

## Research on construction advisory services based on Internet technology

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### Abstract

**With the increasing number of construction projects, construction project advisory services catch more and more people's attention, and it has put forward higher requirements. In the rapid development of Internet technology today, how to enhance the ability to integrate resources and improve consulting services of construction industry, has become one of the important issues facing the construction industry in China. This article will examine the business model innovation and upgrading construction consulting services designed to improve the core competitiveness of China's construction industry consulting services.**

### Keywords

**Construction project, advisory services, Internet technology, integrate resources, business model.**

### 1. Introduction

Construction project is a high input, high-cost project, both construction units or construction companies in order to obtain high profits in the construction, it is necessary to do the whole process of construction cost management and reasonable control of investment. That will not only related to the interests of the construction companies, but also the need to save social resources. However, investment control is a very complex task, with strong technical and professional, but also carry out this work and the construction of the entire process. And the traditional construction industry widespread risk control ability, high financing costs, lack of cooperation, fragmented, lack of government guidance, do not pay attention to the introduction and accumulation and enhance the management level and other aspects of talents common problem. These phenomena fully explain the necessity of construction advisory services exist, only for the construction of parties to provide all-round quality consulting services in order to reduce risk, save resources, and promote sustainable and healthy development. Therefore, how to use Internet technology, reconstruct consulting business, integrate resources, and enhance advisory services and profitability in construction consulting, problems is urgent to be solved.

### 2. The conventional engineering consulting firm

There are in general three types of engineering consulting firm in our country, Comprehensive engineering consulting corporation, professional engineering and management engineering consulting firm. At present, all kinds of engineering consulting business unit is expanding its borders, Engaged in the project implementation phase engineering consulting business unit is extending forward, engaged in the project preparation stage consulting engineering consulting business unit is expanding to two sides, to consult the whole process of development. Despite the different emphasis on services, but the three consulting firms have similar business development process. First, customers make decisions according to their actual needs and consulting firm with consulting firms approached, raised demand for services, the two sides signed the relevant contracts. The second step, through talent and engineering consulting firm configuration knowledge and information resources, establish the Advisory Panel Project. The third step is to enter the engineering consulting services within the project team, the provision of consulting services under the contract.

The fourth step, after the completion of the project, the project under contract payments consulting firm consulting services related remuneration. However, the traditional consulting firms target audience is more dispersed, single revenue model from a pure consulting services in highly competitive environment, companies may achieve sustained profitability, but it is difficult to effectively profit. Therefore, it is not easy for the traditional service business consulting firm to achieve the integration of industry resources to quickly enhance the core competitiveness of the goal. Therefore, it is necessary to make innovation consulting services for company's business model in the new starting point by means of Internet technology.

### 3. The construction of business model innovation consulting firm

Famous management guru Peter Drucker once said: "Competition in today's competition between companies, not between products, but competition between business models." Business model is based on business needs of its customers, combined with their own business , resources to create value for customers and profit from the business logic. Basis of value creation is to understand the needs of customers, only to meet customer demand as the goal, the enterprise's production and service activities do have value and meaning. To make the service accurate, timely and efficient, rely heavily on information, and information used in the integration of resources to provide a broader way.

#### 3.1 Strategic Value Proposition

Goods and services for the target, with accurate information, the value of the expression product or service is good enough to contain the customer, the process described is called strategic value proposition. Clear value proposition will help companies design correctly grasp the direction of the business model, customers benefit from the value of the enterprise through the demand to establish a potential model, the strategic value of the strategic value proposition is to establish a tone, it is the strategic positioning of the soul. Based on the background of the development of the construction industry, a strategic consulting firm value proposition is simple: to reduce risk, increase revenue, so that project stakeholders satisfaction. Figure 1 is an innovative service value chain under the strategic value proposition.

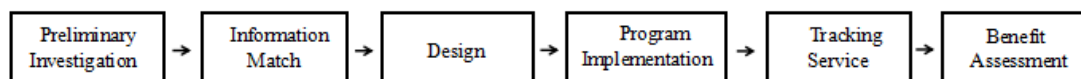


Figure 1-Innovative Services Value Chain

#### 3.2 Value demand Mining

Construction engineering consulting companies need to seize the customer's needs for advice, restructuring or value chain innovation consulting services to create value through innovative aspects, and ultimately achieve their business model innovation [1]. Consulting company around the value needs of all parties, the overall solution designed to meet the parties to help the parties involved to reach agreement on preliminary engineering and efficient collaboration. Consulting through Internet technology resource integration to meet customer needs and to further tap its outreach needs, enlarge customer satisfaction, enhance trust, so that the majority of customers formed a consulting inertia, strengthen dependence on consulting firms.

#### 3.3 Resource Integration

Integration is the key to quick access to resources. Using industry resources integration, we can achieve a win-win business interests of the subject, solving problems like that ,difficult for investors to select an item, the lack of professional and technical personnel as well as material and equipment suppliers of funds is difficult to achieve mass merchandising. In Figure 2, is the resource integration flowchart under this thinking guide. Thus, by consulting firm providing services in the course of playing the role of information in a match, its value lies in the use of short time, shorten the payback period; the information is accurate and reliable, reducing unnecessary costs; information greatly enhance the value of consolidated earnings gradually enlarged.

