



Seeing Things Clearly

The Profitability of Contact Lenses for European Eye Care Practitioners

Key Findings

- Patients who wear spectacles and contact lenses are up to 80% more profitable than those who wear only spectacles
- Contact lens plus spectacles patients are more loyal
- At least 60% of contact lens patients also buy their spectacles from their eye care professional

Commissioned by Euromcontact



Chapter 1

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Executive Summary

Euromcontact, a trade group of contact lens and lens care solution manufacturers, approached London Business School (LBS) with a request to investigate the profitability of contact lenses against spectacles from the eye care practitioner’s perspective. This request was driven by Euromcontact’s collective observation that the contact lens market was experiencing stagnant growth in the five principal European markets of France, Germany, Italy, Spain, and the United Kingdom.

LBS were instructed to investigate the hypothesis that for European eye care practitioners, selling contact lenses is more profitable than selling spectacles. Euromcontact believed that European eye care practitioners did not fully appreciate the profit potential of contact lenses.

LBS provided a team of three native speakers for each of the five principal European markets who undertook comprehensive qualitative analysis of the various markets to put themselves in the mindset of the eye care practitioner with the ultimate goal of undertaking subsequent quantitative analysis to test the hypothesis through an economic model.

Following the qualitative research, LBS reframed the analysis, revealing that the key to properly understanding the value proposition of each patient type is to appreciate that a contact lens patient is, in virtually all cases, a spectacles patient as well and as such represents multiple revenue streams to the eye care practitioner (rather than a spectacles patient who represents only one).

The quantitative findings, delivered through a pan-European questionnaire, revealed that contact lens patients, as defined above, are on average 53% more profitable to an eye care practitioner than a spectacles patient. Key to capturing this extra profit, however, is understanding that this is driven by a patient’s lifetime value, rather than on a purely transactional basis.

Euromcontact, along with their customers, must thus adopt the end user’s perspective. A number of recommendations present themselves to the industry group, which revolve around achieving customer loyalty and understanding the dynamics of the retail marketplace.

1. Introduction

1.1. *History and Background*

Significant ocular refractive error occurs to the extent that up to 60% of Western populations requires some form of vision correction. In Europe, evidence of the use of spectacles to correct vision defects can be traced to the 13th century¹. For centuries, spectacle makers searched for improvements to the primitive frames as early spectacles improved vision only when the patient’s gaze was perpendicular to the lens. In spite of this and other difficulties, scientific improvements in spectacle manufacturing encouraged the commercialisation of spectacles and allowed for the creation of a new industry that included the export of frames to the new world².

However, even the best advances did not satisfy wearers. Many patients continued to reject spectacles, in many cases living with their impaired vision for fear of being perceived as old and weak³. In many parts of Europe, spectacles were considered unfashionable⁴, and patients preferred spectacles such as monocles, which could be quickly hidden from view. Nevertheless, spectacles remained the only choice for vision correction.

In 1887, the industry of vision correction was revolutionised when Adolf Fick developed the first contact lens to correct irregular astigmatism⁵. However, as with spectacles, early contact lenses were not practical as the glass lenses often popped out of the patient’s eyes for no apparent reason. Two significant advances, the

¹ www.brittanica.com

² Drewery M.D., Richard D., *The History of Eyeglasses*, University of Tennessee Department of Ophthalmology, <http://www.eye.utmem.edu/history/glass.html>

³ Øydegaard, Floyd D.P., http://www.perret-optic.ch/Histoire_Musee/histoire_musee_gb.htm

⁴ Except in Spain where spectacles were thought to make people look important and dignified.

⁵ www.brittanica.com

development of the first plastic lens in 1948 and the development of the soft lens in 1961⁶ brought new hope to vision correction. These advances allowed contact lenses to make the transition from the laboratory to the market. By the 1970s contact lenses were worn by millions around the world and had become an established form of vision correction.

