

The Business Value of iBiz in Digital Transformation

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Abstract: I am engaged in the information industry. In recent years, I have found that many software companies have mixed programming capabilities, high labor costs, and heavy reliance on individual technicians. Secondly, in the process of contacting with different industries, I found that no matter what industry it is, its growth and development are inseparable from the introduction of information technology. In addition, the needs and functions of many enterprises are roughly similar. In order to understand this phenomenon, I selected the ibiz software cloud development platform used by many consulting companies for research and practice.

1. Introduction

Constrained by the company's business volume, many companies do not have their own core software development teams, and mainly rely on the model of entrusting orders to other software companies for OEM production. If the sales team's business ability is strong, the company can also gain a certain market share, but it is technically controlled by others, and the profit is limited. Many medium and large enterprises have their own software development teams, but such teams have many problems. Large enterprises have relatively high requirements for their own informatization, but the self-built development team may not have such professional development capabilities, but to meet the technical requirements that meet the enterprise specifications, the cost of talents and hardware servers is too high, and there is no such thing at all. necessary.

There are many research theories on digital transformation. For example, Neelesh Rangunath Kumbhojkar suggested that organizations are embracing digital transformation at an exponential rate to drive growth through new business models and the use of digital technologies. Digital transformation is a business need, not a technical one [1]. Marco A proposes that colleges and public universities want to modernize their processes. Therefore, changes in company processes and work culture and the integration of digital technologies require a digital transformation process [2]. Blockchain is one of the technologies that can support the digital transformation of industries in various ways. This advanced technology can provide organizations and companies with a decentralized, transparent and secure environment. Dimah H et al. discussed the adoption of blockchain in the port and shipping industry to support digital transformation [3]. However, there are few research theories on the commercial value of iBiz in digital transformation, so this paper explores this.

This paper first analyzes and discusses the core concept of iBiz, and then discusses the implementation of digital transformation of enterprises point by point. Then analyze the role of iBiz in the enterprise. Afterwards, a description is given of the iBiz digital transformation all-round empowerment execution line. Finally, the ability requirements to realize digital transformation are discussed and summarized.

2. The Business Value of iBiz in Digital Transformation

2.1 Core Concept

Application software systems have become an integral part of our business operations, and the

complex process and huge cost of developing software have seriously hindered the development of society. We are deeply aware that we are responsible for our deep accumulation of technology and tool application. We are convinced that iBiz software factory's support for enterprise informatization is a paradigmatic change, and its impact goes far beyond the tool itself.

In addition, it advocates inclusiveness, professionalism, openness and innovation. No matter the size of your business, you can get support from iBiz. iBiz works with other partners to create a new ecosystem to create the future. iBiz is open and innovative [4-5].

We believe that as a market-oriented IT construction and management team, it is necessary to first reflect the business value of the team. iBiz firmly believes that the introduction of iBiz "software factory" can bring huge business value.

Today is the era of data, and data, like oil, is one of the core lifelines of enterprise development. In fact, there is a huge amount of data in any company, such as our procurement data, production data, sales data, etc. How can we use seemingly scattered data to empower our enterprise and ensure that we do not fall behind in the trend of digital transformation [6-7].

(1) The necessity of digital transformation for enterprises

The transformation of informatization in all walks of life is obvious. Banks have replaced a large number of counters with robots, hotels have begun to use robot waiters to deliver meals to check-in guests, political and legal units have tried to use robots to handle basic police reception, and digitalization in agriculture can save agricultural resources and consumables, and accurately grasp the growth of each plant. For enterprises to achieve digital transformation, they will inevitably experience time, cost, and psychological pain.

During the communication between our pre-sales personnel and business owners, we found that the management of some large companies can see the real-time operating data of the company, which is called the data cockpit. The management can grasp all kinds of data of the company's operation at any time, analyze it at any time, see the overall trend chart, etc., and have a very intuitive and three-dimensional grasp of the company. However, their own companies can only see a few sporadic spreadsheets such as rigid accounting, marketing, and human resources, which are neither vivid nor intuitive. They are not helpful for the leadership to grasp the overall picture of the company and formulate strategies. There are even data from two departments. Contradictory, duplication of statistics, on the contrary, adds a lot of ineffective workload to the grassroots level. Business owners are very eager to improve this situation. They hope that as soon as they see the data, they can know the existing problems, and let the relevant personnel take quick action to correct and improve, and improve work efficiency [8-9].

