

**ALBERTA OPTICIANS ASSOCIATION ONLINE CONTACT  
LENS DISPENSING MODEL**

by

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## **ABSTRACT**

In this report, a business model is developed for the Alberta Opticians Association as a response to recent changes in the disposal contact lens industry. The model serves as a tool to help opticians to sell contact lenses online and compete with other non-optician online retailers. A series of value propositions are described in this business model, along with details of financial viability and regulatory compliance. This report also outlines the technical, time, and monetary aspects to implementing this model as a website. This report is sponsored by the Alberta Opticians Association, and provides the information for the Council of the AOA to make the decision to go ahead with implementation.

**Keywords:** Alberta; business model; contact lenses; online dispensing; unbundling of services; opticians.

## EXECUTIVE SUMMARY

The disposable contact lens industry has changed over the past decade, and opticians are compelled to consider a new business model. Specifically, opticians are now finding stiff competition from non-optician online retailers that sell contact lenses directly to their existing customer base. An important consideration in the new business model is that in-store services should be unbundled from boxes of contact lenses. This will allow opticians to be more competitive by enabling them to charge lower prices for contact lenses, and separate fees for value-added services. This business model will enable the opticians to start selling contact lenses online and compete through value-added services, rather than through price competition of contact lenses alone.

The concept discussed in this model is embodied as an online tool or website called OpticiansDeliver.ca and is based on a set of compelling reasons for adopting and implementing this website. The model also serves as a template for opticians to operate a regulatory compliant e-commerce store. Based on the available research data provided by Opticians Association of Canada and published by the *Globe and Mail*, there is a market of approximately one million contact lens users who are willing to purchase contact lenses online. Furthermore, OpticiansDeliver.ca allows for seamless online transactions between opticians and the one million contact lens consumers. These consumers are categorized into three types by consumer behaviour.

The cost of building this website is relatively low, at less than \$4,000 per year over three years. Finally, the report strongly recommends the Alberta Opticians Association (AOA) Council to implement the OpticiansDeliver.ca website with the support of other organizations such as the Opticians Association of Canada in order to gain nationwide recognition.

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## GLOSSARY

Cloud	Cloud Computing is Internet-based computing, whereby shared resources, software are provided to computers on demand, like the electricity grid
Contact Lens Fitting	The act of selecting or recommending the design and type of contact lenses required, or the act of performing any test related to assessing physiological safety or suitability
Contact Lens Practitioner	An optician who is educated and licensed to fit contact lenses
Drop shipping	When opticians request the contact lens manufacturer to send products directly to the health care consumer
Health Care Consumer	A person who uses health care services
Online Contact Lens Retailer	Internet-based businesses that sell contact lenses online without professional optician oversight
Independent Optical Stores	Optical stores owned and operated by opticians. These stores are usually not franchises or chain stores
Business Model	A design that exploits new business opportunities, by enabling transactions to occur between opticians and health care consumers
Online Tool	In this report, the tool is the OpticiansDeliver.ca website, which is an extension of the AOA model
Scalability	The technical capability and readiness to handle business growth and productivity

# **1: CHAPTER 1 – INTRODUCTION**

## **1.1 About the Organization**

The Alberta Opticians Association (AOA) was established in 1965 as a self-regulatory professional organization with a mandate to improve the practice of opticianry and ensure quality professional care in eye health. AOA has dual roles of being both a regulatory body as well as an association. It reassures the public that opticians provide competent and effective care to their health care consumers. At the same time, the AOA promotes the interests of opticians in Alberta. Promoting the interest of members is typically the mandate of any association, which include offerings such as membership services, continuing education, professional awareness and business advice. This project falls under the latter of the two roles, which is to promote the interests of AOA's optician members who are “contact lens practitioners.” As of July 5, 2010, the AOA has 224 optician members who are licensed as “contact lens practitioners,” which qualifies them to fit and dispense contact lenses in Alberta. However, while promoting the interest of its members, it is crucial to remember that the AOA also regulates in the public interest. That is, a high standard of care must be simultaneously maintained for the public. The AOA Council of Directors is comprised of government-appointed directors and elected directors chosen from its membership. The Council of Directors is responsible for the submission of annual reports on the business affairs of the Association to the Alberta Minister of Health and Wellness.