Over recent years advances have been made in contact lens materials, design and manufacturing methods, providing exceptional vision and ease of use for a wider range of consumers. Contact lenses can offer accurate vision correction for all types and degrees of refractive errors, and correction can be altered with relative ease. Visual results with contact lenses are generally favourable, and many consumers acknowledge that contact lenses can provide superior quality of vision. In the European region, about 80% of contact lens wearers wear soft lenses and around 20% wear rigid gas permeable lenses, with this ratio varying from country to country.

Contact lens fitting patterns have also evolved considerably over the years. In the 1950s and 1960s, contact lenses were made from a hard PMMA⁷ material. Conventional (non-disposable) soft hydro gel and rigid gas permeable daily wear lenses replaced PMMA lenses as the lenses of choice in the 1970s. Extended wear of conventional soft materials was popular during the early 1980s, only to be replaced by disposable or frequent replacement soft lenses, used principally for daily wear in the 1990s. Likewise, there have been many advances in the products

⁶ Obituary: Otto Wichterle, *The Economist*, 5 September 1998

⁷ PMMA is a transparent (>90% transmission), hard, stiff material with excellent UV stability, low water absorption and high abrasion resistance. <http://www.salyp.com/up16.htm>

used to care for contact lenses: today, the majority of contact lens wearers use single bottle multi-purpose solutions to care for their lenses.

1.2. Current Market Trends

In spite of technological advances leading to significant product improvements, as well as extensive trade and consumer marketing campaigns, this nascent industry has shown early signs of maturity in the last decade. The contact lens market is producing stagnating growth figures. Analyst reports question earnings expectations on the basis of market maturity, particularly in Europe and the United States. In the major European markets, penetration rates are especially low with only 3% to 10% of the total population wearing contact lenses⁸. In addition, many wearers choose to discontinue lens wear. It is difficult to measure the percentage of contact lens wearers that dropout each year, but this figure has been estimated by the industry to be in the 5% to 20% range.

Despite the clear consumer-related benefits and commercial opportunities provided by contact lenses, spectacles remain the principal mode of refractive correction recommended by eye care practitioners (ECPs) for vision correction. Approximately 95% of the vision correction population use spectacles, either alone or in combination with other forms of correction. Against prior expectations that accompanied the introduction of contact lenses in the 1960s, spectacles still retain a significant share of the market and continue to grow⁹.

Especially in the last century, spectacles have greatly benefited from technological advances, using new materials to improve flexibility, durability and weight. In

⁸ Euromcontact brief, Project Brief, December 11th 2000

addition, spectacles today have become part of the patient’s “look” – as much a fashion statement as a medical device. The market has become intensely competitive, with brands such as Dolce & Gabbana, Armani and Calvin Klein constantly vying for market share by introducing new lines every year, and low cost and low quality manufacturers flooding the market with imitation designer frames.

1.3. Eye Care Industry Characteristics

1.3.1. Market Description

The global market potential for spectacles and contact lenses is estimated to be approximately \$48 billion, evenly divided into thirds between the United States, Europe and the rest of the world¹⁰. In the industrialised world, industry growth is estimated to be 5% per annum¹¹.

Industry growth is expected largely because increasing life expectancies and decreasing birth rates in industrialised countries are expected to inflate the over-45 age category relative to the general population. Due largely to a condition called presbyopia, 90% of the over-45 age category requires vision correction.¹²

Spectacles

Spectacles continue to be the most widely used form of vision correction. Technical developments over the last three decades have allowed manufacturers to create ever lighter and more durable frames, and to produce smaller, lighter and more accurate lenses. Further, as well as being functional and practical, they have also become a fashion accessory in their own right.

⁹ Rotlex, <http://www.israel.net/rotlex/Papers.htm>

Even contact lens wearers typically keep at least one pair on hand. Many people, particularly men, prefer spectacles to contact lenses as it avoids the necessity of touching the eye.

