

Introduction to the Internet Ecosystem

-From the Perspective of Course Design and Practice

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Abstract—The course will introduce students to theoretical knowledge of the business ecosystem, the latest development trend and frontier hot-spots of the Internet. According to Chinese Internet business model, the extra-curricular research and classroom discussion have been set in order to inspire students to explore and think. By analyzing the well-known Internet business model and strategic positioning case, its main task is to cultivate students' innovative thinking ability, and to help students understand the basic knowledge of business ecosystem theory, as well as Internet thinking. Try to explore the appropriate case teaching forms, embody the concepts of cooperative teaching, cooperative learning, autonomous learning and inquiry learning.

Keywords—Internet ecosystem; Business ecosystem; Internet thinking; Case teaching

I. INTRODUCTION

The 21st century is the era of the Internet, the rapid development of information technology, the full reconstruction of the business model, social life has had a huge impact on all aspects; at the same time, it also caused people's thinking changes, Internet thinking allows people from a fresh look at the rapidly evolving changes in the world. This observation can begin with the evolving evolution of Internet systems from nonexistence.

So we try to analyze the evolution of the Internet ecosystem for students, to analyze the structural characteristics of the Internet ecosystem, to explain the energy and information flow patterns, to explore business models of Internet companies, and to describe the latest trends in the Internet. All of these can help students to understand how to develop an innovative Internet Symbiotic strategy from an ecological perspective. The introduction of a course such as "Introduction to Internet Ecosystem" will help students gain a better understanding of the development prospect of this major in the future Internet industry.

In the choice of teaching contents, it emphasizes the introduction of the latest management thoughts and theories, introduces the frontier hot technologies and new business models of Internet development. Firstly, it focuses on the strategic competition strategy of business ecosystem theory and its related theoretical knowledge, and then adopts the classroom discuss formal analysis of specific cases, so as to develop students ability to analyze and solve problems.

II. COURSE CONTENT DESIGN

The "Introduction to Internet Ecosystem" has a total of 32 class hours, 2 credit, mainly for the freshmen seminar. Because of the characteristics and the novel content of this course, the course time arrangement, uses 30-40% of the class hours to explain the theoretical knowledge of business ecology and 60% -70% of the class time to elaborate the hot topics of the Internet and the new business innovation mode. This course highlighting the latest trends in the development of the Internet, introducing new management theories and management ideas, and examining the competition strategies business models of the Internet industry from a strategic perspective

Through case studies and other forms, students are allowed to understand "the evolution of the Internet ecosystem", "the movement patterns of Internet information", "internet thinking and culture", "the business model of Internet companies", and the "Internet Business Innovation Strategy "and other content,. This helps to broaden students' horizons, cultivate students' innovative thinking ability, develop students' innovative thinking ability, enabling students to understand the latest technology and development direction of the Internet, so as to establish professional confidence, improve professional interest, and lay a good foundation for follow-up professional learning. The newly created "Introduction to Internet Ecosystem" is also the first attempt in information management and information systems professional teaching in China.

A. Business Ecosystem Theory

The "Business Ecosystem" was first proposed by MOORE [1], the famous American economist, in the Harvard Business Review in 1993. Learned from the study of natural ecosystems it analyzes the structure and function of social organizations, business and the environment, the relationship between business and business, and the evolution of the entire system.

In the information age, the competition among enterprises is not limited to the competition of products or services, but also to the competition among enterprise-centered business ecosystems. As a result, students need to improve their understanding of management theory, transform students' way of thinking, and thus introduce the business ecosystem theory. In this course, we mainly take "Alibaba" e-commerce ecosystem as an example and its business ecosystem development process as the main line. We detailed analysis of

what important measures to be taken for Alibaba at each key step. What is the key issue to solve? Gradually deepen to help students recognize how a business ecosystem from scratch, and gradually expand; at the same time let students understand the concept of niche, population, business community, value chain, business model.

