The Idea of Digital Intelligence Empowering the Creation of a Tutoring Platform for Primary and Secondary Schools in the Same City

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Abstract

Under the background of the "double reduction" policy, information asymmetry between supply and demand in the tutoring service industry in the same city for primary and secondary schools has led to social conflicts in the tutoring market that coexist with high and arbitrary fees and damage to the legitimate rights and interests of the service subjects (college students). In the digital era, integrating digital wisdom into the tutoring service market will help break the limitations of time and space and reduce communication barriers in tutoring services. Use big data, Internet and other technologies to create a digital smart platform for two-way selection of tutoring services to help both supply and demand parties choose and communicate directly online. This will not only help build an efficient, convenient and reasonably charged tutoring service market, but also promote tutoring. Digital transformation and development of the service industry.

Keywords

Digitalization; Smart Platform; Tutoring in the Same City; Tutoring Service.

1. Introduction

1.1. Research Background

With the rapid development of Internet technology, people’s lifestyles have undergone earth-shaking changes. Although the traditional face-to-face tutoring model has certain advantages, it also has problems such as time and space constraints and insufficient teacher resources. Online education platforms can provide a wealth of educational resources, break the limitations of time and space, and enable cross-regional communication and learning between teachers and students. At the same time, the online education platform is equipped with a professional teaching team to provide students with personalized teaching services to better meet students' learning needs.

1.2. Existing Problems and Significance

At this stage, we have found that many institutions provide outstanding training, uneven regional education, uneven training quality, piracy and infringement, etc. The traditional training service model needs to be improved urgently. In view of this, we are committed to promoting the construction of an efficient, convenient and reasonably charged tutoring service market, promoting the quality and efficiency of existing training services, meeting the urgent
need for high-quality tutoring services in primary and secondary education, and promoting the
digital transformation and development of the cultural and creative industry, from Both sides
of supply and demand are building a digital smart tutoring platform. On the one hand, the
tutoring platform is used to help children find tutors. Parents can ask multiple teachers about
their teaching status to understand whether their expertise is their child’s shortcomings, from
teaching methods, teaching atmosphere, and communication. Based on many aspects such as
personality, compare multiple teachers and finally find the tutor that suits your child; on the
other hand, with the help of tutors, students can master the learning content more deeply,
which will greatly improve their performance. Moreover, in the process of tutoring, tutors can
have a more comprehensive understanding of students’ learning level and learning psychology,
and provide targeted guidance according to individual situations, thereby better improving
students’ academic performance.

2. Literature Review

Feng Jinzhu (2019) used technologies such as system data flow analysis, overall data flow chart,
functional design, and database design to explore part-time jobs for college students. The
design and characteristics of the tutoring service platform must be based on the development
of society and the use of technology to realize educational informatization, also requires the
efforts of everyone. Lu Meixing (2016) pointed out the existing outstanding shortcomings of
traditional tutoring service platforms, advocated the application of Internet big data and cloud
technologies in the education industry, and described the Internet +Three development trends
of traditional tutoring service platforms under the background. Zhou Tong (2014) investigated
the phenomenon of part-time tutoring for students at Shaanxi Normal University and the
working status of the tutoring service center, and found that there are many problems in the
process of part-time tutoring for college students, put forward corresponding suggestions and
countermeasures for the problems existing in tutoring for college students, so as to establish a
green tutoring management organization as the main platform for tutoring industry
management.

In summary, through existing domestic and foreign research, a set of processing systems have
been formed using analysis methods such as system data flow analysis, overall data flow chart,
functional design, and database design, which provide methods and suggestions for regulating
the tutoring market. It provides effective reference and reference for this topic, but there is still
room for development. First, the problem of information asymmetry among bad tutoring
service market entities still exists, which not only reduces service efficiency but also increases
service costs, while harming the interests of service entities (college students) and parents;
second, under the "double reduction" policy The structural contradiction between supply and
demand in the primary and secondary school family service market is still obvious.

3. Construction of a Digital Smart Platform for Tutoring Services in the
   Same City for Primary and Secondary Schools

3.1. Establish an Open and Transparent Resource Database

Currently, as users attach great importance to reliable and accessible digital resources,
establishing an open and transparent resource database is of great significance to the
subsequent construction of this platform.

(1) Establish multiple sharing data methods to meet the needs of different users. In order to
achieve data diversification, this platform will adopt various methods such as data sharing
platform and API, and clarify the data citation specifications.
(2) strengthens data security protection and improves data security. On the basis of strict network monitoring, this platform will adopt secondary encryption measures, access control and other means to ensure that data is not maliciously used or leaked.

3.2. Provide Excellent Technical Support

Technical support has a clear impetus for improving the operating efficiency of the platform and is an important cornerstone of the digital construction of the platform. In order to improve the efficiency of technical services, this platform will promote the establishment of a rapid response mechanism and supporting knowledge base to provide customers with fast and accurate tutoring services, and provide personalized service plans according to the needs and problems of different users; in order to improve the flexibility of technical services, this platform will provide users with multi-channel service methods, allowing users to choose the most appropriate service method according to their own needs.

