

What We Mean by Global Niche Top



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Nitto Denko has declared the Global Niche Top strategy as its business concept. The idea behind it is to select growth markets, identify niche fields within these markets, and use the distinctive technologies of the Nitto Denko Group to target the top share in the market.

Achieving the top share in the market has the following effects:

1. The latest information from the market flows in
2. Customers come to us first for consultation, allowing us to successively develop new products.
3. We are among the first to apprehend market trends, allowing timely investment.

Supporting Global Niche Top Strategy

In the following, I will be talking about the three policies that support our Global Niche Top strategy: Sanshin Activities, Technology-oriented Company, and Market-driven Company.

1 Sanshin Activities

The Sanshin (Japanese for Three New) Activities strategy is now an established part of our corporate culture at Nitto Denko and has resulted in the attitude of "seeing change as opportunity" becoming built into our corporate genome.

Figure 1 shows business expansion through the

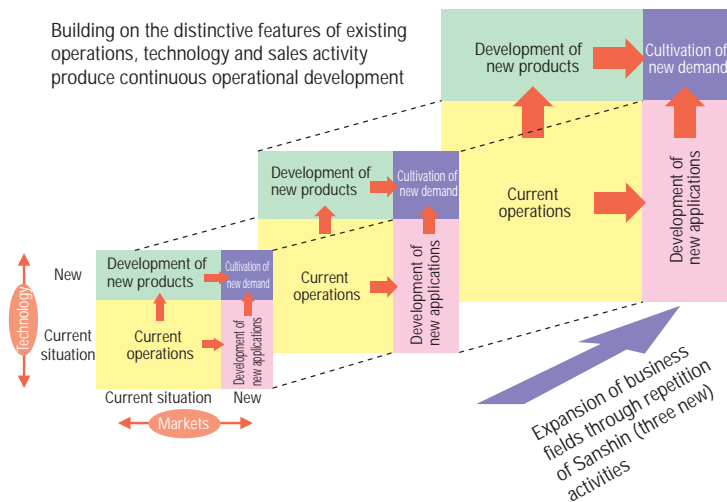


Fig. 1 Sanshin Activity business expansion

Sanshin Activities:

Under this process, current operations are the basis for expanding into new markets by developing new applications, while new technology development leads to new product development and cultivation of new demand. Repetition of this process leads to continuous operational expansion.

The Sanshin Activities strategy is an attempt to take the customer perspective on things and allows the latest market information to be apprehended along with the problems that are affecting customers. The Sanshin Activities strategy is also a program of close contact with the customer that drives the creation of new products and is an unchanging aspect of Nitto Denko activity.

2 Technology-Oriented Company

Nitto Denko was founded with the aim of establishing a domestic production in Japan of electrical insulation materials and began with varnish synthesis and the manufacture of varnished cloth and varnished paper materials. The platform technologies for this were polymer synthesis and coating technology.

In order to resolve the customer problems which we find out about through our Sanshin Activities strategy, we have added molding, membrane-manufacturing, processing, and analysis and evaluation technologies to the original synthesis technology and coating technology to not only expand our range of platform technologies but also to deepen and combine them.

Resolving customer problems, to put it another way, means providing the functions that customers require. This act of providing functions has led to the creation of a large number of new products, the development of new applications, and the creation of new demand. This is what we see as the expansion of functions.

In order to provide the functions required by customers, platform technologies must be honed and adapted to fit the requirements. If Nitto Denko does not have such a technology, it asks for help from another company and may have to acquire the tech-

nology as a new Nitto Denko platform technology. The products shown in red in **Fig. 2** are those featured in the present volume; most of them were based on acquisition of new technologies through joint development or commissioned research projects with universities or other companies or inward technology transfer.

In addition, in order to hone and combine technologies and provide the functions required by customers, we have harnessed imagination and creativity to realize new inventions and create new value. This is what we see as deepening technologies.

Figure 2 gives a representation of the expansion of functions and the deepening of technology.

Deepening technologies and at the same time ensuring rapid exploitation of technological advances for the purpose of product development is an ability much in demand in the rapidly changing business world of today.