## **1.2 The Changing Business Climate in the Contact Lens Business**

Over the past ten years, AOA's optician members have seen an erosion of the profitability of the contact lens business. Consumers often come into an optician's brick-and-mortar optical store to complete a contact lens fitting, then immediately ask for a copy of their fittings, so they can purchase contact lenses from non-optician online

retailers. Meanwhile, these online retailers have grown faster and larger than most brick-and-mortar optical stores. Many opticians cannot compete with large online retailers without engaging in a price war because online retailers typically operate on large economies of scale with large warehouses. Most importantly, online retailers enjoy a cost advantage by not providing services like contact lens fittings. Opticians currently factor in the overhead costs of running a brick-and-mortar optical store, and the time value of conducting contact lens fittings into the price of contact lenses. As a result, opticians cannot compete with the low prices of online contact lens retailers.

Opticians who operate their own businesses lack the time to learn and explore all the available tools to build an online contact lens business. Even after learning the tools, independent opticians do not sell enough volume to achieve the scale or visibility of larger online retailers. Many have not attempted e-commerce at all due to the perception that online sales are cannibalizing their current brick-and-mortar business or online sales are simply incompatible with current optician regulations. A high standard of eye care is specified by AOA optician regulations. The same regulations require opticians to provide follow-up appointments, where opticians must assess the eyes of health care consumers. Currently, online retailers are unable to adopt the same standard of eye care as dictated by the AOA optician regulations. The AOA Standards of Practice for contact lens fittings are included in Appendix A. The AOA permits the use of these Standards of Practice in this project. These Standards of Practice are also available on the AOA website.

### **1.3 Project Goal**

The aim of this project is to address the changing business climate of online contact lens sales, by creating a business model for the optician members of AOA. A business model is a design that exploits new business opportunities, by enabling transactions to occur between opticians and health care consumers, and as a result, making both groups better off (Amit and Zott, 2001). The creation of this new model will depend heavily on consultations with stakeholders, interviews with experienced opticians, and research findings, such as a recent survey performed by Ipsos Reid, a unit of the Ipsos Group. After outlining the business model, the project will discuss the various technological solutions and recommend one that best meets the requirements of the business model.

AOA's optician members as well as other optician professional organizations throughout the country have expressed concern regarding this changing business climate. The members' overall reaction has been to suggest the prohibition of contact lenses sales on the Internet. This is not feasible since a provincial regulator cannot regulate any business located outside of their jurisdiction, and would require inter-jurisdiction collaboration from across different countries and continents. As of May 1, 2010, the British Columbia government changed legislation to allow any retailer to sell replacement contact lenses in-store or online without the involvement of an optician. This shows that governments are not willing and perhaps not able to prohibit the sale of contact lenses online. This change in British Columbia suggests that competition in the contact lens market should intensify.

The strategic response of the AOA is to adapt to the changing business climate by developing a new business model for opticians to offer contact lenses online, without competing solely on price. If opticians do not capitalize on the new opportunity of an online sales channel, then they run the risk of being left behind. The consequence of this could cause opticians to only occupy a niche in the prescription eyewear business.

The proposed new business model is a concerted response to the overall threat of non-optician retailers, and does not aim to engage in low price competition. Instead, the aim of the AOA is to innovate and create a value-added model as part of a professional association. The AOA model identifies several value propositions that appeal to opticians and health care consumers respectively. This model will suggest what value-added services opticians should charge for and what other values or benefits the AOA-sponsored model can give to consumers. The expertise and professionalism of any optician member must have value in the marketplace. When an optician helps a consumer, the optician is adding value to the overall health care experience of the consumer. This model uses an online tool to bring together those who buy contact lenses (health care consumers) with those who sell contact lenses and services (opticians).

## **1.4 Project Structure and Methodology**

This project is jointly sponsored by the Alberta Opticians Association (AOA) and the Opticians Association of Canada (OAC), and developed in consultation with the AOA administration. Maureen Hussey, the Executive Director of the AOA administration, and

Mary Field, the Executive Director of the OAC, have both expressed a strong support for the development of this new business model. Ms. Hussey and Ms. Field will give input on how the model impacts their organization and members.

