Research on the Development of Intelligent Computer Aided Small and Micro Enterprises to Enhance Endogenous Power

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Abstract. Under the condition of intelligence and info tech, the development of Small and Micro Enterprises (SME) is affected by both endogenous power and external environment. At present, some SME still have the prominent problem of low operating cost and efficiency. Based on this, this paper first analyzes the current situation of the growth of SME under the background of intelligence, then studies the promotion of the endogenous power of SME assisted by intelligence, and finally gives the strategy of the promotion of the endogenous power of SME assisted by intelligence.

Keywords: Intelligent Computer Aided, Endogenous Power, SME

1. Introduction

With the iterative progress and maturity of computer tech, it has been widely and deeply studied and popularized in many fields, especially in the auxiliary aspect of endogenous power promotion of Small and Micro Enterprises (SME). SME have relatively flexible operation mechanism and unique innovation ability, but in the current complex market competition environment, the survival and development space of SME is extremely difficult, mainly due to the small enterprise scale and low market share, which makes the competitiveness of enterprises poor [1]. Under the current conditions and background of intelligence and informatization, the development of SME is affected by both endogenous power and external environment. The long-term sustainable development of SME cannot do without the assistance and support of computer intelligence tech. Endogenous power is the internal cause and root of the derivative diffusion of SME, and is an important factor to promote the transformation and upgrading of SME.

As an important supporting force for social and economic development, SME not only drive social employment, promote people's income level, but also promote the transformation and upgrading of industrial economy. SME play an important role in the process of promoting economic internal circulation and social progress, but the lack of endogenous growth power seriously limits the further growth of SME. At the capital level, the driving role of capital investment in the growth of SME is constantly strengthened, but the current SME rely on capital investment excessively, and the efficiency of capital utilization is low. In the aspect of financing ability, the growth of SME has an increasingly urgent demand for management talents and core employees.

In addition, due to the high employee turnover rate of SME, their talent base is relatively weak. As the core element of the growth of SME, technological innovation has an important impact on their own
survival and development. At present, some SME still have obvious family style operation and management mode, which leads to the low objectivity, scientificty, operation cost and efficiency of their operation and management process. In terms of organizational structure, the structure of SME is not scientific and reasonable enough, and the management process is too complicated, which is not conducive to the talent cultivation mechanism, brand building and the improvement of market competitiveness.

In short, in the current market economy environment of fierce competition and the condition of intelligent Internet, on the one hand, SME are facing a more severe situation of survival and growth; on the other hand, they are also facing development opportunities under the condition of intelligence and info [2]. Giving full run to the function and value of intelligent and info-based network tech will help to enhance the scale driving force of production factors and build a new relative competitiveness of SME, promote SME to change the exogenous growth mode, enhance their endogenous growth power and transform to the endogenous growth mode. Therefore, it is of great practical value to carry out the research on the development of intelligent computer to assist the promotion of endogenous power of SME.

2. The growth status of SME under the background of intelligence

2.1. The function and connotation of SME

As the main force to absorb employment, although the number of SME is huge, due to the small scale, the ability of SME to resist the impact of economic fluctuations and industry competition is weak. Especially in the context of current anti globalization, economic friction between China and the United States, and the spread of new corona-virus, SME are facing more and more difficult market environment [3]. SME are not only subject to greater pressure and impact of the operating environment, but also their financing difficulties, lack of talent and management level have seriously restricted the growth of SME [4]. With small and micro businesses upgrading, the service industry has maintained rapid development in recent years. COVID-19 has spread throughout the country. Small and micro businesses have been greatly affected by the Internet, and have also greatly increased the demand for digital upgrading.

2.2. Current situation of SME under the background of intelligence

SME are limited by their relatively single business, management and marketing mode, so that their operation ability, especially the online operation level, still has great room for improvement. Secondly, the narrow financing channels of SME lead to the lack of sufficient financial support for the growth of enterprises [5]. In addition, the demand for digital and intelligent upgrading of SME in the current market environment has also been significantly released, and the scale of digital and intelligent upgrading service market of SME will still maintain a high growth in the future. In the future, the whole society and industry will produce more innovative service modes to better enhance endogenous power empowerment for SME. Figure 1 below shows the scale growth of SME' digital upgrading service industry and its future growth forecast.
2.3. Problems and challenges faced by SME
As the largest and most dynamic group in China, SME are also the most concentrated carrier of private capital. However, in the current market and economic situation, some SME are facing more severe production and operation problems, mainly in the rising cost of enterprises, brain drain, poor management level and marketing efficiency. SME get income from operating income [6]. After eliminating the financial, sales and management related operating costs, the profit margin performance is very embarrassing. In addition, the lack of market demand, financing difficulties and other phenomena further aggravate the difficulties and challenges faced by SME.

