HOW TO CREATE MARKET SPACE IN THE OPTICAL INDUSTRY?

The title of this paper has been taken from the book 'Blue Ocean Strategy' by W. Chan Kim, Professor of Strategy and Management at Insead and Renée Mauborgne, The Insead Distinguished Fellow and a professor of strategy at Insead. They split market places into 'Red Oceans' and 'Blue Oceans'.

By Mark Mackenzie

RED OCEANS

In red oceans you compete in existing markets:

- Industry boundaries are defined
- Competitors try to outperform their rivals
- As the market space gets crowded, prospects for profits and growth are reduced.

This at least, in Western Europe, is the case for ophthalmic lens manufacturers and distributors. Slow growing markets, increases of market shares of retail chains and interestingly no reductions in the total number of market players have led to pressure on net average selling prices to optical retailers. Chart 1 shows the development of net average selling prices over the period 2011 to 2016 in the consolidated markets of France, Germany, Italy and the UK.

During the period 2011 to 2016 total volumes of ophthalmic lenses sold by ophthalmic lens manufacturers increased by 1.9% per year.

Year	Total	Monofocals	Bifocals	Workplace	Progressive Design			
					Entry Leven	Advanced	Individualized	TOTAL
2011	13.02	6.04	11.78	20.86	21.08	44.47	64.53	32.17
2015	12.94	5.48	10.89	18.95	17.79	38.37	58.62	31.38
2016	12.77	5.35	11.05	19.74	16.08	35.49	54.43	29.95

Average selling price in € per ophthalmic lens

*Source: International Markets Models of SWV

BLUE OCEANS

In blue oceans you create new markets by:

- Identifying untapped market space
- Creating demand
- Making the market difficult to enter for competitors

Is it possible to create 'Blue Oceans' in the optical industry? SWV believe it is, and three examples are shown below.

- In 1998, Schneider Optical Machines displayed their first HSC 100 machine at Silmo in Paris. Digital surfacing and polishing led to the development of progressives, which could be made where the position of the frame in front of the eyes, the life style of the wearer and/or the physiology of the wearer could be incorporated into the design.

  Both, Zeiss and Rodenstock, identified untapped market space and launched their individualised progressives. Demand for these progressives has grown constantly since then. In 2016, over seven million individualised progressives were sold in the top four markets of Europe. Although new competitors have entered the individualised segment since then, Zeiss and Rodenstock still have a significant market share of the category.
- 1.56 index organic was launched somewhere at the end of the last century and over time has gained a dominant position in markets of the Far East and North Africa.

  The companies manufacturing and distributing this product recognised the need for a product, which poorer consumers could afford and would also want. Often in these markets, the majority of patients are myopes. Poor people also want to have thin lenses in a fashionable frame. This market segment has proved difficult to enter for many multinationals, as the price points of the product in countries such as Indonesia are very low.
- Creating new markets requires consumer focused thinking based on consumer needs, usage and attitude. One example are lenses for car drivers.

  When car drivers are getting older, they feel uncomfortable when driving in difficult light

	2015
World population	7,346,631,000
Population living in moderate or extreme poverty	2,203,989,300
Population less moderate or extreme poverty population	5,142,641,700

World Population in 2015

*Source: World Bank

conditions like rain, low light and at night. The development of special lenses for all older people driving cars lead to great consumer interest. The lenses have an extra-developed coating, which blocks some of the disturbing light especially from cars coming from head on.

