The Evaluation of College Students' Wechat Business Entrepreneurship Based on Fuzzy Comprehensive Evaluation

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Keywords: The fuzzy comprehensive evaluation model, College students' wechat business entrepreneurship, Assessment.

Abstract. As an important part in colleges and universities, college students' innovation and entrepreneurship exert important impact on jobs and business creation. Wechat business entrepreneurship is one of the simplest forms for college students. Since there are many variable factors, the important topic of the current ideological and political education theory research is how to effectively evaluate the effect of wechat business entrepreneurship in order to provide guidance for college students' wechat business entrepreneurship. This paper provides certain reference for the College Students' Wechat Business Entrepreneurship by discussing the application of fuzzy comprehensive evaluation model in the college students' wechat business entrepreneurship.

Introduction

In the boom period of the rapid expansion of online shopping, with the rapid development of the Internet and the popularization and application of computers, micro commerce emerges. Micro commerce is a social e-commerce mode. With the growth of WeChat users, more and more people are starting to do business on WeChat. In the era of mass entrepreneurship and innovation, college students' micro entrepreneurship has also developed rapidly. Micro business has low threshold, simple dissemination mode and easy operation. It is the best choice for the university students to earn “the first bucket of gold in life”.

An Analysis of the Present Situation of College Students' Wechat Business Entrepreneurship

Strength

Through the investigation of the micro business entrepreneurship of college students, 56.6% of the college students believe that the advantages of the micro business industry are a wide range of human resources, a large number of potential customers and fast propagation speed. 52.83% of the college students think that the cost is small, the operation is simple and the threshold is low; 35.85% of the college students think that the price of the micro business products is reasonable and easy to be accepted by the consumers. The business of the entity shop is tedious, needs to hire shop assistants and has high cost of store and manpower. This shows that business micro business has more advantages than business entities.

Weakness

Problems in the Source of Goods. The quality of products that purchased through a small business has always been our most concern, but most of the people engaged in the micro business do not fully guarantee the quality of the products. College students' wechat business entrepreneurship belongs to the first business. College students have less social experience, and the safety factor of purchase channel is low. The quality of the agency of the college students is difficult to be guaranteed.

In addition, for the time being, there is no supervision mechanism in the micro industry, and the sources of products are complex. The quality of products purchased abroad and domestic products cannot be guaranteed. However, most of the college students choose to start the business by their classmates, friends, or the agents in the vicinity of the school. So the source of the college students is
mainly from the agents at all levels, so many people lack enough understanding of the quality and function of the products they sell.

The Influence on College Students' Learning and Life. College Students’ micro entrepreneurship will have a greater negative impact on their learning and life. How to deal with the relationship between micro business and learning life is a very important issue for college students who are engaged in micro business. Doing micro business brings great pressure to college students' learning and psychology. The main performance is lack of study time, poor quality of study and great psychological pressure. The survey shows that the vast majority of consumers believe that college students' experience and ability to engage in micro business are inadequate, lack of credibility and poor quality. Such a tremendous pressure will seriously affect the physical and mental health of college students.

Model Establishment and Application
In order to strengthen the guidance of micro business entrepreneurship for college students, we must evaluate the effect of micro entrepreneurship. Fuzzy comprehensive evaluation is a more scientific and comprehensive multi factor evaluation method, which is more applicable to college students' micro business entrepreneurship. Therefore, on the basis of the fuzzy comprehensive evaluation model, it is a feasible and effective way to evaluate the effect of Ideological and political education in Colleges and universities. It can improve the accuracy and reliability of the evaluation results.

Model Overview
Fuzzy comprehensive evaluation method is a widely used method in fuzzy mathematics. A kind of problem is often encountered in the evaluation of a particular transaction. As the evaluation of the transaction is determined by many factors, it is necessary to evaluate each factor. On the basis of each factor, all factors should be considered and a comprehensive evaluation should be taken into account.

Fuzzy comprehensive evaluation is a very effective multi factor decision method to make a comprehensive evaluation of things affected by various factors. Its characteristic is that the result of evaluation is not absolutely affirmative or negative. It is represented by a fuzzy set.

Model Establishment

Set Up Factor Set U. Through the above analysis. We choose four factors to make up a set U. the four factors are “micro merchants' attitude towards product quality assurance”, “the purchasing power of college students”, “the consumer demand” and “he optimism of the future of College Students' micro business”, namely:

\[ U = \{ u_1, u_2, u_3, u_4 \} \]  
(1)

\( u_1 \): micro merchants' attitude towards product quality assurance
\( u_2 \): the purchasing power of college students
\( u_3 \): the consumer demand
\( u_4 \): the optimism of the future of College Students' micro business

Determines the Weight Set. According to the importance of each factor, the corresponding weight \( A_i (i=1,2,3, ..., n) \) is given, and the factor weight set (weight vector) is determined according to the Delphi method.

\[ A = (0.5,0.1,0.2,0.2) \]  
(2)

Set Up an Optional Set. An optional set is a set of judges that may make a variety of overall evaluation results that may be made by the judge, which is expressed in V, that is,

\[ V = \{ v_1, v_2, ..., v_n \} \]  
(3)

and VI represents a variety of possible results. The selected set of this study is:
V={excellent, good, general, poor}  

Fuzzy Comprehensive Evaluation Model. The judgment object is judged by factor \( I \) factor \( U_I \), and the degree of membership of the optional \( J \) element \( V_J \) is \( R_{ij} \), and the result of \( U_I \) evaluation by the \( I \) factor is

\[
R_I = \{r_{i1}, r_{i2}, \ldots, r_{im}\}, i=1, 2, \ldots, m
\]

