Regional Education Platform of Supply Chain Research

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Abstract. This paper, by method of supply chain, analyzes the operation of knowledge management platform of Binjiang Higher Education Park of Zhejiang University of Traditional Chinese Medicine. Such analysis can find out defects in self-hemopoiesis. So the supply chain concept of platform operation and maintenance is put forward. By subdividing subject and object of platform service, we come up with service mode and process for teaching product trade of supply chain process and discuss the service mode of supply chain.

Introduction

In 2008, our school established “Digitization Knowledge Management Platform of Binjiang Higher Education Park”, with its service scope of 6 higher learning institutions in the park for a purpose of sharing park resources and community activities. Since operating this platform two years ago, we found out that China appropriates funds in the establishment of higher learning institutions, but the institutions hardly consider their development, operation and maintenance and self-hemopoiesis. We should be aware of the fact that an operating platform with vitality must require regular input and output and capital flow and information flow. A living platform has to join social economy and import informationized information flow. If we ignore the teaching subject and object at planning stage of platform, the platform will be blocked in its operation. For the way of establishing a chain of information and capital, we suggest that we shall create the knowledge management sharing platform of Binjiang higher education park which is based on supply chain.

Supply Chain Concept of Network Teaching Platform

The supply chain concept derives from e-commerce. The chain is a network where some enterprises and departments obtain materials, process materials into middleware or finished products and then send them to users. When applied to network teaching platform, we may explain “supply chain mode of network teaching” in this way that it is a network information system composed of some teaching departments or educational organizations who obtain teaching resources, manufacture resources, transform teaching materials into finished products of teaching accumulated software or teaching course and send finished network course to students. This system puts learners and teachers into an organic chain for its vitality in operating.

The subject of teaching service is functional departments, education technology department and other information departments while the object of teaching service is 6 schools and user department in the park and the ultimate object is learners, teachers, demanders and beneficiaries of information. Middle chain will collect and obtain resources and courses will generate finished products and semi-finished products. We should, by an idea of distribution, popularize teaching finished products and semi-finished products for organic series so as to flow information.
Service Subject of Platform

By analyzing supply chain mode of network platform, we know that there are apparent relations of subject and object when the supply chain generates. Knowledge Management Platform of Binjiang Higher Education Park with its subject of Zhejiang University of Traditional Chinese Medicine is built for the purpose that is to realize “unified planning, unified management, unified standard, unified resource, unified evaluation, unified operation and unified profit” in the teaching platform. The core is to advance interschool network teaching cooperation, study cooperation among students, employment consultation cooperation and career design, to advance information flow on the internet, turn information into capital flow and operate and maintain the platform with the capital. In this way, we can innovate teaching management operation mechanism, build a high-level personnel training mode with trans-school and trans-region cooperation, and boost higher education mechanism innovation and sustainable development of university town on the whole.

Tasks of Service Subject

First, service subject is Zhejiang University of Traditional Chinese Medicine, which tries to systematically carry out network course construction, support developing quality courses, effectively evaluate the formation of network teaching and other teaching activities, demonstrate network course contents, supervise network teaching and learning process, estimate working effect, promote effect and level of whole application, advance network services and conduct medical consultation, medical service, medical reservation, buying books online and other activities through the platform.

Platform of Service Subject

After establishment of the above flow channel, building connotation products of platform appears particularly important. At present, we has established an information publish platform which includes news and trends, notification/announcement, investigation in various forms. Teaching course platform has quality course, network course, course evaluation, humanity classroom, academic forum and training world. Employment platform includes recruitment information publish, career development plan and guide, training offer for reading laws and regulations and enterprise preach activity. Teacher platform has teacher salon and teacher evaluation while student platform has student society, student life, various contests, e-record folder for student’s growing process and laboratory platform.

The basis to support the above platforms in operating is resource sharing platform of Binjiang higher education park, like resources of our school (divided by courses), resources of colleges, resources of Binjiang area, employment resources, foreign resources, mirror image and interlinking resource and library resource, particularly refining resource establishment of old famous doctors of traditional Chinese medicine and famous doctors, medical record and case.

What makes platform safe is service and management platform, including public service by sharing mechanism in park, 24-hour online service of platform, maintenance and repair service of information products such as multimedia classroom, network and computer.

Business of Service Subject

About business: public payment platform (Alipay), third-party bank, finance of various schools and educational institutions.
**Service Object of Platform**

Service object of Platform is mainly teachers, workers, students, parents, Binjiang Science Park, continuing education and training staff in 6 campuses. Subdividing service object is of great significance for operating platform and is also a necessary means for the platform to live. We should, in accordance with object demand, adjust platform contents for increasing expectation value, find out capital flow in subdividing customers and cultivate new customer groups.

Service object also helps us make group classification when establishing customer strategic plan so as to set popular service contents and high-end service contents with high production value.

**Operation of Platform**

Our university, as the subject of platform, provides part of funds in building platform, manage supervising platform and operating status and conduct valued payment by third-party platform in terms of external operation. We also offer supporting policies, evaluate network teaching performance of teaching quality engineering and spread the network teaching. With manpower, material resources of modern education technology center, as well as over 30 years of resource accumulation, we achieve platform planning, implementation, construction and maintenance. With the help of our school’s finance, the third-party platform realizes capital-in and out, and settlement circulation among banks.

