

# [Nanyang optical company strategy](https://assignbuster.com/nanyang-optical-company-strategy/)

### Overview

Nanyang Optical is a well established company in Singapore, with more than 30 years of experience in retail, wholesale and manufacturing in the eyewear industry. They are one of Singapore’s largest optical retail chains with more than 20 outlets operating in Singapore, Indonesia and China.

The reason why Nanyang Optical is able to get to where it is today is because of the product design and development strategies they have adopted throughout the years. Nanyang Optical uses both the market pull and technology push strategy to attract new customers and retain old customers.

The managing director of Nanyang Optical, Mr Yang Wah Kiang, is a man with foresight. He was able to see opportunities in coming up with innovative eyewear designs, which eventually gave them an edge over competitors. His entrepreneurial abilities, together with his creativity as a product designer, led to successful creations of award winning eyewear. This included the Urband design, which product development process will look studied in this paper.

### Background

Eyeglasses were created in the 13th century with the sole purpose of aiding the user to read and write [1]. Developments in the eyeglasses were in the functional aspect rather than on the “ fashion” aspect. It was not until the 1980s that customers insist on having eyeglass frames as both a functional equipment and fashion accessory.

Since then, design of eyewear began to pick off with many clothing designers diversifying their resources in designing high-end mainstream frames [2]. Companies around the world, in Japan, China, Europe, are designing eyewear for the mass market. Both their frames, similar looking within their classes, vary only in colors and/or materials. Niche designers such as Alain Milki and Toki specialized in unique and more expensive frames with great customer appeal. However, customers have to pay a premium for such products.

Nanyang Optical took advantage of the situation to come up with innovative eyewear that has its own identity and character. Mr Yang came up with simple yet strong frames which were aesthetically pleasant. This move, together with some marketing strategies, gave Nanyang Optical a competitive advantage over other retailers.

### Scope

In chapter 2, the general strategies adopted by Nanyang Optical, such as the market pull and technology push factors will be presented. In Chapter 3, the product development process of a particular eyewear, Urband will be studied. This will be followed by an analysis of the strengths and weaknesses of the development process in Chapter 4.

### The Nanyang Optical Strategy

Product differentiation is imperative as customers hunt for the cheaper alternative between two similar products [3]. Nanyang Optical was able to identify opportunities [4] in the fashion eyewear industry, designing high differentiated frames that are functionally superior, specifically for the mass market who desire niche designs and high-end market, with affordable prices relative to clothing designers eyewear. Nanyang Optical adopted both market pull and technology push approaches in their eyewear designs, with a customer focused competitive strategy.

### Market Pull Strategy

### Flexis, Urband And Link frames

The Flexis, Urband and Link “ innovation eyewear” are shining examples of new platform, market pull products. These frames are marketed to anyone of any age, even old people who feel they are “ young at heart”.

Flexis appeals to customers who desire a full rim frame that is lightweight, comfortable and has minimal visual obstruction [5].

The Urband frame attracts the masses with its innovative design of a light, modern, almost indestructible frame that is aesthetically superior. Its titanium frame variant offers a sleek, urban style whereas its acetate counterpart portrays a more youthful look with its thicker, hipper build. With all these features, it is priced lower than luxury brands.

Link frames are catered for the niche segment of mass market with its simple design and its wide variety of shapes, colors and styles for the front piece. Customers are given a special casing, shaped as an oval with a center cut out for attaching to their bags to create a fashion statement. Link spectacles can be easily accessed and stowed without the hassle of removing the case.

Urband and Link were chosen as winners of the 2006 iF material award, a valuable award viewed by many designers. Although Nanyang Optical’s competitors were able to design such frames, they required special tools for assembly and disassembly, causing inconvenience to retailers and customers. Nanyang Optical was first to develop fuss-free innovative eyewear in the market, leading other competitors who claimed to sell “ innovative eyewear” with Prada, Channel or Gucci logos on their frames or sold innovative design frames at twice to four times the price. Japanese innovative eyewear company Toki, the closest competitor to Nanyang Optical, is unable to offer attractive prices as a result of high manufacturing costs in Japan [6].

### Excellent Customer Service And Boutique Stalls

As part of its corporate values, Nanyang Optical ensures that customers receive the best service and shopping experience, adopting a more expensive channel contact in the form of branches to educate customers about its differentiated and innovative products. The result would be customer loyalty and greater value. Customers contribute feedback on the quality of the products and obtain rapid response in form of improved products and services.

