Advantages Analysis on Small Enterprises Cluster Based on Web

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Abstract SMEs (small-medium enterprises) can not be ignored in the role of the development of China's national economy, "cluster" is an important characters in the exist of SMEs. Today the study fo SMEs are majored in the geographical space, whereas there are less research on new businesses exist space which based on web. This paper redefine the concept of small enterprises from the network sense and compared to the enterprises cluster which based on geographical space, make a preliminary study of the comparative advantages of SMEs cluster which based on the significance of network.

Key words Small-Medium Enterprises Cluster, Network

1 Introduction

A lot of facts and research results prove that the small enterprises in the same industry or related industries that based on the specialized division of labor and cooperation through the centralized location on or near can often produce more effective innovation, and get the competitive advantages compared to non-group companies. Whereas the establishment of enterprise clusters which based on web have a more prominent advantages compared to the general sense of the small business.

2 Put forward the concept of small enterprises which based on web

Along with the rapid development of science and technology, in the era of knowledge economy, based on more complete knowledge, information and networking tools, the relationship, transactions and channels of supply and demand will be changes on the commodity market. Digital Network make relation with produce, supply and marketing directly. The owners of products and services can make direct link with buyers, and deliver home by the manufacturer. Well, the agency in the economic transactions, including agents, economic, wholesalers, some retailers, middle-level management of enterprises, even the manager of the supermarket whose functions will be gradually decline because of the rapid development of the network. In this context, the drawbacks of clusters of small enterprises will increasingly exposed which based on the geographical space, therefore, the enterprise clusters which established on network will moving toward the stage of history in the nature of things.

There are many researches about Enterprise Cluster, many scholars’ ideas about what is enterprise clusters are not the same. According to the definition of Marshall, he considered professionals, specialized machinery, raw materials provided, transport facilitation and technical proliferation etc, such "advanced economy" create the "external economy", which shape the small enterprise clusters. Porter said: enterprises geographically close to each other can easily build coordination and information mechanisms, which enable enterprises to reduce the cost of production and form a business cluster. Webber clarify that whether the enterprises select to close each other depends on the comparison between benefits and cost of cluster, discussing the factors of industry gathering and quantifying industry gathering formation’s rules. Qiu Boxing thinks that small enterprises cluster is a system approach to overcome the failures of market and the failures of the internal organization.

Members of the scholars’ research results from the above we can see that they observe the problem from different angles lead to the conclusions reached by them different, but there is one point same that is they are all from the perspective of geographical space to research enterprise clusters. With the popularization of computer and the wider use of network technology, Web-based small enterprise clusters is increasingly becoming the focus of attention, but research in this area less. The author inherited the basis of the results of previous studies, and make a preliminary discussion about the
Web-based small enterprise cluster, thus summed up Web-based definition of small enterprise cluster.

The so-called network-based cluster is a number of small enterprises with their respective expertise, which based on information technology (especially computer network technology), and establishing a mutual cooperation, interdependence, shared risk’s Economic Community under the lease conditions. Clearly, the connotation of Web-based small enterprises cluster include the following contents:

(1) Within small enterprise clusters, every enterprise have their own core expertise and the corresponding function.
(2) Through information technology (network) to transfer knowledge and communicate information between small enterprises.
(3) The small businesses are mutual cooperation community interest.
(4) The small enterprises in space is not continuous, showing discrete state and dispersing in different places, each other link together through built efficient information network.
(5) Small enterprises’ mutual cooperative relations should reply on the lease to safeguard, if there is no lease to guarantee, the default costs are too high.

3 Compare Web-based small enterprises cluster with the general concept of the relatively small enterprise cluster

Web-based small enterprises cluster developed on the basis of the general group of small enterprises, among them there are not only common, and there is a clear difference. Their common mainly embodied in: both general and small enterprise cluster and network-based small enterprise cluster, the various small enterprises within clusters are independent but have cooperative relations with each other; they have their own core technologies and the corresponding function that contains a specialized division of labor and cooperation phenomenon between them.