Colleges and universities in Binjiang Higher Education Park are members of the unified platform and have the right to use the platform without charge. Respectively independent door interface and administration authority are obtained by level-to-level administration mechanism. Relatively independent course construction, network teaching, recourse sharing and interschool cooperation which are personalized and formed according to self-characteristics in running school, are developed on the basis of unified policies and standards of the unified platform. The unified platform is mainly used for avoiding fund problem and time lag in building each platform. In accordance with actual application, the unified platform will take some money out of daily teaching operation funds for paying annual operation and maintenance service cost in the light of enjoyed service contents.

Also, we established professional service agencies that support operation of the unified platform, provide support services in terms of platform construction and operation, profession training, implementing planning and consultation and e-commerce payment, offer professional technology support and intimate service for users at different levels and give rich application and implemented experiences. Besides, corresponding service cost will be made according to ultimate users who enjoyed various services.

**Trade Mode**

Through our investigation, network teaching platform is funded by the state and remains operated due to policies and enthusiasm of teachers. The platform seems no its own life system. What we need is the living platform which may make metabolism and constantly grow. The living platform may, by operation idea, turn teaching contents into products that can be traded. Network course platform, resource platform and evaluation platform can be traded by third-party platform, with mode as follows:
In Fig. 1, X is financing money, N payment money and M release goods money. Trade service requires financing money being more than payment money and payment money is more than lending money for guaranteeing capital safety. “Trade service mode of teaching products of supply chain process” can be divided into three great modes. First, trade function which is based on knowledge management platform of Binjiang Higher Education Park, is open to users and is in seamless connection with trade platform (Alipay) and this platform, namely, assisted by third-party institution. Second, actual logistics of teaching products, including metadata resource, semi-finished resource, finished product supplier and finished product marketing supplier. Metadata resource refers to various multimedia resources of knowledge management platform which are in line with Dublin standards and description of LOM resource. Semi-finished product resource means all kinds of courseware with definition of teaching unit, containing unit content of resource library, unit content of network course and unit content of question bank. Finished product supplier is a unit to provide the whole network course, whole courseware, whole software and whole question bank. Finished product marketing supplier is schools, teaching institutions, commercial operation unit and other publishing units in the park. Third, financial institutions realize real capital flow by banks so as to make blood transfusion to platform by resource service.

**Service Process of Platform**

In Fig. 2, basic functions of this platform are demonstrated from organization structure to business process. Content of resource library shall be scheduled on the payment platform, and it is the same case to request various on-line medical teaching services, or circulate teaching products according to order. In this way, a rational and just process can be guaranteed. Although there is a good beginning in the mode of doing business, the trade mode is not clear and simple enough. Education is not an industry, but has recyclable products. Education resources are valuable. We try to transform this valuable factor into hemopoiesis factor of platform by subdividing education products and restructuring trade process, which is a sustainable development road to solution of funds to build quality courses and network courses.
Structure and Functions of Platform

Since there was detailed description of platform structure in foregoing paragraphs, we only want to demonstrate the payment platform and third-party bank. Platform must remain money circulating in a good way, so we have to consider integrating education product resources by education institutions, obtaining recognized fund pool by electronic trade platform, realizing successful trade about education products with help of public social resources of bank. In this way, education products can be consumed by personal users except schools.

Think of Future in Implementing Teaching Platform

Resource logistics of knowledge management platform of Binjiang higher education park is ongoing according to capital flow and information flow. However, information market is an aggregate market of combination of “push” and “pull”. “Push” is a process of producing resources, teaching semi-finished products or finished products that are needed for the education market according to prediction. For example, most network course constructions are conducted according to regular education institution, publishing industry, medical establishment and advertisement which are in the predicted plan of platform. “Pull” is a process of producing resources or teaching products that are needed for the education market according to determined plan, namely, according to order in e-commerce. Determined large teaching platform, quality courses with provincial-level, state-level and school-level, government projects and planning projects of education institution are those products. Therefore, a process of supply and demand is a basic behavior of the teaching market. Supply chain emphasizes the supply feature of “push” in the market but neglect the demand feature of “pull” in the market. Education products need to be processed and manufactured in accordance with order. These products are quickly reacted to the
So, we should pay more attention to subdividing education market and quickly finishing valuable state-planned products, government-planned products and customer-planned products. In this way, we can, relied on creditworthy strategic alliance and outsourcing third-party education products of market, advance quick service of education platform and sense of market competition.

In modern education market environment with global education information integration and fierce competition, teaching and learning are not only simple static relations of teaching supply, but also complicated relations where competition and cooperation are coexisted. Such relations are of great uncertainty and are dynamic due to influence of supply and demand of talent training market. However, traditional supply chain does not consider the dynamic feature.

Given the above defects of teaching industry supply chain, we think that, in a dynamic environment with competition and cooperation, it is necessary to have a dynamic supply-demand network, called as Agile supply chain, which is constituted by suppliers, teachers, students, teaching products and half products makers and teaching institutions(distributors). Supply-demand chain about teaching platform is not the key point that this paper tries to elaborate. This paper only wants to propose a thinking to solve problems.

References