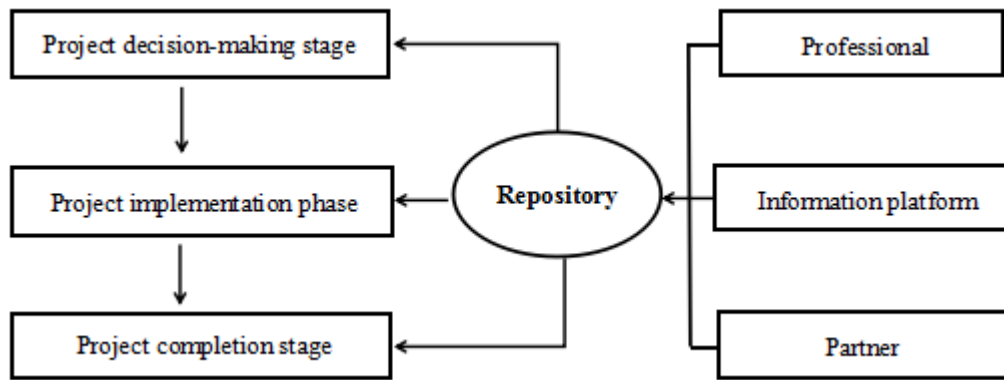


Figure 2-Resource Integration Flowchart

### 3.4 Establish the Information platform

The emergence of the Internet is changing the way people work and live, electronic computing machines and communications industry has gradually become a new economic growth point. This makes more and more companies tend to manage information technology, engineering consulting service class enterprises should use Internet technology upgrade business model to enhance the ability of resource integration, to diversify earnings. Therefore, to build information management platform, combined with e-commerce profit model can promote the rapid development of engineering consulting enterprises. Frame generates breakthrough industrialization process formed way of thinking, theoretical concepts and existing mode to explore with information concept as the core of the new management concepts for the knowledge economy era, with new theories and methods; full use of modern information technology to transform and reconstruction of enterprise business processes and organizational structure, and reduce costs. Comprehensively improve the quality of goods and services, and enhance the ability to adapt and self-organization in dramatic changes in the external environment, finally improve organizational performance, market competitiveness and cultural values[2].

### 3.5 Core Services

Operations class defines the description of the business model for enterprises operating structure, the focus is to demonstrate how to create value business processes and internal basic structure by design. Variables associated with this delivery method include products / services, management processes, the flow of resources, knowledge management and logistics flow, etc[3]. Internet-based technology, construction advisory services will be integrated professional consulting and managed the company's strengths, seek new business models, to provide construction lifecycle tracking service. Strong capital base, high-level professionals, advanced management mode and clear workflow constitutes a construction consulting company's core service mechanisms to promote its implementation benign monopoly.

## 4. Risk analysis

Modern large amount of project investment, the fierce competition in the market to fulfill a long time and the work content is complex, making it a complex system engineering. Thus, in the process of engineering consulting and implementation, risk management can not be ignored.

### 4.1 Economic Risk

Refers to the risk ventures or projects suffer unexpected in the economic sphere. Some economic risks are universal and have an impact on various industries, such as the economic and financial crisis, deflation or inflation, exchange rate fluctuations. Effect of some economic risk is limited to enterprises or projects within the construction industry, such as national plans to adjust to the infrastructure, building materials and labor costs fluctuations, the owners of the performance capabilities and the ability to pay and so on.

#### 4.2 Risk in Management

Risk in management is usually due to mismanagement , such as lack of supervision and experience and signing a binding contract for the other side and so on. Since each partner of the project objectives, due obligations, enjoy and understand the different expectations of rights caused internal management conflicts.

#### 4.3 Organizational Risk

The complexity of the engineering consulting work determines the complexity of the organizational structure of the consulting firm, if the chaos in the organization, and project management can't meet the needs. Within the performing organization, the project management team may lead to bad result due to poor cooperation between the various departments with the project difficult to implement effective management.

#### 4.4 Platform Maintenance

Information service platform may help to business expansion, but from the platform in the planning, development and post-operation and maintenance are required to invest a lot of money and personnel, in addition ,to consulting firm service model requires repeated demonstration and evaluation, which will undoubtedly increase their financial burden and risk management.

In summary, construction advisory service level is relatively low in China, the use of Internet technology to provide comprehensive consulting services is lacking of experience, coupled with engineering consulting enterprises are faced with high investment and high-risk projects,clients and complex relationship factors, making a comprehensive range of construction consulting services face more risks and challenges. But we also see potential opportunities and tremendous business opportunities, construction consulting companies need to strengthen risk management, optimization of the organization, the accumulation of expertise and using innovative mechanisms to seek a breakthrough in a new starting point, in order to seize the initiative and dominate the market.

### 5. Conclusion

In the Internet era, the rapid development of e-commerce consulting company provides a new way to strengthen the integration of resources, expand the service chain ,and that help large-scale engineering consulting services company come into being, which will greatly enhance the ability to resist risks in the construction industry, and there are conducive to the rational allocation of social resources. Internet-based technology in construction advisory services is an effective way to enhance the core competitiveness of China's construction industry, but due to the low technology maturity, it needs deeper and further exploration.

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