B. Internet Thinking

Internet thinking was proposed by Li Yanhong, the founder of Baidu in 2011. There is no universally accepted academic definition. Some scholars think that "Internet thinking" mainly includes the following ideologies: divergent thinking, open thinking, systematic thinking, creative thinking, Humanistic thinking [2]. In order to enable students to better understand the meaning of Internet thinking, we introduce a case in the classroom teaching: "Chinese New Year red envelopes war".

Spring Festival 2014 Tencent launched the Spring Festival red envelope blessing activities through WeChat. By 2016, Alibaba cooperated with CCTV to launch the Chinese New Year grab red envelopes for the purpose of competing for third-party payment platforms. In 2016, a total of 516 million people participated in the red envelope blessings. During the Spring Festival, the total number of red envelope red envelopes sent and received during the Spring Festival reached 32.1 billion times, causing a great sensation.

This case is introduced immediately in class. First, most of the students experienced themselves and became familiar with the development of the incident. Second, although it was a simple case, the incident involved many aspects different from the traditional thinking so as to be able to introduce well the concept of Internet thinking, easy to guide students to think in depth. From all the key points in this case, we guide our students to analyze the "Tencent and Alibaba Red War": What is the competition? What is the purpose of such activities? How to design programs? What kind of information technology support is needed? Who are the participants? And so on. Through classroom discussions, students are encouraged to think about such things as "internet finance", "mobile payment", "social network chain" and "internet culture", so as to guide students to think about the divergence, openness and creativity of internet thinking, Humanity and other characteristics.

C. Internet Culture

Internet culture refers to the cultural phenomenon relying on the form of Internet. It is a kind of culture with distinctive characteristics. The Internet society, in which young people are the main force, has often popularized some online language different from traditional society and has shown a unique cultural atmosphere. However, on the other hand, the Internet culture is rooted in the local culture and is inextricably linked with the traditional culture. That puts "Double 11", a Chinese e-commerce festival for singles, the domestic competition is fierce for mobile payments playing by Spring Festival red envelopes, are the result of the combination of Internet culture and traditional culture.

Among these thing, Chinese Singles' Day, "Double 11", the transaction volume hit a record since 2009, reaching as much as 168.2 billion yuan in 2017. The phenomenon of "Double 11"

is unique to Chinese e-commerce. What are the factors that will make Chinese e-commerce business go from online to offline and from domestic to overseas? In class, aiming at Chinese unique phenomenon of "Double 11", students are encouraged to make in-depth discussions from various angles, including business culture, Internet culture and traditional culture. At the same time, taking the phenomenon of "Chinese New Year red envelopes" as an example, this article analyzes how to introduce traditional culture into the Internet ecology with new forms.

D. Network Information Dissemination Model

At present, under the Web2.0 technology, the mode of information dissemination is totally different from the traditional mode of information dissemination, which changes the unidirectional, passive and centralized information dissemination in the past, and thus shows the diversity, initiative and interaction Sexuality and complexity. Take the example of Weibo such as Social Networking Services (SNS), in the whole process of information dissemination, each agent is not only the sender but also the receiver. The information exchange between groups and groups is swiftly exchanged to form a network of unlimited expansion of information. At the same time, each agent will be limited by individual characteristics, individual structure, group structure and social environment and other factors.

In such an Internet ecosystem, how should each individual in the world understand a non-traditional mode of information dissemination? In the complicated information people how to distinguish the authenticity? How to deal with sudden public opinion? In this unit, taking several real events as examples, students are guided to analyze the key issues, solutions and precautions from different perspectives and help them fully understand the characteristics of network information dissemination in Web2.0 environment, as well as the complexity of online media and other issues.

III. TEACHING METHOD

At present, the western developed countries have a leading position in the field of information science. This course, Introduction to Internet Ecosystem, should absorb advanced research results and teaching achievements from abroad, introduce the latest Internet business model management theory, and on the basis of this, pay attention to the development of Internet companies, learn excellent teaching cases abroad. According to teaching content needs, we should write and improve own teaching cases. Students learn through case study to acquire new knowledge ability; it can also inspire students to think, train students ability to analyze problems and solve problems.