At Nitto Denko, the Chief Technical Officer (CTO, at present a function jointly discharged by the company president) is at the center of the Whole Company R&D Project system, which seeks to speed up technology development and product development, and presides over the Integrated Technology Strategic Meetings designed to realize information sharing and mutual technology transfer (there are also Japan-wide versions of these meetings for all domestic Group companies known as Group Technology Strategic Meetings, and international versions for overseas Group companies known as International R&D Meetings). These are part of our efforts to fill discrepancies of time and geography so as to bring out the full potential of the Nitto Denko Group.

In addition, we are committed to forming close partnerships with customers, other companies, universities, and public research institutes both at home and overseas, engaging actively in joint research, and introducing composite technologies and the latest development methods, with consideration given to merger and acquisitions where necessary, in order to effect speedy product development.

Deepening and Expanding

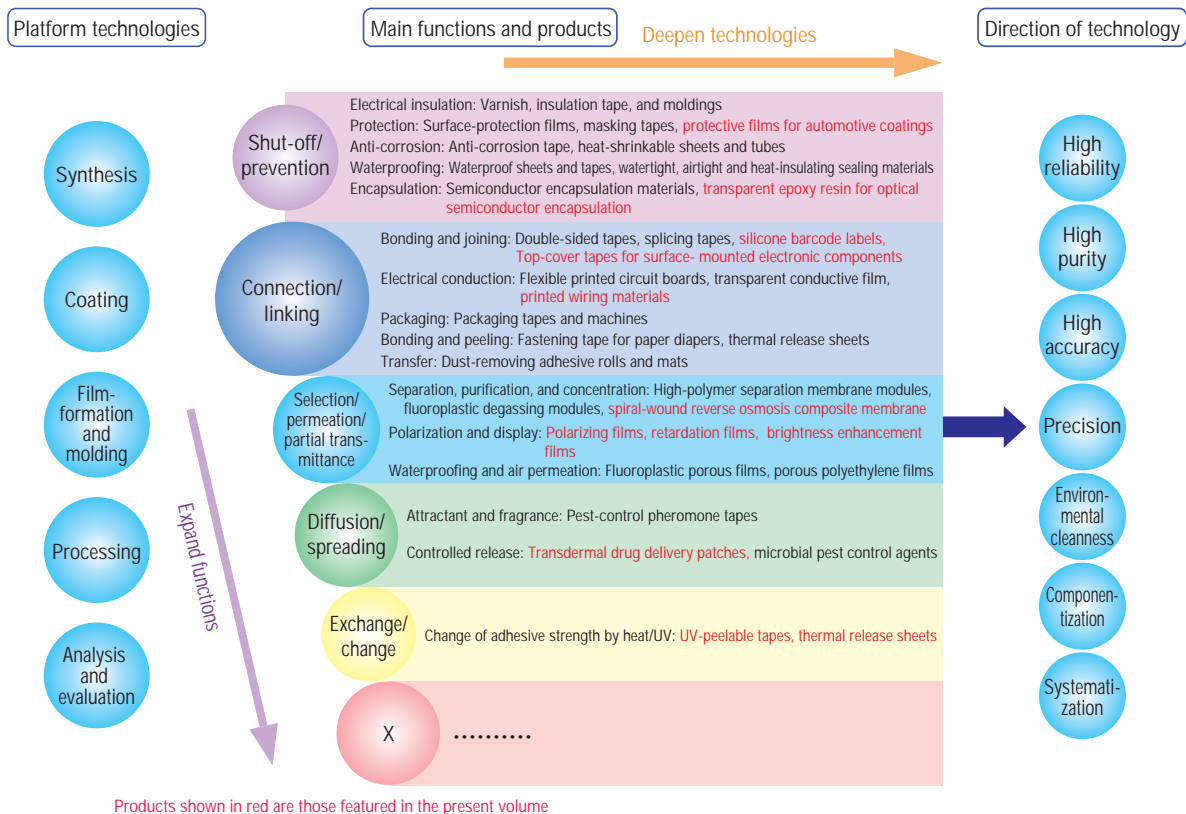


Fig. 2 Deepening of technologies and expanding of functions

3 Market-Driven Company

The basis of Nitto Denko product development is the Sanshin Activities, which means working in close contact with customers and thinking about what will be of most use to them when we undertake product development, and thereby continuously developing new applications and creating new demand.