Nanyang Optical founded the Alexis Eyewear Boutiques in 1988, which house high-end exclusive eyewear in prime city locations. These outlets target local customers and tourists, providing them with premium services. Winning the Best Eyewear category for three consecutive years was a testimony to their services and excellent customer relationship management [7].

### Technology Push Strategy

Customers demand corporate social responsibility, causing a paradigm shift from “ less pollution” to “ carbon negative products that have a positive effect on the environment”. Companies have to balance the triangle of sustainability, competitiveness and innovation to ensure future success [8].

Nanyang Optical has embarked on changing their stores and products to “ Green” products, utilizing a full circle recycling system based on recycled materials [9].

Despite having the constraints and limitations of using recycled materials, Nanyang Optical was able to go one step further to create a fundamentally new product that is international award winning, eco-friendly and eco-iconic design such as LinkSkin, made out of recycled materials. Other models including Eyelet used 70% recycled materials with no soldering in its construction, a process that could add emissions of CO2. The award-winning Urband design used no springs, screws or soldering, yet having a stronger structure compared to its competitor models.

With its strong design team from Eye-biz, French fashion designers, good quality manufacturers from China and a top management team focused on innovation, eco-design, Nanyang Optical will continue to stay ahead of its competitors in providing a wide range of compelling products to pull the markets, gain customer loyalty and value and innovate new technology products for the benefits of customers and the company.

### Product Development Process Of Urband

In this chapter, the focus will be on the resources and time taken for the development of Urband frames. Urband frame was a brand new concept which uses S-clip to replace the usual springs and screws.

Nanyang Optical divided the product development process into three interconnected parts: product function design, product fashion design, and manufacture, with the latter two parts being outsourced to its partners. This method makes good use of all the resources and adopts suitable product design strategy like concurrent engineering to optimize its product design process and handle the new technology requirements and fashion trends.

In most cases of eyewear design companies, it takes two to three years to finish the design process of a new product. Therefore, it is vital to arrange the product process properly and gather all the available resources to minimize the cost.

### Product Function Design

This part covers the whole product developing process. It usually lasts for 18 to 36 months depending on the type of products. Nanyang Optical is mainly responsible for the technical improvement and feature development of its new products. In order to take advantage of the low manpower cost in China, Nanyang Optical owns a 1, 000-square-foot R&D center in Shenzhen. This center houses 10 senior local Chinese research and development professionals and product designers whose main focus is on the technical issues, such material and new frame design concepts.

Developing new products is a tedious and time consuming process that involves significant investments and endless obstacles. When Nanyang Optical first came up with the new S-clip design for the frame, it took nearly three years and several iterations to perfect the design, choose the proper material and settle on the final models. Though this design was harder to manufacture in comparison with more conventional designs, these evolutionary new frames were without any springs, screws or soldering and hence they made eyewear stronger and eliminated the age-old problem caused by screws loosing. [10] This new design helped Nanyang Optical to steadily rise among the western rivals.

In recent years, Nanyang Optical was quick to respond to customers’ inclination towards a greener environment. Together with its powerful product design team, Nanyang acted on its social responsibility and began its product development towards eco-friendly and reusable eyewear.

### Product Fashion Design

In this area, Nanyang Optical partnered three French fashion eyewear designers who have experiences with top brand company as well as a sharp trend sense in eyewear fashion. As soon as the prototypes of Urband frames from the China development center were ready, the three designers would be responsible for creating contemporary styles, branding and packaging for Nanyang Optical to enhance the product appeal. The designers will also assemble the product with their French taste of beauty and handle the delicate marketing push sales, hence retaining the high-end frames and attracting more customers. This process usually takes about 6 months.

Nanyang Optical believes that French fashion is perceived to be the best and consumers would tend to buy and pay more to purchase French brand, which would allow them “ to have a much better chance of succeeding internationally” than a Asian or an American brands [2].

### Manufacture

This part will begin after the fashion design is completed. If the manufacturing went smoothly, the latest product could be finished in 1 month. In order to concentrate on the development of eyewear, Nanyang Optical does not operate a factory, which would cost too much effort to deal with the detail fairs. In fact, they outsource their frame production to a Shenzhen company, which is located in a well-developed place with eyewear production facilities. This allows them to lower the manufacture costs.