3.3. Adopt a Reasonable Business Model

For the rationalization of business models, we can start from two aspects: the determination of target markets and users and the selection of market strategies. Determine target market and user needs. Before designing and implementing the business model, this platform will provide personalized services based on users' respective pain points and difficulties to fully meet user needs. Choose an appropriate marketing strategy. Through differentiation strategies and high-quality service levels, we can form our own unique advantages and develop better.

3.4. Provide Safe and Effective After-sales Protection

Providing safe and effective after-sales guarantee plays an extremely important strategic position in the current digital platform construction process.

(1) Establish a complete after-sales service system. This platform has specialized positions to engage in specialized after-sales business to ensure the timeliness and standardization of after-sales services and fully protect the legitimate rights and interests of users.

(2) Establish a customer feedback mechanism. This platform will actively listen to customer feedback and suggestions to improve customer satisfaction.

4. Feasibility of a Digital Smart Platform for Tutoring Services in the Same City for Primary and Secondary Schools

4.1. Market Demand Analysis

(1) Current market demand

The current tutoring market has become saturated, but the services provided by most tutoring agencies or individuals cannot fully meet the needs of parents and students. In terms of market demand, parents are more inclined to look for professional, efficient and personalized tutoring services. As providers of tutoring services, college students have a solid subject foundation and flexible teaching methods, which can better meet the needs of the market. At the same time, with the rise of online education, more and more parents and students hope to find suitable tutors through online platforms.

(2) Market size analysis

The market size of tutoring service platforms for primary and secondary schools in the same city is huge, mainly due to the large number of tutors for college students and the relatively low tutoring fees. As the online education market expands, the market size is expected to continue to grow. According to market research data, it is expected that by 2025, the scale of China's online education market will reach 7000 billion, of which K12 accounts for approximately 20%, the market size will reach 1400 billion.
4.2. Business Model Analysis

(1) Source of income
The income sources of the tutoring service platform for primary and secondary schools in the same city mainly include two aspects: first, the entry fee of college student tutors; second, the course fees of parents. The platform can charge a certain entry fee from college student tutors, and can also charge a certain course fee between parents and students. In addition, the platform can also generate revenue through advertising and other methods.

(2) Cost structure
The cost of the platform mainly includes the following aspects: first, technical costs, including platform development, maintenance and upgrade costs; second, labor costs, including employee wages, benefits, etc.; third, promotion costs, including advertising, event planning, and ticketing fees. In terms of cost reduction, platforms can reduce costs by optimizing technical architecture, improving work efficiency, and rationally planning promotion strategies. Compared with traditional tutoring agencies, intra-city tutoring service platforms do not require a large number of physical stores and employees, and can significantly reduce operating costs.

4.3. Technical Feasibility Analysis

(1) Development technology: This platform can adopt the current mainstream front-end technology (such as React, Vue, etc.) and back-end technologies (such as Node.js, etc.) to realize data storage and management. At the same time, combined with database technology (such as Python).

(2) Server deployment: You can choose a cloud service provider (such as AWS, Alibaba Cloud, etc.) for server deployment to achieve high availability, high scalability and high security.

(3) Mobile Adaptation: In order to meet the needs of different users, the platform should support mobile access. This can be achieved through responsive design or developing a standalone mobile application.

(4) Security: The platform must have a complete security mechanism, including data encryption, user privacy protection, and prevention of hacker attacks, etc. This can be achieved by using security protocols (such as HTTPS) and encryption algorithms (such as AES) and other means to improve platform security.

(5) User experience: The platform should have a good user experience, including simple and clear interface design, easy-to-operate functional design, etc. User experience can be continuously optimized through user feedback and testing.

4.4. Operation Model Analysis

The intra-city tutoring service platform for primary and secondary schools uses a combination of online and offline methods to provide students with a full range of tutoring services. In the online part, the service platform realizes the rapid matching of students' needs and the sharing of tutoring resources through self-developed systems; in the offline part, the service platform sets up physical stores or cooperative stores to provide face-to-face consultation and services to ensure the quality and quality of tutoring services. Effect. This efficient operating model can meet the needs of students and parents for fast and convenient tutoring services.

5. Conclusion and Discussion

We use personalized service concepts and digital information methods to break the limitations of tutoring time and space, implement strict total quality management, build team brand rules and regulations, make rational use of human and material resources in society, cooperate with universities, and improve the quality of college students. Social experience and enriched own
experience, improve customer service experience, and improve product quality. In the follow-up, we will analyze the user experience of using the platform and constantly modify and adjust the smart digital platform. We want to be a link between parents and college students, connect the tutoring market and resources, and give parents who want to find tutors for their children more choices, allowing college students who want to engage in tutoring work to have more opportunities to serve others while also realizing their own life goals and values.

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References