In the 20th century, the Sanshin Activities were extremely effective in expanding Nitto Denko's business volume. In the 21st century, the pace of change is faster than in the 20th, and in geographical terms, globalization will accelerate continually. In order to implement the Sanshin Activities more effectively and efficiently, it will not always be enough to work closely with the customer.

Being a market-driven company means taking this a step further and raising ourselves to the level of a partner who knows the customer, knows the industry,

and is able to think from the same level of knowledge and the same perspective as the customer, thus gaining customer confidence and becoming the first company the customer turns to for advice.

In 2002, we undertook structural reform in the marketing department to convert to a structure organized not along product lines but along market lines. With all Nitto Denko staff understanding themselves and each other to be marketing staff, sales, development and manufacturing divisions will work together with a clear understanding of what the customer requires so as to resolve customer issues speedily and come up with solutions that are of use to the customer.

In the present Technical Report Special, we are privileged to present a guest article by Professor Itaru Hamachi of Kyushu University, who also appears in a series of reports published by Nitto Denko in the Nikkei Science magazine under the title of Rising

Stars of the 21st Century. The article presents the professor's approach to research and development, which has much in common with the Nitto Denko motto of Evolving through the Challenge of Change, which underpins our Global Niche Top strategy.

Global Niche Top Products

Starting on page 12 of this Technical Report Special, we present twelve products which currently have the top share in global niche markets.

1. RAPGARD®-F Protective Film for Automotive Coatings
2. Silicone Barcode Label DURATAACK S4OH
3. NPF Polarizing Film
4. NRF, NRZ and NIBCOM Retardation Film
5. NIPOCS Brightness Enhancement Film
6. Nitron T Transparent Resin for Optical Semiconductor Encapsulation
7. Printed Wiring Material (PWM)
8. ELEP-NEL System for Protecting and Securing Wafers
9. REVALPHA Thermal Release Sheet
10. Top Cover Tape for Surface-Mounted Electronic Components No. 318H-14A
11. Tape Formulaion for Bronchial Asthma Therapy "AMIAID TBL TAPE"
12. Spiral-Wound Reverse Osmosis Composite Membrane - ES Series

Each article presents the background to the product's creation (the request from the customer and the solution proposed by Nitto Denko), the Nitto Denko platform technology and supplementary technologies, and the strengths of the product.

One common feature of all the products is that they are rooted in Nitto Denko platform technology with the co-opting of new materials and new technologies and new inventions leading to the acquisition of many patent rights. Intellectual property has become an even more important measure of the value of a company.

As globalization proceeds, it is important to deliver

to the customer the optimal product in the place where it is needed. For such a product to come out on top in the marketplace, it is vital that it and its features should be protected by patent.

With new materials, new technologies, and new inventions as watchwords, we look forward to continuing to produce strong products with high-quality functions that become global niche top products.

Conclusion

We have now declared the target of doubling the ranks of our global niche top products from the current tally of twelve. Traditionally our business style has been to create niche top products in Japan in response to requests from Japanese customers, which have risen to global niche top status thanks to Japanese customers.

However, the global niche top products of the future are not all in Japan. In the future, we will work closely with top enterprises in all regions of the world and respond accurately to information generated in all parts of the world so as to turn the niche top products of each region into global niche top products.

In the future a business style will be required that involves keeping our business antenna extended, knowing the customer, knowing the industry, knowing the way things work in the world, identifying the thing that will be of greatest use to the world, and working closely together with the customer to speedily create global niche top products. In addition, to provide the functions required by the customer, and to offer solutions to customer issues, we will need to continue deepening our technologies.

This will mean where necessary learning technologies from universities and public research institutions and engaging actively in joint projects with other companies and also mergers and acquisitions.

With the Sanshin Activities as our driving engine, by deepening technologies and encouraging all staff to act as marketing personnel, we are committed to responding to customer requirements. We ask for your continued support in our activities.