As the unique design like Urband or Link from Nanyang Optical has high failure rates and high production cost, the product development center would send one team to stay with the production company to deal with the production problems as well as inspect the quality, and report the manufacture burden to the development center in time. [2, 10]

### Other Resources

Nanyang Optical also cooperates with SIMTech, one of A\*STAR’s center in sustainable manufacturing technologies, to assess the life cycle of its business operations and identify potential areas for improving sustainability. SIMTech has also aided Nanyang Optical in making industrial polymer waste into fashionable eyewear frames by cutting the recycled pellets. This product is not only eco-friendly, but it also helps Nanyang Optical in saving its production cost. [11]

### Analysis Of Product Development Process

In this chapter, the steps taken for the product development process will be evaluated for their strengths and weaknesses.

### Design

In coming up with new eyewear design, the managing director, Mr. Yang, assembled a team of ten research & design professionals and trained product designers. The professionals were hand-picked and paid competitively. Having a dedicated product development team allows them to focus intensively on research into facial contours, fashion trends and optical technicalities. For example, it was discovered that titanium could not be used for the S-clips because friction caused titanium to discolor from grey to black. Stainless steel was subsequently adopted for the S-clips. Hence, teams dedicated to their own specific areas allow them to have more time and concentration to do what they are good at, in order to recognise problems and overcome obstacles more easily.

### Partnership

The forming of partnerships with the 3 French designers allowed Mr Yang to leverage on his partners’ expertise and gave himself more time to focus on issues that were better suited to his own skill set. This allows product development to work concurrently and at the same time give the French designers full responsibilities to work on fashion design, packaging, branding and marketing aspects.

The combined product design and fashion efforts were successful when Urband and Linkskin were selected as winners of 2006 iF (International Forum) material award and a 2007 Red Dot award. The Dulles, Va.-based Industrial Designers Society of America named Linkskin a finalist for its 2008 International Design Excellence Awards [12]. More recently, Urband Origami collection had got another two design awards, Red Dot Design Award winner 2009 and 2009 iF material award gold [13]. While Linkskin won 2009 International Forum Design Award Gold.

### Branding And Marketing

Launched of Urband at the SILMO (an essential trade show for professionals in the optics/eyewear sector) industry fair in Paris in October 2005 was very successful as the French national newspaper Le Figaro chose the titanium Urband as the industry’s #1 new design and the acetate Urband as #3. Apart from the additional media coverage, one publication even placed Urband alongside mega-brand Oakley in its reviews. The positive reviews and media coverage puts the product in a good position for sales in the market.

This showed how important going for the right kind of media coverage is. Mr Yang was smart to launch the eyewear at Europe as he wanted the brand to be identified as European in order to have high prestige and greater pricing power. He also chose the correct fair to launch his eyewear as the fair was a stylish affair, thus giving his eyewear a positive outlook.

### Manufacturing

Outsourcing of the manufacturing aspects allowed Mr Yang to gather all his resources to focus on creativity and improvement on the design of the frame.

However, the initial outcome in search for outsourcing to factories was disappointing even though China was responsible for much of the world’s eyewear frame output. Few factory managers were willing to manufacture Urband or Link frames because of their unusual designs. The problem Nanyang Optical faced was that most work has to be performed by hand. This was made more challenging with the many variations between styles and colors. Another problem was that employees have to be given special training and with the high turnover rate, training for new employees has to be carried out frequently. These led to quality control problems, more rework and low yields.

10, 000 titanium Urband frames were produced in China in a test run. The components had been outsourced to several factories and the frames had been assembled by hand by Eye-Biz employees. The production was considered a failure because Mr Yang had ordered enough components for 4, 000 frames, but only 1, 300 assembled frames passed the quality inspection. He had to order more parts and eventually 10, 000 finished frames were assembled and approved. “ It was a production nightmare” said Mr Yang. Therefore, when outsourcing is used, the disadvantage would be having the need to work closely with the factories, provide technical support and oversee quality control.

### Feedbacks

The 10, 000 frames were distributed in Europe to gather consumer feedbacks and generate industry buzz. The frames manage to sell well, but some consumers later return them to retailers as the color painted onto the titanium faded after several months. Mr Yang resolves this issue with a better color plating technique.

Hence, we see how feedbacks will encourage continuous improvement in on-going product development and enhance the brand’s reputation as a reliable and fashionable product.

