# **Analysis of Multifunctional Electronic Information Card Competition Situation based on Porter Five-Force Model**

## -- Take an Electronic Information Brand Enterprise as an Example

Tao Zhang, Haichen Ding, Qi Hao and Xiaojing Liu Shandong University of Science and Technology, Jinan, Shandong 250000, China

#### **Abstract**

With the change of China's epidemic prevention and control policies, residents have gradually become the first person responsible for their own health protection. The electronic information industry with a high degree of information and intelligence also has a broad market development space in epidemic prevention technology products.

### **Keywords**

Porter Five Force Model; Industry Analysis; Electronic Information Card.

## 1. Analysis of the Supplier's Bargaining Power

The multi-functional electronic information brand is based on R Electronic information Technology Co., LTD., which has carried out extensive research, on two different versions, each selected several product suppliers with high-cost performance, and analyzed the negotiation of each supplier.

For the ABS plastic used in the ordinary version of multi-functional electronic information brand, by comparing Dezhou Jicai Chemical Products Co., Ltd., Dongguan Haiyue Plasticizing Co., Ltd., the average market price is about 1.6 yuan per gram., with a large number of suppliers, it is very easy to obtain materials, and the suppliers' bargaining power is weak.

High-end version of multi-functional electronic information brand using magnesium lithium alloy, through comparing cheng metal materials products co., LTD., fetai metal products co., LTD., shen metal materials co., LTD., finally calculate the market price in about 45 yuan per gram, due to the upstream supply chain, material access is relatively easy, supplier bargaining power is weak.

Therefore, in the early stage of the company's operation, the bargaining power of the multifunctional electronic information brand OEM factory is weak.

However, this does not mean that the company will rely on the equipment of R Electronic Information Technology Co., Ltd. for a long time. After the multi-functional electronic information card matures,

On the basis of the original capital and capital accumulation, the company will establish a modern equipment processing factory in line with the industry standards, high quality and high standards, and gradually realize the independence of the company's independent production.

To realize the professional and efficient performance of the intelligent induction card.

## 2. Analysis of the Bargaining Power of the Buyers

At present, the continuous spread of the epidemic and the requirements of regular epidemic prevention make the product have a wide range of buyers, including managers of personnel in major government and enterprise units, and managers of personnel in the service industry.

Demand is prosperous, with few channels, and there are very few similar products on the market.

Because the multi-functional electronic information brand products have patent technical barriers, the number of technology enterprises in the domestic market with the ability of intelligent induction information brand in their own production is not large, buyers choose to acquire intelligent induction information brand from a few technology enterprises, do not have bargaining power;

At the same time, the domestic economy's effective prevention and control of the epidemic and the resumption of work and production provide opportunities for domestic enterprises' scientific and technological innovation. As far as foreign technology companies are concerned, due to the continued spread of the epidemic, it is even more difficult for everyone to develop products. Therefore, the international and domestic market of intelligent induction information brand has a broad prospect and the demand is large. Although there are few companies providing intelligent induction information brand products, the competition similar to the electronic information brand and table card sales is fierce, so the buyers have a certain bargaining power.

The main service objects of the company's products are the service groups of major service halls, enterprises and public institutions, and public places, as well as the workers in takeout, express delivery, drivers and other industries. Cost performance is an important factor to consider when buying a product.

In the early stage of enterprise development, the enterprise mainly aims to increase the market share. In the early stage, the production cost of raw materials and spare parts is relatively low. In the later stage, the enterprise has a large space in product pricing, and the price will be based on the average price level.

Therefore, although the buyer has a certain bargaining power, our company can still make the product price obey the overall strategy of the company, and control the price within a lower range on the premise that the product performance is better than similar products in the market.

#### 3. Threat of Potential New Entrants

The number of enterprises providing such regular epidemic prevention technology products is small, and the demand will surge in the future, and the profit level and space are large. Moreover, the government policies provide policy support and fund support for the research and development work of the domestic science and technology industry.

In order to make our company's products occupies a leading position in the market, we should keep up with the pace of the normalized epidemic prevention disease resistance, make good use of its own patent industry barriers, make full use of the advantages of scientific research and social relations, to the surrounding government hall, bus station and Banks and so on public places to provide our new products. By constantly improving the quality of products to gain reputation, and further consolidate the barriers on the basis of the market.

#### 4. The Threat of the Alternatives

At present, there are few domestic science and technology companies for public daily epidemic prevention. For example, Nanjing New Power, which mainly uses electronic table cards, does not own the patented technology of electronic information cards for epidemic prevention, and cannot directly produce electronic information table cards for epidemic prevention.

And the company's multi-functional electronic information card has a unique functional advantage:

- 1. The big data prediction function of the product, through the use of P2P protocol, realizes the wireless transmission and acceptance function of communication information, so as to timely understand the incidence of the staff in the scene of high flow and high intensity, summarize information, establish models, monitor the influenza epidemic in real time, and estimate the future development of the epidemic.
- 2. The shape of the product can be designed and customized, which enables the information card to play different roles in different scenes. According to consumer needs, can design embedded, hanging, flat, wear and other styles of information card. At the same time, consumers can choose one-to-one service, communicate with designers, and customize the information card most in line with the actual situation of consumers and enterprise characteristics, so that the multi-functional electronic information card can not only improve the service efficiency, strengthen the implementation of the normal epidemic prevention and control work, but also become the service highlight of the service hall and staff.
- 3. Infrared automatic temperature measurement, different from the manual input of body temperature of ordinary health information code, body temperature data is more real and reliable.

While ensuring the quality, the company constantly update, and strive to establish a good corporate image, so as to occupy a certain degree of market share. In this regard, the company will cooperate with more talents to explore, use the resource advantages of universities, as well as professional technical team, constantly carry out technology research and development, develop a comprehensive marketing strategy, expand sales channels, to ensure the long-term healthy development of the company.

## 5. Existing Competitor Analysis in the Industry

#### Main competitors:

Nanjing New power, its company now has a production plant multi-functional products exhibition hall. Has a software and hardware product design and development team, and equipped with assembly line production equipment. There are a small number of professionals, the company'the main business scope is mechanical and electrical equipment production, sales, technical services, information system integration, Internet of Things technology services, computer software and hardware research and development.

Guangzhou Aorong Electronic Technology Co., Ltd., the company is committed to the research of the conference room desktop pattern, the main development direction is intelligent digital conference and terminal series products with other audio and video conference equipment combined. Can produce office electronic information table card, no production of epidemic prevention nature of products. There are fewer professionals, only simple training for company employees. Mainly engaged in professional research and development, design, production, sales of digital conference system equipment professional manufacturers, has been focusing on the field of intelligent digital conference system.

Most of the existing competitors in the industry do not dig deep into the concept of "product + epidemic prevention normalization", and the market competitors compete less strongly. But do not rule out the possibility of its late entry into the market.

#### References

- [1] Wu Tongyao. Research on the mechanism and effect of venture capital to promote innovation in high-tech enterprises [D]. Donghua University, 2022.
- [2] Zhang Yifan, Yu Xiaoyu. Exploring the mechanism of venture capital to promote the growth of high-tech enterprises -- Based on the case of D Laser Company [J]. Prices in China, 2022, (06): 65-67.

[3] Yang Yuan. Research on the influence of venture capital on the innovation performance of high-tech enterprises [D]. Southwestern University, 2019.