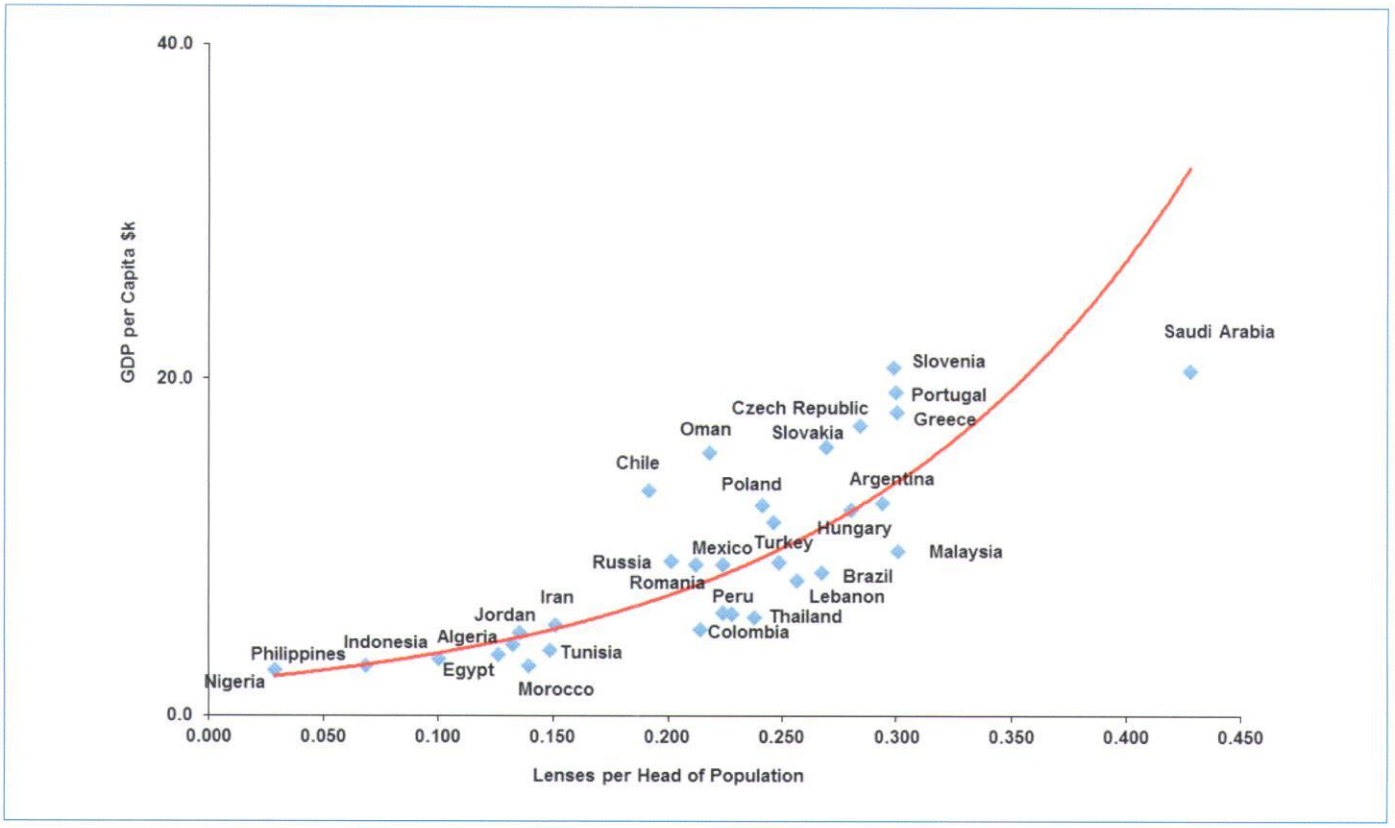
The question that SWV asked itself was: Are Blue Ocean strategies necessary in a market where the 'magic' word ageing population is used to ensure that there will be constant growth in sales of optical products?

STUDIES AND RESULTS

SWV has been making studies of total World Demand of ophthalmic lenses since 2003. From 2011 onwards, world demand for frames was added. Our first studies had mistakes. The customers purchasing the studies pointed them out to us or sometimes challenged our figures. It allowed SWV to research again the countries in question, and if necessary, correct our figures. We believe that the best way to measure ophthalmic frames sales is to have a reliable figure for ophthalmic lenses: from this frame sales can be calculated by deducting breakages and returns of lenses, reglazing and sometimes putting old lenses in new frames.

Ophthalmic lens volumes worldwide grew by an estimated 2.7% per year between 2003 and 2015. Ophthalmic frame volume grew by 3.4% per year between 2011 and 2015. The year 2011 was, for several markets, a year when they were suffering from an economic downturn. Economic downturns tend to affect the optical market as a consumer can and does delay a repeat purchase. During the period 2011 to 2015 the economies of the world recovered.

During the period 2011 to 2015 the average worldwide net selling price of an ophthalmic lens to optical retailers declined and the average worldwide net selling price of frames to optical retailers was stable. SWV believe that this trend for average net selling prices to grow at either a lower rate or the same rate as volume will continue in the future. This means that volume growth is critical. The estimation of SWV is that volumes of ophthalmic lenses will grow at between 2.5% to 3.0% yearly. This will have a knock-on effect on ophthalmic frames. Some extra growth could come from a decrease



*Source: World Lens and Frame Demand study 2016 'WLFD'. A study by SWV of 65 countries of the world which account for 95% of the total World Gross Domestic Product.

in reglazing rates. SWV carried out interviews to see if a sales growth of between 2.5% to 3.0% per year is sufficient for the financial demands of the customers we deal with.

Examples of the answers we got were:

- "Honestly speaking, no."
- "It would be nice to have a higher rate of growth."

This means that the development of 'Blue Ocean' Strategies are essential, if the ophthalmic lens and frame industry wishes to grow at faster rates. Mergers and acquisitions bring extra growth but only for the acquiring company and not for the overall market. What we are looking at here is how to grow the total cake for the total optical industry.

Let us start by looking at the World population and the need for vision correction.

GROWING THE TOTAL CAKE FOR THE TOTAL OPTICAL INDUSTRY

People living in moderate and extreme poverty are defined as those who live on less than US$ 3.10 per day. It is estimated that approximately 30% of the world population live on less than US$ 3.10 per day. (Source: World Bank).