### Conclusion

In this paper, we have seen how Nanyang Optical was able to identify the correct opportunities and come up with the right kind of eyewear designs at the appropriate time. They brought in a new kind of innovative eyewear for the mass who wanted niche designs at affordable pricing. These designs were able to cater to customers of all ages, hence attracting many customers. Besides this, Nanyang Optical was responsive towards customers’ feedback by improving their products and services. This was helpful in building customer loyalty. When there was a move towards a greener environment, Nanyang Optical was also quick to start coming up with eco-friendly products made out of recycled materials. Their sensitivity towards market needs and technology direction allow Nanyang Optical to succeed and maintain its own pool of customers, attracting more potential ones at the same time.

In the process of product development, Nanyang Optical was able to take advantage of the low labour cost in China, as well as leverage on the creativity of its French fashion designers. The French designers were able to give a French outlook to the new eyewear, hence increasing the chances of the eyewear in succeeding internationally. Nanyang Optical also practiced concurrent engineering whereby prototypes of new designs were made as early as possible in order to discover any problems in the early stages. Outsourcing certain parts of the development process was a good option for Nanyang Optical as it not only allows them to be able to focus on what they are good at, but also allows them to achieve higher standards in areas they are not experts at.

Nanyang Optical was careful in marketing their products. They chose to launch their new eyewear at a prestigious European fair, thus raising their own standards and allowing them to price the products at a higher range.

However, not everything was smooth sailing for Nanyang Optical. The biggest obstacle they faced was the challenge in manufacturing the unusual eyewear. This was because most work was to be performed by hand, hence making the process very labor intensive. Training of employees needed to be carried out frequently due to high turnover rates, aggravating the quality control problems and lowering the yields.

Every product development process has its own unique set of problems. The company must be prepared and well-equipped to handle all kinds of situations in order to stay competitive. The distribution of workload among partners is also very important as this will contribute to the efficiency and effectiveness of the entire product development process. Every stage in the development of a new product, from the initial design stage to the final launch stage must be planned with care to maximize the chances of success.

### References

[1] Glasses (2009). Retrieved September 21, 2009, from Wikipedia Web site, http://en. wikipedia. org/wiki/Glasses

[2] Wee Beng Geok and Nigel Goodwin, Nanyang Optical: beyond production design from idea to launch, The Asia Business Case study, September 21, 2006

[3] Timothy C. G. Fisher and Robert G. Waschik. (2002). Managerial Economics: A game theoretic approach. New York: Routledge.

[4] Leong Kah Fai. (2009). Chapter one: Introduction to Product Design. NTU. Singapore. [powerpoint slides]. Retrieved from Nanyang Technological University Blackboard. Site: http://edventure. ntu. edu. sg/webapps/portal/frameset. jsp? tab\_id= \_2\_1&url=%2fwebapps%2fblackboard%2fexecute%2flauncher%3ftype%3dCourse%26id%3d\_317678\_1%26url%

[5] Singapore’s First eco-friendly Eyewear Store. (2009). Retrieved September 24, 2009, from Nanyang Optical Web site, http://www. nanyang. com. sg/products. html

[6] Toki. (2006). Retrieved September 24, 2009, from Toki Web site, http://tokieyewear. com/index. php

[7] Chen Chun-Hsien. (2009). Chapter seven: CRM and Mass Customization. NTU. Singapore. [powerpoint slides]. Retrieved from Nanyang Technological University Blackboard. Site: http://edventure. ntu. edu. sg/webapps/portal/frameset. jsp? tab\_id= \_2\_1&url=%2fwebapps%2fblackboard%2fexecute%2flauncher%3ftype%3dCourse%26id%3d\_317678\_1%26url%3d

[8] Eco-innovative Design. (1997). Retrieved September 18, 2009, from Organisation for Economic Co-operation and Development Web site, http://www. oecd. org/home/

[9] Singapore’s First eco-friendly Eyewear Store. (2009). Retrieved September 19, 2009, from Nanyang Optical Web site, http://www. nanyang. com. sg/eco. html

[10] Robert Grace, Designer eyeglasses fit eco-friendly niche, Plastics News, September 8, 2008

[11]Singapore and US Institutes Collaborate in Environmentally Impactful Sustainable Manufacturing Technologies, ACN Newswire, April 12, 2009

[12]Welcome to LinkSkin eco-friendly eyewear world. (2009) Retrieved September 18, 2009, from LinkSkin web site, http://www. linkskin. com/

[13] Urband: designer of light and comfortable contemporary eyeglasses. (2009). Retrieved September 21, 2009, from Urband Web site, http://www. urband. com/