2.2 Execution of Enterprise Digital Transformation

(1) Establish a corporate culture that meets the needs of digital transformation

With the development of economy and society, the traditional management model does not pay attention to the individuality and emotional needs of employees, resulting in the separation of management and grassroots. Under the promotion of the new management model, people who formulate the management model should pay more attention to the psychological characteristics of the new generation of employees, and do a good job in the communication and integration of new and old employees. Allow them to develop their own strengths and appreciate each other. Creating a harmonious, open and inclusive environment, a pleasant atmosphere of interpersonal communication and a corporate culture that respects equality will help improve work efficiency and corporate loyalty, and reduce the loss of corporate labor costs [10-11].

(2) Establish an organizational structure that meets the needs of digital transformation

We can clearly realize that in the traditional enterprise management, the management system of many enterprises is very rigid. Either there is no management system at all, or the system is rigid. In fact, in the company, the highest principle is management, and all management systems should serve the business, rather than override the business. However, when the enterprise becomes larger and the structure exceeds three layers, many middle-level managers use the management system to bully colleagues, reduce work efficiency, and cause meaningless internal friction. In digital

transformation, how to form a system that can not only help business departments, but also have a binding force? This requires a flat attitude to transform, allowing every front-line grassroots employee to make suggestions, establish a system that is most suitable for the department, and let the system serve them. Reform should be bottom-up, not top-down [12].

(3) Establish a technical foundation that meets the needs of digital transformation

Establish a hardware environment suitable for the enterprise, and recruit experienced digital talents to form a team. And hire a relevant consulting team to tailor the system for the company to suit its own actual situation. When forming a team, the enterprise can send the business backbone of each business department to the digital team as a consultant, helping the digital experts to understand the details and current situation of the enterprise as soon as possible, and implement it for the enterprise in a better and more down-to-earth manner.

(4) Establish an operation system that meets the needs of digital transformation

Digital transformation means that an enterprise bids farewell to its previous and accustomed operating model and working state, and enters another state that is very unfamiliar to enterprise staff. The changes here are no less than reborn. When an enterprise's organizational structure, management system, marketing model, financial management model, and human resource model have all been fixed, and then abruptly changes, it will inevitably experience a tear-like sense of discomfort.

The management system of most private enterprises is relatively incomplete, and the preservation of data is incomplete. Many enterprises even focus on business and neglect management. Some enterprises only have business teams and no data development teams. All systems are outsourced, and even databases are provided in the system. Shanghai, not to mention the data analysis team.

2.3 The Role of iBiz in the Enterprise

(1) Cover steady-state and agile businesses, and build a reachable digital transformation strategy

Digital transformation requires strong delivery capabilities that fully cover business needs! This means that the traditional enterprise informatization needs based on steady-state business (highly deterministic and predictable key business systems) have turned to steady-state business and agile business (unclear needs and rapid market response needs) Coexisting digital transformation needs, in which agile business needs new methods of agile implementation. This requires stronger IT support concepts, methodologies and tool systems to support. The digital transformation strategy must formulate a balanced digital transformation implementation strategy based on multiple business goals, different business functional characteristics and innovation efficiency requirements, and clearly divide and comprehensively take into account steady-state business and agile business.

(2) Owning models and codes to build a fully autonomous and visualized digital asset library

Digital transformation requires self-controllable software asset management and control capabilities! In the past, customers spent a lot of money but never really controlled digital assets such as data and software. Managers often sighed, "We have invested a lot of budget, but where is the completed data and system? How is it used? Is there any value? I can only see a few reports, but I can't see or touch any assets!". The first is that technology has complicated the trend of fragmentation over the decades. Secondly, software assets continue to accumulate over time. Regardless of the rapid development of customer business or the evolution of technology, a large amount of data and software assets are continuously accumulated. They are large, diverse, and inconsistent, and the asset value density is different. The digital transformation strategy requires breaking through the barriers of technical complexity and the diversity of digital assets, introducing methods to effectively control software assets, clearly separating, effective and corresponding management makes the assets of digital transformation truly under the control of the company.