3. Promotion of endogenous power of SME assisted by intelligence

3.1. Acceleration of digital and intelligent transformation
SME seize the opportunity of digital transformation to improve quality and efficiency, which helps to activate their own endogenous power [7]. On the one hand, with the help of intelligent and digital tools, it can effectively alleviate the practical problems faced by SME, such as weak anti risk ability and low resource utilization; on the other hand, there is a huge room for improvement in the digital upgrading service market of SME. In addition, the digital and intelligent transformation of SME needs a certain amount of time and space, especially its intelligent transformation process will be affected by several factors as shown in Figure 2 below, which puts forward higher requirements for the intelligent transformation ability, intelligent talent reserve and intelligent transformation cost control ability of SME.

![Figure 1](image1.png)

**Figure 1.** Scale growth of digital upgrading service industry for SME

![Figure 2](image2.png)

**Figure 2.** Factors influencing the intelligent transformation of SME

3.2. Multi dimensional empowerment with intelligence
The practical difficulties faced by SME force them to accelerate the intelligent transformation, especially with the help of intelligent tech to assist SME to effectively integrate info, services, funds and other info and data resources, so that intelligent tech can provide more targeted services for SME,
and enable them in financing, enterprise marketing and enterprise risk control [8]. Secondly, with the help of intelligent tech, it can help SME to further strengthen the use of data to support business decisions. In addition, intelligent auxiliary tech does not change the business nature of SME, but improves their management and interaction mode, so that SME can more effectively coordinate and utilize internal and external resources, and enhance their own resilience [9]. For example, the distributed development platform of SME is built with the help of intelligent computers, which can realize the rapid response of SME to the front-end requirements, thus significantly reducing the cycle and cost of enterprise product and service development and iteration.

The layout of digital solutions in the business field of SME can further enhance the flexibility of their products and services, strengthen their own business model and business logic, and promote the improvement and improvement of their endogenous power while improving their own development ability.

4. Strategy of enhancing endogenous power of SME with the assistance of intelligence

4.1. Factors of releasing endogenous power of SME
The core elements of endogenous power of SME include high-quality talents, continuous innovation, leading core tech, outstanding management ability, enterprise culture with strong influence and inspiration, efficient info circulation mechanism and perfect internal incentive mechanism [10]. With the help of intelligent tech to assist SME to carry out R & D and innovation, drive their own development and achieve tech leadership. With the help of intelligent tech, SME can be promoted to have leading innovation driving force, build enterprise culture and incentive mechanism that can effectively mobilize employees' creative thinking and talents, and promote them to establish development advantages in the fierce competition space. SME can effectively enhance their core competitiveness only if they have a clear endogenous driving force to drive their own development and make efforts in the system, culture and talent construction.

4.2. Deepening the reform of enterprise system with the aid of intelligence
Under the background of intelligent and digital transformation, SME with the help of intelligent computer to carry out the innovation of labor, personnel and distribution system has important value for improving their own business system and strengthening their ability in several aspects as shown in Figure 3 below. First of all, with the help of the Internet, we should improve our own governance mechanism and stimulate the endogenous power of reform. Secondly, we should establish systematic thinking, carry out innovation, and establish a scientific reform evaluation mechanism to promote the implementation of innovation strategies.

![Figure 3](image)

**Figure 3.** Aspects of small and micro enterprise system reform

In addition, with the help of info tools to establish a market-oriented operation mechanism, improve the level of governance. Finally, by creating a cultural atmosphere to stimulate interior decoration power, update the concept of employees, and promote the innovation of corporate culture.

5. Conclusion
In summary, with the assistance of intelligent tech, SME can enhance the scale driving force of production factors, build up new relative competitiveness, promote SME to change the exogenous
growth mode, enhance their endogenous growth power, and transform to the endogenous growth mode. This paper analyzes the problems and challenges faced by SME through the research on the growth status of SME under the background of intelligence. Through the analysis of the promotion of the endogenous power of SME assisted by intelligence, this paper studies the multi-dimensional empowerment provided by intelligence, and finally gives the strategy of the promotion of the endogenous power of SME assisted by intelligence.

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