Michael Tsao, the project manager, and Drew Jefferies, the former Executive Director and currently a consultant of the AOA, will serve as technology specialists to explore the technologies available to support this online business model. Rick Miller, who is a director on the AOA Council, will act as a project advisor working closely with the project manager and is responsible for reporting back to the Council on this matter. Other project advisors, who are not on the AOA Council, will provide feedback on the model and suggest certain opticians to interview. Finally, advisors will work with the project manager to look into specific business aspects of the model such as value-added benefits, market research, and the respective perspectives of the opticians and the consumers.

The project manager interviewed a total of nine opticians for comments and suggestions. All notes from the interviews are aggregated in order to protect the interviewees' identity. In all the discussions contained in this report, only the respondents' initials, province of employment, and number of years in practice are revealed.

A list of key stakeholders who are directly or indirectly affected by the findings of this project is provided below:

- Opticians in Canada will be impacted by this model regardless of whether they use it or not
- Independent optical stores can benefit from a new business model, and also provide the project manager with real-world business insights and numbers for analysis
- Opticians Associations (national and provincial) can provide additional resources and support to positively influence this project. The associations act as a gatekeeper to opticians, and provide legitimacy as a group
- Opticians Council of Canada's "Licensed Optician" campaign is an important complement to this model
- Simon Fraser University MBA project supervisors will advise the project manager and can direct him to available resources, and have a stake in seeing the successful completion of the project

## **1.5 The Organization of the Report**

In Chapter 2, the report explores the changing business climate by identifying value propositions opticians have to offer while analysing the AOA tool to support the value propositions of the business model. A good way to test value propositions in a model is to identify potential challenges as soon as possible. A discussion on challenges to offering these value propositions can be found in chapter 2.

The research findings to support value propositions are presented in Chapter 3. Secondary research data is available through a 2009 survey conducted by Ipsos Reid, and current statistics available from *The Globe and Mail*. An interpretation of AOA standards of practice provides useful insights on the compliance of value propositions with current legislation. Interviews with opticians and consultations with stakeholders also provide insight into the industry.

Chapter 4 details the relevancy of information technology to the success of this project. Findings from previous chapters are used to create a list of features for this online tool. Features must be feasible for the AOA by utilizing available technologies. Special considerations are made to support an efficient and supportable operational process for the AOA.

Chapter 5 consists of the recommendations to the AOA. The final recommendation provides a single and coherent solution with a number of funding options. The AOA created an initial research and development budget to develop this model, after which it will evaluate whether it is desirable and financially feasible to commit additional resources to implement the model. A cost breakdown for implementation is included in this chapter. The initial implementation and launch of the model is beyond the scope of this project. If the AOA decides to implement this model, then it will need to explore more specific choices.

## **1.6 Project Success Factors**

There are some very important factors to keep in mind when proceeding with this project, as they will shape the decisions and analysis throughout the project. These factors have been identified and discussed by the project manager and the sponsors prior to the commencement of the project. First, minimize AOA resource requirements for the operation of the online business model. For long run sustainability, the AOA



online contact lens dispensing model cannot be a drain on the administrative resources of the AOA. For example, a negative cash flow of \$10,000 every year, along with increased workloads on employees may not be sustainable in the long run, and the AOA would be less likely to go forward with implementation. Therefore, in designing the model, the project manager has to consider the resource constraints of AOA.

Second, the "Licensed Optician" professional identity campaign, under the Opticians Council of Canada (OCC) was launched in May 2010 to educate consumers of the benefits of the profession. This campaign can be used to generate interest among opticians to try the AOA model as a response to non-optician online contact lens retailers. This type of campaign could have a positive impact on the overall success of this project. However, if this campaign is unsuccessful, then it could decrease the appetite of opticians to try something new. Even though the organization of the campaign is outside the scope of this project, the AOA model is partially dependent on the OCC campaign.

Third, create value-added features for opticians and consumers. AOA must make it worthwhile to make the switch by giving convincing reasons for opticians and health care consumers to adopt the AOA model. The AOA must give opticians incentives to use this model and give health care consumers what they want.

Fourth, allow opticians to become more competitive. There is a tendency to focus only on price when addressing the competitive online environment. This model is different by having two aims: Allow opticians to drive down the price of each box of contact lenses, and to sell their services as a valuable feature to the health care consumers. These points are very important: Decrease the price of contact lenses, and increase the willingness for health care consumers to pay for value-added services.

