

# Exploring the Teaching Mode of Intelligent Media Innovation Design Based on Product Manager Thinking

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**Abstract**— *The development of intelligent media has put forward new requirements for the teaching of media majors, and the innovation and design of intelligent media has become an important content of related majors. This paper takes the innovation of teaching concept and method of "Intelligent Media Innovation and Design" course in School of Journalism and Communication of Shanghai University as an example, and discusses how to take "product manager" as an important training goal and direction, so that students can understand the development logic of intelligent media more effectively and improve the practical ability of intelligent media.*

**Keywords**— *Intelligent Media, Product Manager Thinking, Teaching Model.*

## I. INTRODUCTION

With the application of various advanced technologies, the degree of intelligence of media has been greatly enhanced, which has put forward new requirements for the teaching of media majors. "We need to grasp the connotation, extension and essence of the concept of intelligent media and intelligent communication, and provide a correct cognitive framework and preliminary theoretical framework for opening the paradigm shift of communication"[1]. Products are the bearers of intelligent technologies applied in various social scenarios, and intelligent products can be divided into two categories: hardware products and software products. Here, we focus on the development of intelligent media software products to think about the innovation of teaching concepts and models of media majors. Take the School of Journalism and Communication of Shanghai University as an example, when declaring the major of network and new media and formulating the training objectives and teaching structure, "product manager" is taken as an important training objective and direction, that is, to train students to become excellent product managers in the era of intelligent media. Based on the course "Intelligent Media Innovation and Design", we have gradually explored the teaching mode of cultivating students' understanding of the development logic of intelligent media and improving their practical ability of intelligent media around "product manager's thinking". Here, we combine the case of "Intelligent Media Innovation and Design" course to reflect on the teaching mode of intelligent media innovation and design based on product manager's thinking.

## II. TRAINING REQUIREMENTS AND OBJECTIVES OF INTELLIGENT MEDIA COURSES

This course focuses on intelligent media product design, with the development of intelligent communication as the background, supported by the competency structure of product managers, and oriented to drive social development based on intelligent products, guiding students to become innovative and complex talents with disciplinary frontier concepts, mastering product design skills, and capable of working on media product innovation and design in the intelligent era.

### 1. Master the knowledge structure of intelligent media product design

Systematically learn the knowledge structure and workflow of product managers, and focus on the new background and requirements of the intelligent media era, guide students to build a knowledge structure about intelligent media industry design, and lay the initial foundation for becoming an excellent intelligent media product manager.

### 2. Combine cutting-edge vision with practical training

On the one hand, students will grasp the frontier of intelligent media development, guide them to master the combination of intelligent media and various scenarios of social production and life, and clarify the application scenarios and directions of intelligent media product design; on the other hand, they will master the basic process and tools of product design, and have the basic practical ability of teamwork, design and production of intelligent products.

### 3. Connecting the intrinsic connection of multiple courses in the network and new media curriculum system

With intelligent media product design as the core, students are guided to connect the content of this course with several other courses in the teaching program. For example, in the process of determining the goal of intelligent media product design, the course "New Media and Society" is linked; in the exercise of industry development background analysis, the course "Data Mining and Analysis" is linked; in the process of user demand analysis, the course "Network Social Psychology" and "Network and New Media User Analysis" are linked. We strive to guide students to form systematic disciplinary thinking and abilities through the core content of intelligent media products.

#### 4. Social value guidance of intelligent media product design

Strengthen the guidance on the content of different chapters in terms of ideological content, product intent and social value, so that students can be clear that intelligent media products have social attributes and avoid problems such as deviations in value concepts.

### III. DILEMMAS AND MEASURES FOR UPGRADING INTELLIGENT MEDIA COURSES

After preliminary research, we found that most journalism and communication schools do not have product manager-related courses and content in their traditional teaching system and structure, and lack corresponding faculty, and "Intelligent Media Innovation and Design" (1) has become a basic course to carry this training goal. After two years of polishing and optimizing, this course was established in the second year with the framework of "product manager" as the core of intelligent media, introducing the relevant system and knowledge of product manager into the course, integrating it with the specific requirements of intelligent media, and forming a set of general courses to cultivate "intelligent media", integrating the requirements of media product design and innovation.

#### 1. The course design model needs to be adjusted

"Intelligent Media Innovation and Design" is a new course for network and new media majors, which has just had two rounds, and is a course that is constantly optimized and improved in the process of teaching. In the first round of lectures of this course, students are mainly guided to think and learn how to carry out media product design based on the needs in intelligent media development and urban construction, with case study as the main teaching method. However, there is still a gap between the overall structure and content and the professional training objectives. Before the second round of lectures, the course structure and content were adjusted after further demonstration by the teaching and research team. Around the important goal of cultivating excellent product managers in the era of intelligent communication in network and new media majors, the relevant knowledge system and content of product managers were introduced into the intelligent media innovation design course. Based on this, the content of the course has been greatly updated, and the new framework and content of the course have been built by integrating the core content of "intelligent media + product manager". Through the second round of lectures, the updated course structure and content arrangement proved to be much more effective than the first round, and at the same time, we have a clearer grasp of what parts should be further optimized and improved. Through the subsequent continuous optimization and adjustment, this course will become one of the highlight courses of the network and new media majors.