Based on our experience of carrying out studies in areas such as Egypt and Indonesia,

we believe that a consumer is willing to pay between five to seven days of income for a spectacle. A frame of a quality, which is well made and looks attractive, will cost US$ 3 in China and two single vision lenses US$ 1. In Egypt or Indonesia, the frame and the lens typically go through an importer, a distributor and a retailer. Usually, they make a mark-up of at least 100% each time. That means a spectacle, which is of acceptable quality and looks good, is priced to the consumer at a minimum of US$ 20-25. For a person earning under US$ 3.10 per day, this is a lot of money to pay for a spectacle and has to compete with other priorities. For this reason, we have estimated the number of persons worldwide able to pay commercial prices for eyewear at about 5.1 billion.

SWV is aware that there are various organisations trying to bring affordable eyewear to the poorer people of the world. However, at present, we do not believe that these organisations have the sufficient size and resources to really bring access to vision correction to the approximately one billion poorer persons needing vision correction. Bringing spectacles free of charge into these countries may also put existing optical business under pressure as shown by exports of cheap food and clothing into many African countries.

SWV have a sub-sample of countries where we have more detailed knowledge of spectacle lens wearers. These are based on larger scale consumer studies. The sample size is 1.1 billion people and it suggests that 46% of the population wear spectacles, and that the repeat purchase cycle is every 2.7 years. We are aware that a majority of developed countries make up the sample, and for this reason, we have used 3.5 years when scaling up to the figure of 5.1 billion. The extra demand that could be generated by ensuring that all of this population wore spectacles when necessary would be between 250 to 300 million ophthalmic lenses per year. Usually, the reason for not wearing spectacles is due to cultural factors or to the fact that a person who needs D 0.75 of correction simply does not know.

Social media is a good way of challenging cultural traits, such as 'wearing spectacles is a sign of physical weakness', which we have come across in Near Eastern countries. Autorefractors are quite cheap, easy to train

	Photochromic	Sun tinted lenses, incl. gradient tints	Ophthalmic polarizing	Total of photochromic, tinted lenses, ophthalmic polarising
UK	13%	12%	2%	27%
WLFD	11%	6%	2%	19%

*Source: WLDF study 2016 of SWV

people on and quick to use. Used within the legal system of the relevant country, they will pick up whether a person could need vision correction.

Another area where growth of over 3% can be achieved is in developing markets, please see chart 3. Here, at gross domestic product levels between US$ 6,000 and US$ 20,000 per capita there seems to be an acceleration in demand for ophthalmic lenses. It may have to do with the level of disposable income that is available after priorities, such as living costs, have been paid for.

The correlation coefficient (R^2) of the above curve is 0.74. Between $\geq 0.7 < 0.8$ is acceptable reliability (source: *www.statisticshowto.com/test-retest-reliability/*)

Observing best demonstrated practice and applying it in other parts of the world is another way to create Blue Oceans. The United Kingdom is a good example of best demonstrated practice when it comes to selling ophthalmic sun protection lenses to consumers. The table above shows the figures for the UK compared to the average of the 65 countries in the WLFD study for the year 2015.

Are there lessons to be learnt from the marketing messages of yesterday? SWV analysed new products launched over the last ten years, to see if there were any lessons to be learnt. Hard-coat, anti-reflection, anti-smudge, anti-static and water-repellent coatings have been very successful. Workplace lenses are another example of a category, which hardly existed ten years ago. They are both product areas where the optical industry speaks with a similar language about product benefits and where the product benefits are clearly discernible. SWV would urge caution in the use of medically based messages. Unless the product benefit can be clearly proven and the message controlled, problems can arise.

To summarize there are still a lot of opportunities open to the optical industry. If time and money is spent in identifying untapped market space and creating demand, then new Blue Oceans can be created. SWV is aware that the third criteria for creating a Blue Ocean, which is, 'Making the market difficult to enter for competitors', has not been addressed in these suggestions. SWV believe that if all the opportunities available at present are worked on then the total size of the market will grow and there will be enough demand to satisfy all market players.

SUMMARY

- Demand for ophthalmic lenses and frames grew by between 2.5-3.0% per year
- Part of the value growth was achieved with Blue Ocean technology/products
- Projections of population and GDP growth suggest that volume growth will continue
- Average prices in Western Europe are declining
- Blue Ocean technology and products are needed

POTENTIAL BLUE OCEANS

Potential Blue Oceans could be created by:

- Helping non-correcting persons with minor prescriptions to be aware that their quality of life could improve by wearing vision correction
- Using Social Media to combat cultural resistance to eyewear
- Learning from best demonstrated practice to help increase ophthalmic sun protection
- Speaking with a similar language about product benefits and making them clearly discernible.

Mark Mackenzie

Mark Mackenzie is CEO of SWV, a privately-owned consultancy and market research company specialising in the eyewear and eyecare industry with in depth market knowledge of ophthalmic lenses, ophthalmic frames, sunglasses, contact lenses and many other products in the supply chain for the eye. SWVs works with customers and a team of over 40 associates worldwide, to develop strategies to accelerate growth, assist in the acquisition, financing and sale of companies. The analysis of markets and SWVs international market models complement its product offering.