## **1.7 Project Authorization**

The Executive Director of the Alberta Opticians Association has authorized the project manager, Michael Tsao, MBA graduate from Simon Fraser University Segal School of Business, to develop this response to the changing business climate for opticians. The total budget for this project is \$3,000, which includes the costs of research and development. This project outlines a new model for opticians to dispense contact lenses. This project is referred to as, "Alberta Opticians Association Online Contact Lens Dispensing Model" or simply the "AOA Model." Michael Tsao is responsible for the

project, and Maureen Hussey will be accountable for bringing this proposed model to the AOA Council. The scope does not include implementation of the online tool, which involves a separate set of costs and discussions.

## 2: CHAPTER 2 – CHANGING CLIMATE AND RESPONSE

### 2.1 Current Situation of Opticians' Businesses

The current practice of many opticians is to charge only for the goods they sell, and build all the costs of services into the price of contact lenses. When health care consumers come into the store and ask for services, then the services will be provided for “free” of additional charges. These services are not really free because the price has been bundled into each box of contact lenses sold. There are other opticians, who charge for each additional service they provide but sell contact lenses at a lower price. These opticians are better off because they make money on goods and services sold. This table below lists the services opticians can currently offer in their brick-and-mortar optical stores. There is a noticeably large time commitment with providing good customer service.

**Table 1 - Services Bundled in a Box of Contact Lenses**

Types of Services		Time Involved
Initial Fitting	Spherical lenses	60 min.
	Toric lenses	60 min.
	Multi-focal lenses	90 min.
	Mutli-focal Toric lenses	90 min.
New Fitting	Spherical lenses	30 min.
	Toric lenses	30 min.
	Multi-focal lenses	45 min.
	Mutli-focal Toric lenses	45 min.
Follow-up Assessment	Two weeks after initial fitting	20 min.
	Two years after initial or new fitting	20 min.
Troubleshooting	Existing patient walk-in	20 min.
	New patient walk-in	30 min.
Auto-refraction	For changes in lens power	45 min.

Note: None of these services are offered by non-optician online retailers

Source: Author

Opticians who bundle service fees into the goods they sell inflate the price of contact lenses, and effectually hide the value of services from consumers. A health care consumer, who does is uninformed about all the services an optician can offer easily takes them for granted. Consumers may know that they need to see an optician at some point but they do not know when or why. Furthermore, the price of a bundled box of contact lenses appears high to the average consumer because the optician has bundled the price of potential future services into contact lenses sold now. As a result, consumers are not willing to pay for an inflated box of contact lenses and wonder why contact lenses are sold for half the price online.

Over the past ten years, e-commerce has created more contact lens purchasing choices for consumers and consumers are now choosing to avoid buying contact lenses that appear to be double the price. Health care consumers can now take contact lens fittings, which is only one of the services opticians provide, and order contact lenses from online retailers. Alternatively, health care consumers take the measurements found on the outside of the box of contact lenses and order refills of contact lenses that way. Most contact lens boxes contain sufficient information for consumers to order refills of the contact lenses from other online retailers. This method is less precise but has definitely become a popular choice among budget conscious consumers. Figure 1 shows the PWR (power), DIA (diameter), and BC (base curve) required to order refills of contact lenses. All consumers must do is match the acronyms on the box to the ones found on the website of any online retailer.

**Figure 1 - Information Available on the Contact Lens Box**



Source: Author

Opticians who continue to offer “free” services have seen consumers come in for fittings but after the free fittings are complete, consumers ask for the fitting information in writing so they can buy contact lenses elsewhere. These consumers are essentially “free-riding” on the knowledge that other consumers may buy in-store or that the opticians will absorb the time cost of performing services. These opticians may only sell one box of contact lenses and never see a consumer again. As a result, an increasing number of opticians have resorted to withholding the release of contact lens fitting information to consumers, which is not the best response.

## **2.2 A Collective Response**

The mindset behind the AOA model is simple: A single collective action to respond to a changing business climate. AOA’s optician members need to realize the current business model is quickly changing, so they must find a way to compete more effectively with online retailers. Consumers want the option to purchase contact lenses online without any optician services bundled into the price, and so opticians must consider a new business model.