#### 2. Refinement of the content of the course Civics

In 2021, the lecturer participated in the 13th undergraduate teaching competition for young teachers at Shanghai University and won the second prize. During the competition, he gained a deeper understanding of the content and methodological design of the course Civics through training and polishing of

courseware. After that, he organized the content of this course according to the requirements of the course Civics, added many knowledge points of the course Civics, optimized the classroom interaction of the course Civics, such as guiding students to integrate the concept of "people's city" into the design of intelligent urban governance products.

#### 3. Challenges and additions to the knowledge base

The lecturer of this course is a researcher of intelligent communication and has accumulated rich experience in the field of "intelligent media". However, there is still a lack in "product manager", and there is no teaching faculty related to "product manager" in our college. In order to support the teaching of this aspect, the speaker took the initiative to attend the product manager training course and accumulated product manager-related knowledge, skills, and materials through learning, so as to make up for the shortcomings of this aspect in time. In addition, the presenter attended the product manager training course with the task and problem of optimizing this course, that is how to effectively combine the content of "Smart Media" with the modules of "Product Manager". Through learning and discussion during the training process, the integration idea of "Intelligent Media + Product Manager" was formed, and the course content was reorganized based on this. The large amount of materials and cases accumulated in the training can provide strong support for the course teaching.

### IV. THE REFINEMENT OF THE TEACHING CONCEPT OF INTELLIGENT MEDIA COURSES

Focus on new trends, issues and contents of intelligent media. With the development of new media, the traditional teaching paradigm has been difficult to adapt to the needs of the changing media ecology, and the training model oriented to traditional media has been difficult to adapt to the requirements of various intelligent media platforms for communication. "Change the traditional single evaluation mode, explore the diversified presentation of course teaching results, realize the course reform, and effectively improve the teaching quality of the course"[2], this course focuses on the new requirements of teaching for the development of intelligent media, focuses on the transformation and innovation exploration combined with the industry. On the one hand, it reflects problem awareness, on the other hand, it provides effective strategic solutions through the analysis of representative new cases, guiding students through the transformation towards the requirements of intelligent media on multiple levels of concept and competence.

#### 1. Optimize "media practitioner" to "product manager" training

In order to adapt to the practical requirements of the intelligent media environment, this course breaks away from the traditional concept of focusing on "media practitioners" and builds a new teaching content system around the "product manager" by combining the diversified communication practices of the intelligent media era, following the current hot spots of "product manager" practice, digging into representative cases of intelligent media innovation practices, and guiding students to think about specific intelligent product design

approaches in relation to the needs of different communication subjects and characteristics of different communication platforms.

### *2. Reflect the expansion of professional applicability in the context of intelligent media*

This course not only needs to train traditional media practitioners, but also adapts to the needs of various emerging media platforms and various communication subjects for intelligent communication practices. Therefore, this course is designed to target students of network and new media, journalism, advertising and many other majors, aiming to help them master the concept of intelligent communication and corresponding strategies, so as to adapt to the more complex and diverse media practice requirements of various new media platforms.

### *3. To impart knowledge and cultivate practical ability at the same time*

This course is cutting-edge and closely follows the media practice in the era of intelligent media, so the cultivation of students' practical ability is the core concept. We strive to polish and optimize the course framework by combining cutting-edge practices in different fields in intelligent communication, and focus on enhancing students' diverse practical skills in intelligent communication as the starting point, reflecting the openness and inspiration of the course framework and content.

### *4. Case studies precede conceptual narratives and focus on the embodiment of professionalism*

Through the analysis of related and similar textbooks, it is found that the related textbooks focus more on the explanation of concepts and the construction of knowledge system and structure, but there are relatively few practical contents and ability training that fit the development of intelligent media industry. The core problem of this situation is that journalism and communication-related courses and textbooks are far from media practice and to a certain extent are not in line with the needs of practical training. In order to solve this problem, this course focuses on in-depth analysis of front-line and cutting-edge practical cases in the industry.