To ensure the validity of software assets, the consistency between the business model and the code should be ensured first, that is, if the business model changes, the code will also change accordingly. Secondly, the consistency between the technical template and the code should be ensured, that is, if the technical template changes, the code will also change accordingly. Finally,

the operating assets, i.e. the complete open source of the code, should be guaranteed. After completing the above three points, we can say that we have effectively controlled software assets, and we can find or understand other assets corresponding to them through any asset.

(3) Connect capabilities, processes and resources to build a multi-level integrated ecosystem

It is necessary to obtain strong connection capabilities to build a usable and controllable ecosystem. This connection capability should be completely open and accessible. Openness and accessibility are multi-layered, and we are particularly concerned with the connection of digital production capacity, the connection of digital asset production processes, and the connection of digital production resources. To this end, it is necessary to have a compatible and unified standard system and a fully open and connectable support platform to complete the connection of production capacity, production process and production resources.

We can build an ecosystem of extension and expansion around the core platform capabilities. Capability connection, based on the principle of technology business decoupling, establishes five types of digital capability connections to form the inner layer of the ecosystem. The five categories of digital capabilities include: computing resources, business models, technology templates and components, applications, and services. Process connection provides integrated support for multi-domain, multi-level, multi-subject, and multi-modal software production processes in the form of channel fusion. This includes: cloud service platforms, trading malls, enterprise users, open source communities, forums, etc.

2.4 iBiz's Digital Transformation Enables All-Round Execution Lines

iBiz can provide 4P empowerment. iBiz provides a powerful digital productivity platform, simultaneously provides digital asset management integrated with multiple mainstream source code platforms, and provides full-life-cycle digital process solutions for R&D and interaction. Of course, it can also provide consulting, training, professional Digital organization-related services that integrate services and human resources intermediaries. Building a successful dual-mode IT capability in a client organization is a complex task. Digital asset repositories and building a multi-level integrated ecosystem are even more arduous, with a good roadmap. The specific steps are as follows:

(1) Step1: Evaluation

Seeing is believing, selecting requirements around the enterprise's steady-state business system or directly selecting appropriate agile business requirements. iBiz demonstrates how to agilely build a system in a few hours, complete capability assessment, and build transformation confidence.

(2) Step2: Application

After training, select a small team, use iBiz to deliver your first app in 30 days, and start your digital transformation right away. Demonstrate how real business-IT collaboration can unleash innovation with an agile approach.

(3) Step3: Architecture

Leverage the lessons learned from the first project to create a structured approach to scaling agile business application portfolios. Build the right architecture and principles for reuse, component- or service-based development, application of design patterns, and quality assurance. Build innovation teams, identify training needs and procurement strategies so you can quickly hire the right people to create more applications.

(4) Step4: System

Improve governance at multiple levels through better project portfolio management, continuous integration, and component- and service-based architecture. Correctly adjust the relationship between the steady-state business system and the agile business system, and transfer the rapid expansion of the agile business system construction plan after success to the system construction operation of the steady-state business. Build an innovation center of excellence to guide and support distributed development at scale.

(5) Step5: Ecology

On the basis of architecture, system establishment and improvement, integrate the iBiz-based

open source system and open application connection capabilities, build a digital asset library, form connectivity with external digital assets and human resources, and build a platform that supports digital transformation. complete ecology.

Empower traditional businesses by using the ibiz platform for digital transformation.

3. Relevant Research of iBiz in Software Asset Management

3.1 Management of Different Roles

Managers will be able to see the full list of assets and use the asset sandbox to view business assets, technical assets and operational assets as needed.

Senior domain expert who builds and augments model standards and toolsets in advance for business modeling efforts.

Business development specialists who are oriented towards taking on business development roles, managing and structuring business assets.

Technology development experts, oriented to take on technology development roles, manage and build business assets.

Operation management experts, responsible for DEVOPS operations, management and deployment of maintenance operation assets.

3.2 iBiz's Visual Business Modeling

iBiz's visual business modeling environment allows our construction and requirements departments to collaborate in an unprecedented way.

The process and results developed by using the visual business modeling environment can be displayed to the users of the business requirement department at any time. Business departments can put forward insights and improvement suggestions for the visualized business model during the modeling stage without waiting for the modeling to be completed.

By directly publishing the program and completing automatic compilation and deployment within 2 minutes of the model, the business department can directly see the delivered application system almost when the model is confirmed, and the interaction time point is advanced dozens of times.