The differences between the two reflected in the following points:
(1) Transfer knowledge and communicate information in different ways, General sense of the small enterprise cluster, through the mail or direct contact (document) to transfer knowledge and communicate the information, but the web-based group of small enterprises through the network.
(2) The state of agglomeration different: The general sense of small enterprise cluster is a concentration in geographic space, which is an adaptive ability to adjust between enterprises in a lower communication technology circumstances, but the web-based small enterprise cluster is not request the concentration in geographical space. They transfer knowledge and communicate information rapidly through the network, so the length of space distances little effect on them.
(3) Internal relations among enterprises in different ways: The general sense of small enterprise cluster, the formation of enterprises’ long-term relationship is not request the lease to maintain, but they request trust and commitment which is the human factor to maintain, and have its unique competitive advantages when in the face of foreign competitors. But the network-based cluster of small enterprises, because of the far geographical location between each other, and the high cost of network construction, If there is no lease to guarantee, Once a corporate default, the cost of the loss is high, therefore, the relationship between enterprises need the lease to maintain.

4 The network of small enterprise cluster's comparative advantage

4.1 The superiority of information’s transfer

The 21st century is the information, knowledge and economy’s society. Knowledge and information has become an important resource. Most practice has been and will continue to prove that those who have advanced knowledge and first-hand information, who will be the wave of the market economy in the champion. The web-based small enterprises cluster has the rapid communication ways. Whether within clusters between enterprises or within a small enterprise, the transmission of knowledge and the exchange of information are quick.

For an enterprise, the network makes the enterprise’s staff to share information anytime, anywhere, to the re-use of resources. Multimedia electronic document save the cost of transportation and printing,
and to update the contents of the documents more convenient and faster. The network provide communication, co-ordination and co-operation platform for the internal staff, improving staff’s overall efficiency.

For various small enterprises, through control the access, allow legitimate users to access remote enterprise’s internal network resources and get the purpose of sharing the resource between enterprises. As the business is on the rise, businesses need to work together with other enterprises, or provide customer service timely to expand the performance of enterprises, improve the company's efficiency. Network in these areas have played an important role.

Procurement as an example, under normal circumstances, the company’s processes of procurement of raw materials as follows: Company engineers responsible for developing the specifications for the raw materials, production personnel inform the procurement staff to buy, and any procurement problem should be informed production staff by procurement personnel, production staff inform engineers to find solutions. The trouble is once more a part of the procurement in question, often have to contact the leadership to solve the problem, it is time-consuming and laborious. However, due to the application of network technology, the company engineers can transmit the specifications to the supply of raw materials directly, or publish the information of raw materials in the internal network, the supplier can capture the related information by themselves, the supplier may also reflect any procurement problem to the engineers directly, then speed up the raw materials’ procurement process.

4.2 The advantages of technological innovation

The cluster’s the greatest feature is every enterprise in the cluster has its own core technology compared with the non-cluster. Because of the expertise, the organization can remove their non-expertise and the corresponding function, with the result that small-scale organizations. This makes enterprises more flexibility, and can often seize the opportunity which can easily vanish, and give full play to the advantages of enterprises. This cluster is also an important manifestation of competitive advantages.

But it is precisely because of the expertise which causes fatal shortcomings of the enterprise in the clusters, which is not conducive to the overall product innovation. The enterprises in the cluster carry out technological transformation respectively around their own expertise, but sometimes their respective innovation combined do not necessarily compatible. Like a computer assembly, and all components are used the world's most advanced, but assemble computer is not necessarily running high efficiency. This request every enterprise in the cluster to carry collective innovation through mutual cooperation, the way is technical personnel contacts each other often, and makes mutual consultation. The build of web-based small enterprise cluster make the network become a cooperation platform timely. In this platform, the technical experts in various enterprises make their own study results put together to do a mock operation, if success, carry the improvement. Thus, all experts can make consultation that should not meet each other, saving them the time and cost of contacts.

4.3 The advantages of transaction costs

The general sense of transactions between enterprises in small enterprise cluster exist a problem which is whether the transaction costs are minimum. An enterprise want to buy other enterprises’ products, because the production of the product may be not only one business, their prices may be inconsistencies, and if this enterprise want to know which enterprise’s products' price is the lowest, it must search the market information, but information search needs a certain amount of time and money. At certain times, information search cost is very high. Various enterprises in the Web-based Enterprise Cluster regarded their own product information posted on the Web, so the people who demand it can know whose price is the lowest easily. General sense of transactions of the small enterprises cluster is the two sides meet personally to sign purchase and sales contracts, but the enterprises in the web-based enterprise clusters can meet each other on the net and reach a consensus, which avoid direct contact with the staff and reduce the transaction costs.

According to China’s scholar Qiu Baoxing’s research, the main direction of the evolution of small enterprises cluster is virtual enterprise. I believe that Web-based small enterprise cluster is the realize
form of virtual enterprise organizations. In the future development of economics, this will become the main form of small enterprise clusters.

**Reference**