Case teaching helps students to better grasp the frontier knowledge of the discipline and effectively improve the ability of analyzing problems, which can play an active role in expanding students' horizons. For the Internet ecosystem courses, the choice of case should consider the following aspects:

- Hot Events: Students are no strangers to such cases. Students know the ins and outs of the events and have

experienced in their lives or on the Internet. In this way, students' interest can be stimulated when they are discussed in the class, then their desire to explore the hot events and to make new discover.

- Multi-Level: This case involves multiple levels of content, such as business models, Internet thinking, new technologies, cultural level, etc., that is conducive to guide students to think from multiple perspectives.
- A Simple Story: the story of the case is clear and concise, without twists and turns, which makes it easier for students to understand the antecedents and consequences of the incident. While it can let students have in a relatively short period of time and facilitate discussion in one lesson (no more than two hours).

In addition, the situational teaching method can also be used in class. Selecting hot events as an example, the students are divided into groups, each playing a different role, take turns expressing their own views in class, explore events that may occur, and try to get a reasonable solution. Such targeted discussion is necessary in class, and it can arouse the students' interesting and guide the students to participate actively so as to deepen their understanding of the issue.

In this way, through the combination of case teaching, situational teaching method, research and discussion, students can be taught the cutting-edge management thinking and business model knowledge.

IV. COURSE EXAMINATION METHOD

The traditional closed-book examination is not suitable for freshmen innovation seminars, in order to encourage students to think actively and guide students to participate in class discussions, the assessment methods should be reformed. This course requires students to analyze the strategic positioning and business model of well-known enterprises in the domestic Internet industry that may be discussed with case studies. Based on the "Analysis of an Internet Enterprise Ecosystem" as a research topic, Students are in small group responsible for the system to complete a simple Internet business case analysis report. Group discussion to complete the report of the ecosystem model, strategic positioning and business model of an Internet enterprise. Students led group discussion and complete the analysis report that is about an Internet company's ecosystem model, strategic positioning, business model and other content of the report. While the teacher participates in the panel discussion, answers students' questions and guides students to complete the case analysis Report. Each team reports its results in class, and accepts the teacher's questions on the completion of each part of the case report. The teacher gives the grade according to the students' defense situation. Through these efforts, it can increase students' problem-solving skills and creative thinking skills. All of this can lay a solid theoretical and practical basis for students' future study and work practice.

Judging from the teaching situations of these several courses, freshmen of the university are not well adapted to the examining method such as the report of the case analysis. The completion of each group is quite different. The key to the success of the course report is to look at the team leader's ability to organize and coordinate efforts with other personnel to achieve objectives. While each group and group leader are independently selected by the classmates, which will inevitably result in constant strong and weak students' ability among different groups, thus bringing the various groups differences in the completion of the report. In response to this problem, the grade of the course report score needs to be further refined. In student achievement evaluation, it can be considered normal performance, case analysis report and theoretical test scores.

Then through the teaching of this course, we hope students should meet the following basic requirements:

- 1) *To grasp the basic theory of business ecosystem, to cultivate students understanding the synergies between Internet companies from the perspective of ecosystem strategy, to help students form strategic thinking and win-win way, and to improve problem solving skills..*
- 2) *Grasping the characteristics about the mode of information dissemination under the Internet environment, students can have basic coping ability when they encounter the emergencies of internet public opinion emergency.*
- 3) *To understand the Internet culture and Internet thinking patterns, to know the latest trends in the Internet, and to have innovative thinking skills.*

V. CONCLUSION

The main purpose of this course is to help students break the traditional mode of thinking, from a new perspective on the Internet. Using business ecosystem theory to help students understand the evolution of the Internet ecosystem and observe how traditional and Internet cultures interact together. In classroom teaching, we also try to use a variety of teaching methods, such as situational teaching method, case teaching method, sub-group discussions, in order to fully mobilize students' interest in learning.

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