## V. OPTIMIZATION OF TEACHING METHODS OF INTELLIGENT MEDIA COURSES

### *1. Refinement of teaching concepts and methods*

This course will use several methods to support the teaching in addition to the basic knowledge content. First, case study, in different chapters of the teaching, selected representative intelligent media products case, in-depth anatomy, restore its planning, innovation process, through seminars to bring students into the product design scenario. Secondly, the interaction and guidance of industry mentors, we have reached an agreement with several product managers from MIGU Vision Technology Co, Seetatech Technology Co, and Deep Blue Technology, etc. We will bring three industry mentors into the teaching through online interaction and project assignments, and the industry mentors will issue "industry tasks" and guide students to complete them according to industry concepts and

standards. Again, in the flipped classroom, after the product design topic is selected by different groups, the students are encouraged to complete the vertical industry research, competitive product analysis, and demand analysis through the flipped classroom format, and to conduct specific discussions on the issues that arise. Finally, the results are evaluated by anonymously presenting the product design solutions and content of different groups through the WeChat public platform channel, which is targeted to multiple communities. This included the lecturer sending them to the teaching and research group, the student group of other institutions, and the industry mentor sending them to the designated work groups of three companies, where the professional teachers, student "users", and industry practitioners evaluated each work from different dimensions and gave feedback to the students. This will allow students to experience how to follow up on user and peer feedback and continue to push for product optimization after completing their smart media product design.

### *2. Teaching resources construction*

The basic course contents and materials are uploaded to teaching platforms such as Super Star to support classroom knowledge lectures and post-class assignments, etc. First, focus on the construction of intelligent media products case library, in the process of preliminary training and teaching, a large number of cases have been organized, through the construction of systematic and classified case library resources to provide basic materials for student seminars. Secondly, build the intelligent media products industry project resource library, in the teaching, will ask a number of industry instructors in the scope of intellectual property rights allowed, assist in providing the industry's cutting-edge project information, after finishing the construction of a resource library specifically for the use of course teaching. Once again, the intelligent media product library will be built. During the teaching process, students will continue to plan, create and polish different types of intelligent media product plans and products, which will have a certain scale after continuous accumulation and will be valuable materials for subsequent teaching; based on the classification and organization of this part of materials, the library of works will be built to provide reference for subsequent teaching.

### *3. Construction of teaching materials*

With the development of the teaching and research of intelligent communication, there are several "intelligent media" related textbooks in China, but the content mainly focuses on the background of intelligent communication, the form and role of intelligent media, etc., which is a general introduction to intelligent media, and there is no systematic and professional textbook for the innovation and design of intelligent media written according to the textbook style. On the other hand, there are many textbooks on "product manager" in China, but their ideas and contents are more inclined to management and operation, and strictly speaking, they do not belong to the discipline of journalism and communication. Therefore, under the intersection of "intelligent media + product manager", there is still a gap in the textbook designed specifically for intelligent media. This project plans to write China's first professional textbook that integrates the concept and content of "Intelligent

Media + Product Manager" to support the construction and development of the new profession of network and new media in our university.

#### 4. Assessment method

This course uses the traditional short answer and expository question format to assess students' mastery of course fundamentals, with a weighting of 30%. The usual online discussion accounts for 10%. Case studies account for 10%. At the same time, the method of production and evaluation of works is used to complete the assessment of the practical part of the course by creating a way close to the industry's operation and evaluation status. In the specific assessment, there are three innovations, one is the introduction of the industry mentor scoring mechanism, the industry mentor to assess part of the score, after the three mentor scores to do the average processing, accounting for 30%, and the industry mentor needs to give assessment comments, feedback to students. The second is to simulate the audience feedback evaluation mechanism, through the WeChat public platform to anonymously present the students' design solutions and products, the external student community to score and take the average, accounting for 10% of the weight. The third is the assessment of the social value of intelligent media products. The lecturer will check and score the ideological content, product intention and social value of each work, so as to guide students to clarify that intelligent media products have social attributes and avoid problems such as deviation of value concepts, accounting for 10%.

In summary, "the advent of the artificial intelligence era has brought new opportunities and challenges to media education, impacting and reconstructing the fundamental issues of curriculum, talent training and teaching practices of the media education system"[3]. Through two years of polishing, we have completed the refinement and optimization of the curriculum

concept, built a mature "intelligent Media + Product Manager" course content framework, the formation of "online and offline connection, classroom and industry through" teaching and evaluation methods. Based on the construction of intelligent media product case library, intelligent media product industry project resource library and intelligent media product works library, we accumulate and build rich online teaching resources. By writing the first professional textbook that integrates the concept and content of "intelligent media + product manager", we support the construction and development of the new profession of network and new media. In the actual teaching process, the teaching and training of this course will help students to open up the connection between multiple professional courses. Students will be guided to become innovative and complex talents who are equipped with cutting-edge concepts of disciplines, mastering product design skills, and capable of innovating and designing media products in the intelligent era.

#### REFERENCES

- [1] Xingdong Fang and Xiangming Zhong: Discerning the concept of intelligent media and intelligent communication - a paradigm shift in communication under the double dilemma of path dependence and technology myth, *Modern Publishing*. 2022(3):42.
- [2] Xiao Wei, Ye Zirong: Exploring the reform of teaching outcomes of "Digital Media Product Design" course in the age of intelligence, *Digital Communication World*. 2021(11):282.
- [3] Zeng L.H., Li P.: Research on media education reform in the era of artificial intelligence, *Media Watch*. 2021(9):69.

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