Contact Lenses

Projections for the contact lens market are unfavourable. The trends are towards maturing markets, particularly in Europe and the United States. Although new product innovations continue to appear in the market, these tend to cannibalise new product sales rather than grow the market. For example, the move to new daily disposables eliminates the need for lens care solutions, which are the highest margin products. In addition, the increase in private label usage by patients is driving price competition and threatening commoditisation.^{13 14}

Whilst industry organisations continue to trumpet the industry, media attention has focused on the unfavourable projections. For example, the Financial Times’ prominent LEX column recently stated, “Contact lenses and solutions ... have become mature, even commodity products. Innovations, such as one-day lenses, merely cannibalise older versions rather than expand the market. Some users are switching back to glasses, others are trying surgery.”¹⁵

In general, contact lenses are perceived mainly as an alternative to spectacles, providing comparative advantages as listed in Table 1-1 below.

¹⁰ Rotlex, <http://www.israel.net/rotlex/Papers.htm>

¹¹ Rotlex, <http://www.israel.net/rotlex/Papers.htm>

¹² Salomon Smith Barney Equity Research, Bausch & Lomb, 1 September 2000

¹³ Salomon Smith Barney Equity Research, Bausch & Lomb, 1 September 2000

¹⁴ “Baush & Lomb Stumbles and Its Future Blurs”, Morningstar.com, 24 August 2000

(<http://news.morningstar.com/news/Wire/0,1230,2586,00.html>)

¹⁵ Financial Times, 6 January 2001.

Table 1-1

Advantages of Spectacles	Advantages of Contact Lenses
<ul style="list-style-type: none"> • Convenience in terms of placing them on and removing them • Clear, immediate and consistent vision • Versatility in achieving a wide range of refractive corrections • Widest range of options and most satisfactory outcomes for multifocal correction • Perception of culturally desirable traits; e.g. intelligence, maturity, appearing serious, etc. • Can be worn as a fashion item • Preferred for occasional short-term vision correction, e.g. reading, driving • Mechanical protection against eye injury can be provided • Major complications from the use of spectacles are rare • Low on-going costs after initial expenditure 	<ul style="list-style-type: none"> • More desirable cosmetic outcome • Lower start up costs • Better visual acuity and increased field of view • Improved sports vision • Elimination of vision distortion. • Ability to wear non-prescription sunglasses • No situational inconveniences such as: <ul style="list-style-type: none"> - Spectacle lenses becoming dirty, scratched or fogged up - Frames slipping or falling from face or causing discomfort because of excess weight or poor fitting - Lost or misplaced spectacle lenses - Spectacles moving when lying down

Refractive surgery

Refractive surgery, also known as Laser Vision Correction, reshapes the patient’s cornea by surgically removing tissue that impairs proper vision. The surgery allows light rays to focus properly on the patient’s retina, thus providing the same solution that spectacles and contact lenses currently provide. Two procedures are typically performed: PRK (photorefractive keratectomy) and LASIK (laser-assisted in-situ

keratomileusis)¹⁶. The procedures achieve close to perfect vision, with nine out of ten patients achieving 20/20 vision.

In the United States where refractive surgery procedures are more commercially advanced, 1998 procedure volumes and spending doubled over 1997¹⁷, and this trend is set to continue into this century. The industry is new and expected by analysts to enjoy high growth rates in the coming years.

While the market for refractive surgery is increasing, not all patients are suitable for the procedure. Specific medical conditions, age and vision prescription define the patient’s suitability. In addition, cost can be a factor since fees for the procedure are in the range of \$2,000 to \$2,500 per eye. Reports of long-term effects include trouble with night vision, increased light sensitivity and glare.

1.3.2. Industry Players

The main industry players and their characteristics are as follows: manufacturers, distributors/wholesalers, ophthalmologists, and eye care practitioners (ECPs). Each is described below.

