Research on the training system of enterprise employees' digital skills enhancement

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Abstract. This study aims to explore the difficulties faced by the training system of employees' digital skills enhancement and design the training course system. With the rapid development of digital technology, enterprises are faced with increasing digital demand, and the enhancement of employees' digital skills has become a key factor in maintaining competitive advantage and improving work efficiency. The curriculum system designed in this paper covers the use of digital tools, network security, data analysis, programming technology and other aspects.

The results show that through this training system, employees have significantly improved their digital skills and are better able to cope with the increasingly complex digital work environment. In addition, according to the characteristics and needs of enterprises, the training content can be appropriately adjusted and supplemented to better meet the personalized learning needs of employees.

Keywords: staff digital skills improvement, training system, digital tools, network security, data analysis, programming technology.

1. Introduction

The high-quality development of China's economy urgently needs the comprehensive promotion and use of data technology skills as support, and digital economy has become one of the important engines of China's economic growth. In October 2021, the Cyberspace Affairs Commission of the CPC Central Committee issued the Program of Action to Improve the Digital Literacy and Skills of the whole People, making arrangements for improving the digital literacy and skills of the whole people, proposing to basically build a digital talent country by 2035, and achieve a higher level of digital literacy and skills of the whole people. Digital technology is the hard support for the development of digital economy, and the national digital literacy is the soil for the growth of digital economy. Only by constantly improving the national digital literacy and skills can we consolidate the social foundation for the development of digital economy in our country. In clarifying the central task of the Communist Party of China, the report of the 20th National Congress of the Communist Party of China proposed "to comprehensively promote the great rejuvenation of the Chinese nation with Chinese-style modernization", and "digital technology is the pioneer of the world's scientific and technological revolution and industrial transformation", and digital reform is the key variable to promote Chinese-style modernization [1].

Digital literacy and skills are the collection of a series of qualities and abilities that people should have in their life, study and work, such as digital acquisition, production, use, interaction and sharing. In recent years, the development of global digital talents has accelerated significantly, and there has been a significant increase in major cities around the world, and digital talents are also accelerating the penetration of the whole industry, and the proportion of digital talents in non-ICT traditional industries is higher. In traditional industries, manufacturing, finance, consumer goods, and corporate services are the industries with the most digital talents [2]. With the continuous advancement of the digital transformation of economy and society, digital literacy and skills of all people have increasingly become an important way to enhance a country's comprehensive national strength.

Since 2017, we have systematically tracked the development of digital talents in China every year. From the perspective of industry proportion, less than 50% of China's digital talents are distributed in the Internet, information and communication ICT basic industries or digital industries, and more than half of the digital talents are in traditional industries. Over the past three years, we have begun to study digital talent and skills around the world, and we have found that the digitization of global industries is deepening. According to the newly released Annual Report on Global Digital Talent Development (2022), the proportion of digital talent in software and IT services in Chinese cities has increased significantly in the past two years. Among the representative skills in Chinese cities, the proportion of digital skills is very high. Especially in the past two years, the development of China's digital industry and the digital transformation of traditional industries have accelerated, so that the proportion of digital skills in the representative skills of Chinese cities has continued to increase. The explosion of technologies such as the Internet of Things, cloud computing, and artificial intelligence has brought about a boom in digital careers.

2. Problems faced by employees' digital skills upgrading training

2.1 Lack of scientific and reasonable planning for staff training.

On the one hand, more and more enterprise managers realize that the talents possessed by the enterprise are the most precious resources of the company, and they will implement the staff training at a certain strategic height. However, it can be seen that employees of an enterprise have a high degree of autonomy and creativity, and their training cannot be "training for the sake of training". Instead, they should combine the business development strategy of the enterprise, conduct in-depth investigation on training needs, and formulate a long-term training strategy, such as building a learning organization and cultivating a learning atmosphere of the company through training, so as to maintain the creativity of the enterprise [3]. On the basis of strategic attention, the training will be included in the management focus of the enterprise for a long time, and the tactical attention will be paid to organize training in a planned way. On the other hand. Training effect evaluation is a very important step in training work, but it is ignored by most enterprises. Training should not focus only on the form, but not on the content, especially not on the results. Good feedback after the training can see the advantages and disadvantages of the training, so as to improve the next time, through continuous feedback and improvement, to form a positive cycle to ensure the continuous improvement of the training mechanism.