This new business model is an online marketplace that allows opticians to sell to health care consumers from a single website. After consultation with Maureen Hussey and Drew Jefferies, “OpticiansDeliver.ca”, will be used as a preliminary name for the website that will embody the concepts of the AOA model: An online shopping mall that specializes in the sale of contact lenses by opticians. This website is different from non-optician online contact lens retailers because a network of opticians will offer services both in-store and online. OpticiansDeliver.ca attracts two groups of people: Opticians and health care consumers, by offering unique benefits or value to both groups. In the following sections, there will be a number of “value propositions,” which are the values or benefits OpticiansDeliver.ca proposes to each group.

## **2.3 Value Propositions for Opticians**

Six value propositions offered by OpticiansDeliver.ca are listed in Table 2. These values propositions directly impact how willing an optician is to adopt this online business model:

**Table 2 - Value Propositions for Opticians**

Value Propositions for Opticians	
2.3.1	Regulatory Compliance
2.3.2	Increased Competitiveness
2.3.3	Greater Visibility
2.3.4	Revenue Recovery
2.3.5	Learning, Setup and Maintenance
2.3.6	Better Tool for Business Management

Source: Author

### **2.3.1 Regulatory Compliance**

Opticians can sell contact lenses online in compliance with rules made under the authority of the AOA as outlined in the Standards of Practice. The AOA Standards of Practice contain a number of “must-do” items for opticians on providing in-person service. The Alberta Opticians Association can use OpticiansDeliver.ca as a way for opticians to dispense or sell contact lenses online in a safe manner, in accordance to the Standards of Practice. In this case, an unsafe manner refers to online sales of contact lenses without the proper oversight or supervision that an optician would normally perform. According to the AOA standard of practice, an optician must “recommend” an annual follow-up after initial fitting is complete with subsequent visits at least every two years. It is mandatory for an optician to recommend follow-up visit every two years but it is still possible to refill contact lens orders beyond two years, as long as the optician find other ways to perform follow-up assessments. The initial contact lens fitting and some follow-up services should be completed in-person but having performed these services in-person, opticians can refill contact lens orders online and ship directly to consumers in the same manner as non-optician retailers.

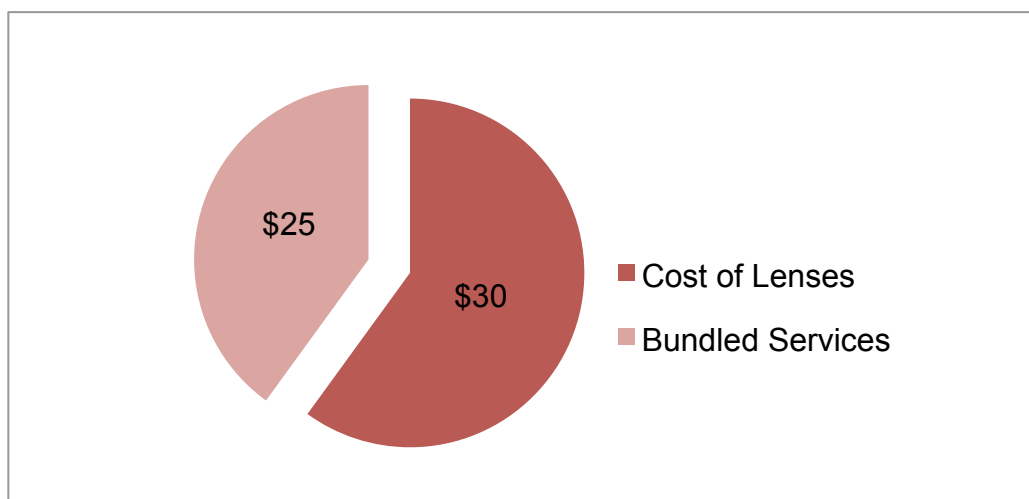
A proportion of assessments can also be made relatively quickly and conveniently, without the need for consumers to physically visit the store. A standard telephone or email questionnaire can be used as a form of follow-up. In the event of a red flag is raised during these convenient assessments, the optician will require the consumer to come in for a follow-up visit. If the consumer refuses to come in, then the optician has the option to discontinue future shipments of contact lenses. A more in-depth reading of the standards of practice and regulations is available in the next chapter.