Manufacturers¹⁸

Most manufacturers of vision correction products have expertise in contact lens production, contact lens solutions production, spectacle lens production or spectacle frame production. A few manufacturers (such as Essilor) have produced contact lenses and spectacle lenses as well as frames. Table 1-2 in Section 1.4 below

¹⁶ Contact Lens Manufacturers Association, www.contactlenses.org

¹⁷ Advest, “Vision Correction”, 2 June 1999

¹⁸ Manufacturers of eye care products produce frames, lenses (spectacle and contact), liquids, surgical lasers, etc.,

outlines the basic financials and business interests of the five Euromcontact members who are among the most influential manufacturers in the industry.

Distributors/Wholesalers

In the five European markets studied, the principal distributors are most often fully owned subsidiaries of the manufacturers. They have local offices and sales force in every market and sometimes have production facilities. Wholesalers are most often large retailers who buy in large volumes to benefit from volume discounts and make margin by selling on to smaller independent retailers.

Ophthalmologists

Ophthalmologists are medical practitioners who specialise in vision defects and illnesses. Across Europe, they have varying levels of influence in the patient’s decision process. In France, prescriptions must be issued by an Ophthalmologist, therefore they maintain a high level of influence over both the patient and the ECPs. In most other markets however, a patient is only referred to an Ophthalmologist in special cases.

Eye care practitioners (ECPs)

ECPs are the retailers who have the principal interaction with patients. ECPs work in or own optical retail stores commonly known as Opticians¹⁹. Opticians operate either as independent outlets or as branded chains. Independents are often part of central purchasing organisations in order to benefit from bulk purchasing discounts. Across the five European markets covered in this report, 75% of Opticians are

¹⁹ Throughout this report, Opticians are referred to as ECPs, with the exception of Section 2.7.1.

independent or part of buying groups, with chains representing the remaining 25%. Chains however account for 36% of turnover of the optical retail business.

1.3.3. Patient Decision Making Process

The patient purchasing process begins with the diagnosis of the need for vision correction. An ophthalmologist or ECP diagnoses the condition and makes a recommendation on the type of vision correction that is most suited to the patient. To obtain the necessary treatment, the patient typically takes one of two distribution channels:

Ophthalmologist → sells contact lenses in house, performs refractive surgery, refers to ECP for spectacles (contact lenses if not in-house)

ECP → sells contact lenses and spectacles.

In some countries, notably France, patients must take two steps: first the prescription from the Ophthalmologist is obtained, and then the required form of vision correction is purchased from an ECP. In markets such as the UK, large Opticians such as Boots are beginning to offer refractive surgery.

Because only a small fraction of the population is deemed unsuitable for contact lenses, the ultimate decision is generally up to the patient, who decides on the best form of vision correction according to their lifestyle needs. There are some patients that are dissuaded from using contact lenses due to contact lens manipulation and maintenance requirements. For example, children under the age of 14 or persons with poor motor skills do not generally make suitable contact lens patients.

Because of its medical nature, the industry is also marked by the involvement of government regulations and national health schemes. Thus, national insurance and private medical insurance companies can play a role in determining the balance of power within the industry. Consumers tend to favour products that are covered by such insurance schemes, typically spectacles, over products that are not, such as refractive eye surgery.

In addition, there are certification requirements to be met to become a dispensing ECP. Typically university level studies or equivalent, lasting four to six years and board level exams are required to be able to measure, prescribe and fit vision correction products. Ophthalmologists are fully licensed medical doctors, with additional training in pathologies of the eye. This makes the vision correction provider highly influential in the patient’s decision-making process.

1.4. *Euromcontact*

In January 2001 Euromcontact, an organisation made up of the European arms of Bausch & Lomb, Allergan, CIBA Vision, Johnson & Johnson, and Essilor invited London Business School Professor Mark Ritson to explore the issues associated with stagnating growth figures in the contact lens market. Professor Ritson was commissioned to oversee a market research project conducted by 15 MBA students at London Business School.

Euromcontact’s main objective is to increase contact lens penetration rates in key European markets by 50% in two years. These five key European markets –France, Germany, Italy, Spain and the United Kingdom – represent approximately 80% of

the total vision care market. The organisation is relying on the LBS research and findings as a key component in achieving this objective.