2.2 The curriculum system of staff training is not sound enough.

First of all, in the training of employees, in addition to the knowledge training of the existing business, more should be introduced to the latest and most cutting-edge business-related knowledge training. Therefore, the training of external experts should occupy the bulk of the training, rather than casually training some knowledge, which can not stimulate the interest of employees, but also waste resources. Secondly, employees of the enterprise have high autonomy, high creativity and high education, so the form of training should not be rigid. It is best to set up more roundtable discussions and thematic discussion meetings to give full play to the enthusiasm and vitality of every employee, and maximize the training effect by stimulating employees' thinking and collision sparks of thinking [4]. Finally, the curriculum system is a core link in the construction process of the core personnel training system. In the training process, enterprises do not develop the enterprise-specific personalized curriculum system according to the enterprise management and development strategy, and the lack of pertinity is a difficult problem in the digital skills training of enterprise employees.

2.3 Training is often implemented for the purpose of formality, ignoring the conversion rate of results.

Low conversion rate of results after training leads to waste of resources. Employees of enterprises improve their knowledge and skills in a short period of time, but rarely apply them to actual jobs. In other words, the conversion rate of results after training and development is very low, which is a fatal blow to enterprises [5]. The inability to translate employee knowledge into technological progress. It is difficult for enterprises to maintain a high degree of competitiveness, and finally can only decline.

2.4 The training staff is forced to participate in the training by the company's requirements, and the enthusiasm and autonomy are not high.

The reason for the low enthusiasm is likely to be as mentioned above, the enterprise will training in the form of the process, and did not deeply study the needs of employees, which is the underlying reason. It is precisely because of the lack of research on the needs of employees, the design of training content, courses, forms are floating on the surface, and eventually lead to employees to participate in the training enthusiasm is not high, resulting in unsatisfactory training results.

3. Countermeasures and suggestions for the construction of enterprise employees' digital skills training system

3.1 Based on the company's strategy and operation management, With the purpose of building a learning organization, a training system for all employees shall be established and a long-term mechanism attaching importance to education and training shall be established.

First of all, the enterprise will integrate the staff training into the strategic planning, increase the investment in the staff training, and through this way, the training will be lasting and effective in all aspects of the enterprise operation and development. Secondly, regular training should be carried out, long-term training programs should be formulated, training should be formalized, periodic, systematic, and learning organizations should be built, and corporate philosophy and culture should be internalized in the thoughts of every employee and externalized in actions, so as to enhance the comprehensive competitiveness of enterprises in the market [6].

3.2 People-oriented, based on the needs of employees, in-depth analysis of training needs, personalized training, training implementation to specific individuals.

Firstly, the training needs of employees in different departments and positions are analyzed. Secondly, we should optimize the training content of employees and develop targeted and systematic course systems for employees of different professions and positions in order to build core competitiveness and leading competitiveness. Finally, we should optimize the training forms, make the training forms more diversified, and increase the enthusiasm of employees to participate in training.

3.3 Establish effective training feedback mechanism and incentive mechanism.

First of all, establish the concept of "no training feedback, it is better not to train", each training must have a training feedback form, summarize each training, optimize the next training, so as to ensure the effectiveness of training. Secondly, it should focus on the evaluation of the training effect of employees by means of additional examinations or small discussions, and pay special attention to the improvement of the work performance and ability of the training employees. Training can be included in their entire career planning to ensure that the training results are transformed into innovative results.

4. Enterprise staff digital skills training system construction plan

4.1 Training course design

Digital skills training of enterprise employees can be divided into basic skills training, intermediate skills training and advanced skills training from the level, and can be divided into expert teaching, seminars, internal sharing meetings, personalized training and so on. The following is the training course system design, different companies can choose different courses according to the needs of the company's business

Table 1.

Course category	Course name	course content
Introduction to digital tools	The use of cloud storage	Baidu Netdisk、 Google Drive、 OneDrive
	Network notepad, mind map	Youdao Yunji、 Xmind wait for
	Video conference tool	Classin，Tencent conference、 Zoom wait for
Introduction to data literacy	Basic data visualization tools	Such as excel charts
	Advanced data visualization tools	Tableau Or Power BI data analysis
Network foundation	network security	Password management, identify the network of fish and other common network attacks.
	Network tool use	The use and importance of vpn
Advanced digital tools	Enterprise resource planning system	ERP
	Customer relationship management tools	CRM
programming language	Basic programming	Simple programming concepts
	Advanced programming	Python Or JavaScript The foundation of
	Data interaction	Using api for data interaction
data analysis	Data analysis tool	Pycharm
	Data cleaning and preprocessing technology	Python language
	Fundamentals of machine learning	scikit-lear data package

4.2 Design of training methods

Due to various reasons, the current training method of the enterprise is relatively backward, the training form is single, most of the training has become formalized, and basically held in the enterprise workshop or conference room, resulting in unsatisfactory training results, combined with the previous training needs survey, many employees have said that they can go out of the enterprise, the employee training system should be diversified, including: Class presentation, case analysis, mentoring, external training organization, other enterprises visit training, training organized by industry associations, related training organized by the government.

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