A single factor judgment matrix is composed of 4 factors.

\[
R=(r_{ij}) = \begin{pmatrix}
    r_{11} & \cdots & r_{14} \\
    \vdots & \ddots & \vdots \\
    r_{41} & \cdots & r_{44}
\end{pmatrix}
\]

Fuzzy comprehensive evaluation is a comprehensive evaluation index \( B \), considering all the effects.

\[
B = A^* R = (a_1, a_2, a_3, a_4)^* \begin{pmatrix}
    r_{11} & \cdots & r_{14} \\
    \vdots & \ddots & \vdots \\
    r_{41} & \cdots & r_{44}
\end{pmatrix} = (b_1, b_2, b_3, b_4)
\]

The maximum membership degree method is used to judge the evaluation index.

**Model Application**

Bring the survey data into the model and get the four factors frequency allocation table.

**Table 1. Membership distribution table of four major factors.**

<table>
<thead>
<tr>
<th>( u_1 )</th>
<th>( u_2 )</th>
<th>( u_3 )</th>
<th>( u_4 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( v_1 )</td>
<td>0.1509</td>
<td>0.1321</td>
<td>0.4906</td>
</tr>
<tr>
<td>( v_2 )</td>
<td>0.1510</td>
<td>0.1510</td>
<td>0.2771</td>
</tr>
<tr>
<td>( v_3 )</td>
<td>0.5846</td>
<td>0.2642</td>
<td>0.2264</td>
</tr>
<tr>
<td>( v_4 )</td>
<td>0.4906</td>
<td>0.2830</td>
<td>0.0943</td>
</tr>
</tbody>
</table>

Therefore, the membership vector is:

\[
\vec{u}_1=(0.1509,0.1321,0.4906,0.2264)
\]

\[
\vec{u}_2=(0.1510,0.1510,0.2771,0.6928)
\]

\[
\vec{u}_3=(0.5846,0.2642,0.2264,0.4717)
\]

\[
\vec{u}_4=(0.4906,0.2830,0.0943,0.1321)
\]

Therefore, the membership vector of all factors in the whole set of factors constitutes a membership matrix. That is, the fuzzy matrix is:

\[
R= \begin{bmatrix}
    0.1509 & 0.1321 & 0.4906 & 0.2264 \\
    0.1510 & 0.1510 & 0.2771 & 0.6928 \\
    0.5846 & 0.2642 & 0.2264 & 0.4717 \\
    0.4906 & 0.2830 & 0.0943 & 0.1321
\end{bmatrix}
\]

According to the comprehensive evaluation concept of fuzzy set theory, if the membership degree vector \( R \) of the factors within the known factors and the weight vector \( E_I \) of the factor set, the comprehensive evaluation result (the comprehensive evaluation vector) is as follows:
That is:

\[
B = A \times R
\]

Have to:

\[
B = (0.3056, 0.1906, 0.3372, 0.3032)
\]

The results are normalized and processed:

\[
B = (0.2689, 0.1677, 0.2966, 0.2668)
\]

The result shows that the excellence degree of the micro quotient is 0.2689, the good degree is 0.1677, the general degree is 0.2966, and the poor degree is 0.2668.

According to the conclusion of fuzzy comprehensive evaluation and according to the principle of maximum membership, it is concluded that the comprehensive evaluation of micro businesses is general at present.

**Summary and Suggestions**

By establishing the mathematical model and processing the survey data, we can know that the evaluation of the micro business industry is general. It shows that the micro business industry has been intertwined from the advantages and disadvantages to the present. In order to avoid the unnecessary time and energy for the college students to lose in the process of entrepreneurship, the following suggestions are given.

**Good Faith Management, Rational Distribution of Learning and Entrepreneurial Time**

College students should strictly abide by laws and regulations, follow professional ethics, avoid false propaganda and exaggerate product effects. Do not seek huge profits. Do not seek small profits. To allocate the time of learning and managing micro businesses rationally, we must prioritize priorities, improve efficiency and put learning in the first place. If we do not delay our studies, we can allocate time appropriately for micro business. At the same time, in order to obtain maximum benefits, we must ensure product quality, integrity management, service in place, and adopt a variety of publicity methods to get good reputation.

**Entrepreneurs Must Fully Understand the Market, Dare to Innovate, Improve Marketing Models, and Strengthen Internal Management**

The micro business of college students can establish a customer database in order to understand the customer's needs. According to the degree of understanding of customers, we actively recommend to customers the goods that meet their needs and characteristics, and try to meet the individual needs of consumers. We should organize and manage our own business teams reasonably and rationally, and pay attention to product publicity work on campus network platform. At the same time, under the premise of maintaining our own advantages, we should break through ourselves and pursue excellence and innovation from the actual situation.

**Schools Should Provide Entrepreneurship Education So That Students Can Have Enough Knowledge**

Entrepreneurship education is not only a guarantee for training college students' social practice ability, but also provides corresponding entrepreneurial experience for college students. And micro entrepreneurship is to put entrepreneurship education into practice. It is no longer limited to theoretical teaching. From the practical point of view, the formation of a perfect entrepreneurial
practice system will greatly improve the feasibility of the micro business enterprise, fully meet the needs of the social development, and create a broader space for the development of the college students' micro business. At the same time, the school can open the course of micro business sales management and communication, so that college students can systematically study the skills of micro business, guide practice through theory, and take less detours.

References