Table 1-2

Vision Care Industry Manufacturers

(in \$millions)											
		Allergan		Bausch & Lomb		Ciba		Essilor		Johnson & Johnson (1)	
Total Sales											
2000		1,563		1,772		n/a		n/a		10,281	
1999		1,406		1,765		9,042		1,673		9,913	
1998		1,262		1,605		8,408		n/a		8,566	
US % (last avail)		48%		52%		40%		n/a		54%	
Int'l % ex US		52%		48%		60%		100%		46%	
Europe		n/a		27%		35%		n/a		22%	
Sales CL + CL Care											
			% vs Total Sales		% vs Total Sales		% vs Total Sales		% vs Total Sales		% vs Total Sales
2000		329	21%	1,014	57%	n/a	n/a	n/a	n/a	1,032	10%
1999		360	26%	1,024	58%	0.0	0%	1,506	90%	937	9%
1998		357	28%	965	60%	0.0	0%	n/a	n/a	n/a	n/a
Sales CL											
2000		n/a	n/a	502	28%	n/a	n/a	n/a	n/a	1,032	10%
1999		n/a	n/a	481	27%	n/a	n/a	1,506	90%	937	9%
1998		n/a	n/a	443	28%	n/a	n/a	n/a	n/a	n/a	n/a
Sales CL Care											
2000		329	21%	512	29%	n/a	n/a	n/a	n/a	n/a	n/a
1999		360	26%	543	31%	n/a	n/a	n/a	n/a	n/a	n/a
1998		357	28%	521	32%	n/a	n/a	n/a	n/a	n/a	n/a
Business Areas											
		Specialty pharma: Eye Care Pharma Skin Care Neuromuscular Med Devices & OTC: Ophthalmic Surg. Lens Care		Lens Care Contact Lenses Pharmaceuticals Refractive Cataracts		Pharmaceuticals Generics Eye care products Eyecare medicines Consumer Health Animal Health		Contact lenses Frames (sold CL business to Ocular Sciences)		Pharmaceuticals Consumer products Professional products (incl. contact lenses)	
(1) Professional products only											
Sales are worldwide sales.											
Ciba merged now Novartis. Essilor bought by Ocular Sciences											

A table outlining the basic financial and business profiles of the five firms can be found in Table 1-2 below.

1.5. *The hypothesis to be tested*

As spectacles have been the largest sector and principal driver in the ophthalmic market, many ECPs have concerns regarding the role contact lenses play in their businesses. In effect, many question whether contact lenses are an area of business growth and whether they are worth recommending and fitting.

The combined market intelligence of the Euromcontact members has produced two main hypotheses:

1. One of the key reasons that Contact Lens sales are lower in Europe than elsewhere is because there is a general belief in the optical industry among ECPs, Optometrists, and Ophthalmologists, that contact lenses are not as profitable a form of vision correction as spectacles
2. Contact lenses can be as or more profitable in the retail optical market than other forms of vision correction.

The purpose of this project is to test the first hypothesis and prove the second by performing a market research study that explores perceptions of contact lens profitability and the key commercial opportunities provided to eye care practitioners in fitting contact lenses in the five key European markets identified by Euromcontact. The results from the research, presented herein, create a compelling economic rationale that will be used to educate eye care practitioners and improve confidence in their ability to recommend and fit contact lenses successfully and profitably.

1.6. Research Methodology Overview

1.6.1. Introduction

To analyse the dynamics of the contact lens retail market across the five largest European markets, the London Business School students built an economic model based on primary and secondary market research. Five teams were made up each of three students who were either native to the country they were studying or spoke the language fluently. These teams provided insight into the cultural and business differences in the five countries and gathered data on the ECP industry through country visits.

Throughout the project the researchers remained objective and neutral. The London Business School brand ensured that the research was an impartial academic study and reassured respondents that any findings would be robust and free from bias.

