effective management itself, these issues are also related to many issues such as enterprise architecture, organizational structure, business architecture, technical architecture, and organizational management.

3. Methods and Measures

By establishing an end-to-end value chain management mechanism, align the project set and objectives with the enterprise strategy;

Build a product based industry technology integration team in the organization to enhance team collaboration;

Using an agile R&D model to improve product delivery cycles;

Establish digital portraits of individuals, teams, products, and projects, and measure the production and research process through indicators;

Strong control over project initiation, process, and results through project governance and project management;

Introduce the DevOps toolchain and use automated assembly lines to improve the efficiency of research and development, testing, and operation and maintenance processes. Overall, the goal of the above measures is to achieve lean, transparent, and visual control of project processes and results through the construction of a project management system.

4. Operation and Implementation Plan

4.1 Transform from strategic objectives to implementation plans layer by layer to achieve the best match between strategies and plans.

Firstly, divide the company's strategic planning into annual strategic work, including research and development work and non research and development work, as well as the planned products and engineering. Secondly, combine the planned products and/or projects, combine the executable plans of the projects, and combine the deliverables of the projects with the commercial objectives of the projects or projects. Thirdly, use organizational management methods such as OKR and strategy house to achieve the matching of project performance indicators and product efficiency indicators. Fourthly, in the context of rapid industrial, technological, and commercial development, it is necessary to establish corresponding response mechanisms to changes in product priorities, project resources, and schedules. Adjust the expenses accordingly according to changes in the situation.

4.2 Establish a professional and technical talent team

To achieve the objectives of this strategy, it is also necessary to rely on institutional restructuring and transition from the current separation of business and technology levels. Classify different industries and establish corresponding teams that combine technology to meet customer requirements. This group includes the business department, research and development department, and operations department; Manage, focus on products and services, and achieve efficient cooperation among members. In the process of company development, organizational changes are fundamental to supporting the company's development. After completing the changes, it is necessary to make corresponding adjustments to the company's products, in order to greatly improve the company's innovation, delivery, and service capabilities.

4.3R&D model based on product level

After the initial integration of business and technology in enterprises, flexible product delivery is an effective way to transform business requirements into value. At present, there are two main research and development models based on agile development: Scrum and SAFe. The basic process is to establish a requirement library, decompose stories, and version plans; Kanban tracking, duplicate releases, and so on. A flexible development process can enable requirement planning to be controlled, requirement process to be visualized, requirement quality to be measured, and products to be continuously updated, thereby reducing the time for value transmission and increasing the frequency of value transmission. In the value chain, value transfer is relatively rational. On this basis, this article proposes a data-driven product performance evaluation method, which is based on data-driven methods.

4.4Establish a digital portrait

Digital portrait is a digital representation of the industry and research landscape by measuring the indicators of management objects, including individuals, teams, projects, products, systems, etc. Digitized metric data can also be divided into basic information domain and measurement indicator domain. Basic information domain refers to the basic data of management objects (also known as static indicators), used to describe the current situation of management objects, such as personal basic information, team basic information, project basic information, etc. The measurement indicator domain (also known as dynamic indicators) is used to describe the process data of management objects, such as team workload throughput, team performance, project quality, project delivery efficiency, system stability, etc. After establishing a digital portrait, performance benchmarks can be established based on the digital portrait to identify gaps in management objects, and corresponding improvement measures and goals can be formulated. The improvement process can be tracked and monitored, and the implementation results of improvements can be observed through measurement indicators.

4.5Strengthen project governance and management

The standards include strategic guidelines, decision-making authorization guidelines, supervision and guidance guidelines, etc. Based on different activities, the guidelines regulate the main activities, activity dependencies, personnel functions, scope of responsibilities, decision-making mechanisms, assessment methods, etc. Governance activities are the process driven transformation of an organization through the organization and project activities. Project management is the definition, planning, and execution of management activities to achieve organizational strategic and operational goals. Management activities include defining project sets, managing delivery project sets, evaluating project value, prioritizing and prioritizing projects, dynamically allocating resources, and managing the process of projects and project sets. The purpose of project management activities is to ensure that the project operates based on standards, delivers according to plan, and achieves project target value through management activities.

Conclusion

Enterprise project governance is the framework, function, and process that provides guidance and important decision-making for project portfolios, project sets, and projects. The goal of governance is to establish a series of standards to ensure smooth project flow. Governance activities are divided into organizational level governance, project portfolio governance, project set governance, and project governance by level, and different standards need to be established for governance activities at different levels. Enhance enterprise efficiency.

References

[1] Shen W. Research and Implementation of a Construction Site Engineering Information Management System [D]. Chengdu: Dian Ziji University of Science and Technology, 2014.

[2] Zhang NL. The Impact of Information Technology on the Development of Construction Engineering in the Era of Big Data [J].

Black Longjiang Technology, 2022, 13 (2): 144-145.

[3] Lu WD. Design and Implementation of a Modern Construction Engineering Information Management System [D]. Chengdu: University of Electronic Science and Technology, 2011.

[4] Wang JG, Li T, Yang W. Discussion on the Application of BIM in Engineering Information Management [J]. Zhi Nengcheng, 2019, 5 (21): 85-86.