Many times we can complete the delivery face-to-face for short requirements. The realization of such requirements reflects the interactive process.

3.3 The Role of Software

Enterprises vigorously promote intelligent manufacturing, IOT, artificial intelligence, and cloud computing. These are all favorable manifestations of software moving to the foreground. Some evaluation agencies predict that "more than 80% of enterprise products in the future will be carried by software". The role of software has gradually moved from the back-end support to the front-end, becoming an important role that cannot be ignored.

Software can realize capabilities that cannot be replaced by hardware in a more flexible way. Many transformations have been transformed into sensing or basic capabilities that can be linked to cloud services. The core capabilities of real personality are placed in the cloud. We see that typical traditional products such as automobiles are no longer comparable. Everyone is competing for in-vehicle software. Now, an overall service platform is built in the cloud to improve differentiation and enhance experience.

The software creates different sales and service channels, forming a huge contrast with traditional sales and service. E-commerce is the standard for almost every enterprise that has reached a certain scale. Many enterprises have even closed offline sales channels. Especially during the epidemic period, they have become more and more aware of the value brought by the Internet. This is entirely dependent on refined production management and control to make money directly.

Through the analysis of historical big data, the use of raw materials is directly planned, and the method of pricing and taxation is selected, which directly brings benefits.

4. Discussion on iBiz

4.1 Capability Requirements for Digital Transformation

(1) Digital Assets - Goals and Results

The portfolio will be the conduit for the highest-value innovative projects that require a faster approach to development. Outline project phases, success criteria, and budget guidelines to methodically develop ideas and measure progress. Investment must generate self-controllable digital assets, which at least include consistent business assets (models) and operational assets (codes), and they are standardized, readable, understandable, and repeatable.

(2) Digital organization—talents and teams

People need to be identified to establish a center of excellence to deliver innovative projects and to train this cross-functional team of business and technology savvy to collaborate quickly. It is impossible to undertake the maintenance of all digital technology fields and internal personnel familiar with existing digital assets, so it is necessary to integrate external human resources and utilize open source communities.

(3) Digital process - production and delivery

Innovation teams need to establish a fast-moving process so they can release new features and iterate continuously based on user feedback. Have to implement modern DevOps practices to build the deployment agility required for continuous iteration and mass releases. A governance framework also needs to be designed in order to maintain control over the development of agile business applications to allow innovation teams to rapidly create hundreds of applications. In the optimal case, a set of standards is required, and the process of requirement-design-development can be connected without loss and ambiguity, and the whole process can be visualized.

4.2 Advantages of iBiz

iBiz Software Factory provides a more detailed and reasonable division of labor roles than ever before. In different human resource structures, one or more roles can be assigned to relevant personnel. At its most basic, we can see that iBiz separates the business development role from the technical development role. As for the business development role, we can further divide the roles into data modeling roles, interface modeling roles, process modeling roles, and logic modeling roles. In terms of technology development, we target high-end programmers or architects, and can assume the role of publishing templates and component development, while professional programmers can assume the role of individual development. It can be seen that under iBiz's factory system, if the team size is particularly large, we can make everyone more professional through effective subdivision of roles.

Of course, the meticulous division of labor requires more collaborative management. iBiz uses a large number of asset libraries, automation and other methods, as well as the built-in PMS (software production management system) for task allocation and collaboration, which allows us to easily complement the system management and allow expansion carried out at any time.

When multiple roles are assigned to a specific person, it does not bring about a larger workload, but makes a more reasonable arrangement of the work process, making the work coordination more reasonable and effective. For example: We only have programmer resources on hand. We can let program developers undertake business development and program development at the same time as before, but we require the process of business development to go first, and after the target results are achieved, we will arrange follow-up development. This arrangement actually adjusts the software production process line, making production more orderly and controllable.

5. Conclusion

iBiz greatly expands the groups that can participate in software development and greatly reduces the demand for high-end resources in the software development process. From the process point of view, the iBiz software production system runs through the entire process from the introduction of requirements to development, deployment, and operation; from production to results. According to the research of this paper, it can be seen that iBiz's division of labor and cooperation system makes it easy for us to touch every detail in management without increasing the workload. For the production model that uses a lot of outsourcing before and after expansion, the process, workload, and labor results are intuitively presented in front of the project manager and every manager.

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