Specific results from the country analysis may be found as indicated in Table 1-3 below:

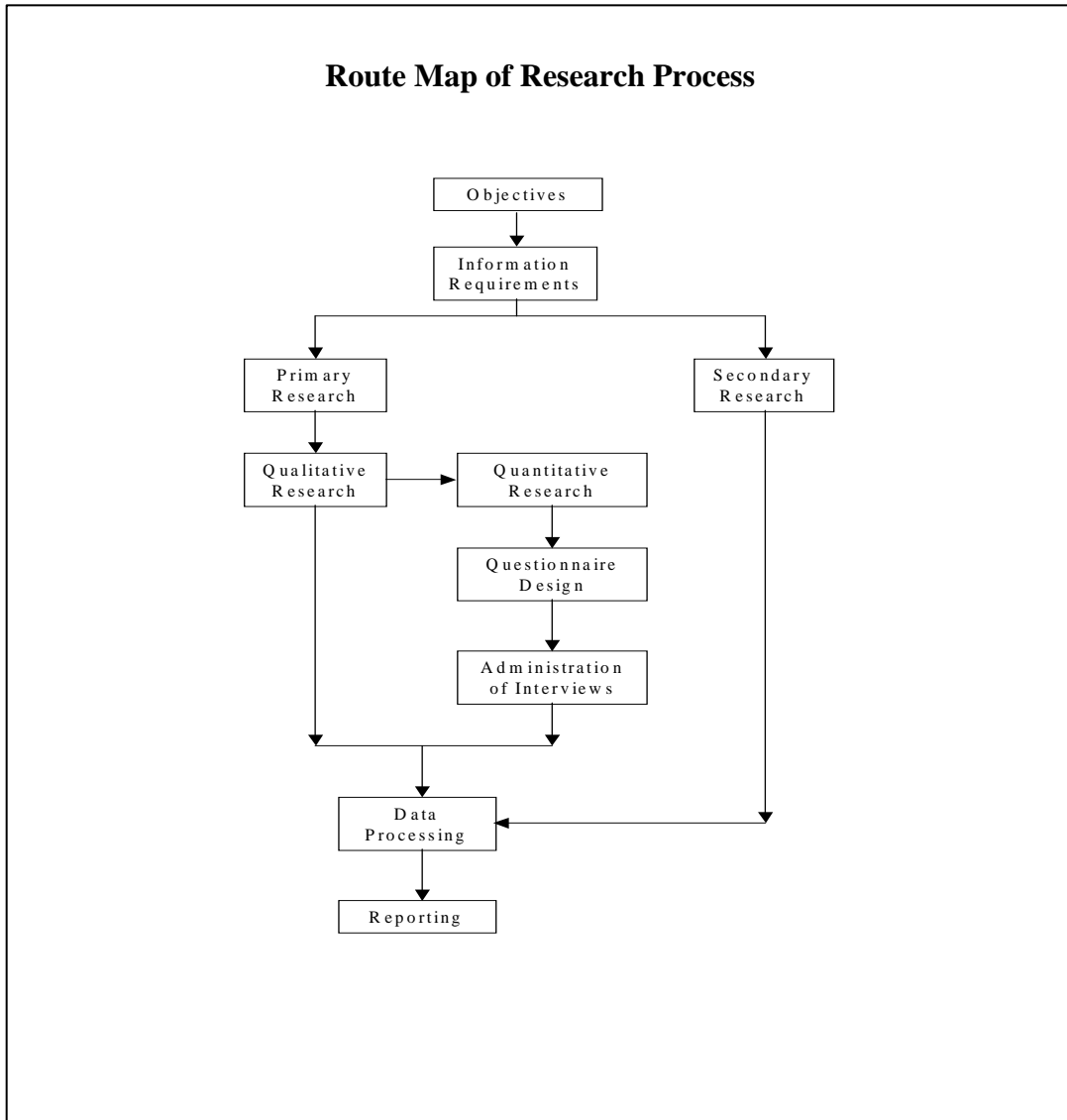
Table 1-3

Content	Location
Qualitative research findings	Chapter 2.7
Quantitative research (economic model) findings	Appendix 1
Interim presentations to Euromcontact of qualitative findings	Appendix 3
Final presentation to Euromcontact	Appendix 4

1.6.2. Route Map of the Research Process

This research was carried out in several stages²⁰ described in the Figure 1-1 below.

Figure 1-1

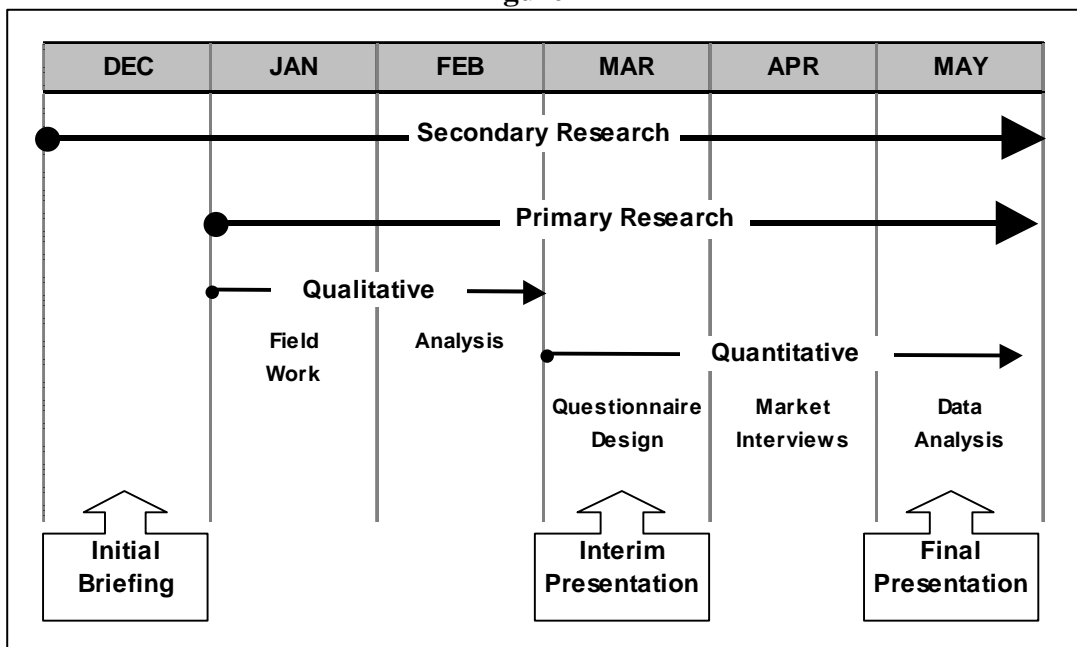


After setting up the objectives of the research, the information requirements and methods of data collection and analysis were then defined. First, qualitative primary research was undertaken by visiting a broad sample of ECPs in each country. The knowledge gained was then used to formulate a quantitative pan-European

questionnaire that was administered by a market research agency. The results of this last research phase were used in conjunction with the qualitative and secondary research to build an economic model of contact lens and spectacles profitability at the retail level.

The research was carried out over a five-month period as shown in Figure 1-2 below.

Figure 1-2



²⁰ Model Based on Paul Hague & Peter Jackson (1996), “Market Research”, p.45

1.6.3. Objectives

The research objective was to model the economic profit of contact lenses and of spectacles.

1.6.4. Information requirements

As shown in the Table 1-4 below, both primary and secondary research was undertaken and different types of data were gathered from each.

Table 1-4

Type of data	1^{ry} Research	2^{ry} Research
Demographic	Yes	Yes
Economic	Yes	Yes
Perceptual	Yes	No

Primary research was sought to obtain economic data with which to populate the model. Perceptual and demographic data was also collected to provide insights into the marketplace and thus to provide possible answers to trends observed in the economic data.

Secondary research was used to support the primary data. Much of this was undertaken following the qualitative phase in order to avoid researchers having pre-conceptions when gathering insights during that phase.