### **2.3.2 Increased Competitiveness**

Opticians will benefit from the unbundling of services from contact lenses. Services such as contact lens fittings, follow-up assessments, and adjustments should not be promoted as "free" services. This is no longer a competitive business model, as more consumers become "free-riders" and use these "free" services in-store then buy their contact lenses from what appear to be cheaper online retailers. A more contemporary business model ensures that value-added services include a price tag. Although withholding contact lens fitting information to the health care consumer can keep the consumer coming back but it also is becoming an unviable response. Recent rule changes in jurisdictions like British Columbia make it mandatory to release contact lens fitting information at no additional charge to the consumer. If a BC optician must release fitting information at no additional charge, and the optician chose to bundle services into contact lens, then it means this optician is providing services without compensation. The Government of British Columbia (BC) amended the Opticians Regulations on May 1, 2010 (Ministry of Health Services, 2010), and opticians there are now required to give a written copy of the contact lens fittings to consumers at no additional charge. This allows a health care consumer to take those fittings and buy from any contact lens retailer. Although many opticians perceive recent changes in British Columbia laws negatively, this is a useful case study of the impact on competitiveness through government legislation. As of May 1, 2010, if a British Columbia optician does not charge service fees for fittings or other services upfront, then the optician will be susceptible to free-riders who do not pay for services and buy contact lenses elsewhere. As a result, all opticians in British Columbia will want to charge upfront fees for services because "free" is no longer a viable business model.

To become more competitive, AOA optician members on OpticiansDeliver.ca should voluntarily unbundle fees and charge for individual services, so that the price appear more appealing to consumers. In many cases, non-optician online retailers often advertise contact lenses for half the price. Consumers can see that the price is nearly double in brick-and-mortar optical stores and may wonder why. Prices are nearly double because optician services not visible on the box are bundled into each box of contact lenses. The following figure is an estimate of value of services bundled in contact lenses. Even if consumers do not buy any contact lenses from OpticiansDeliver.ca, opticians will still earn revenue by performing value-added services.

**Figure 2 - Dissecting a Box of Contact Lenses**



Source: Author

When services are unbundled from the price of contact lenses, the price drops closer to its wholesale cost and is more competitive with online retailers. Consumers will have the option to purchase unbundled boxes of contact lenses, but realize the value of services when they have to pay extra for it. Opticians who unbundle their services will also be prepared if the legislative changes of British Columbia happens in Alberta. The Alberta Opticians Association can prepare itself for this type of legislative change in Alberta by creating an environment that prevents opticians from competing with each other in a cut-throat way. Opticians who subscribe to OpticiansDeliver.ca will voluntarily unbundle their services, and charge fees for initial fittings and subsequent services. This allows for upfront service revenue, and profits from the contact lens products they sell. A project advisor suggested that opticians on OpticiansDeliver.ca could attempt to make bulk contact lens purchases and achieve the volume discounts many online retailers have.

However, OpticiansDeliver.ca does not aim to only achieve lower contact lens prices. It also aims to offer consumers the option of paying for value-added services when they need it. Currently, non-optician online retailers concentrate on volume sales and have no means to offer value-added services, so they focus on selling only goods. A lack of brick-and-mortar storefronts also makes it difficult for online retailers to have space to perform in-person assessments with specialized equipment such as a keratometer. Consumers must still go to an optician for these important services. Once consumers are required to pay service fees, they will realize what they are not receiving from the non-optician online retailers. Chapter 3 includes a list of suggested fees that



opticians can charge. A price analysis is also included, which suggests a competitive price for unbundled contact lenses.

### **2.3.3 Greater Visibility**

A recent campaign has allowed LicensedOptician.ca to generate greater public awareness than any single optician website. OpticiansDeliver.ca should be tied to the national professional awareness campaign at LicensedOptician.ca. The two project sponsors: Alberta Opticians Association (AOA) and the Opticians Association of Canada (OAC) can use their influence to champion this cause among other opticianry groups.

Many opticians do not have the time to research online advertising and available online tools, such as Google AdWords and Google DoubleClick. OpticiansDeliver.ca can do it for them by using a range of sophisticated online tools. Advertisements can be aimed at a selected geographic area, such as Alberta specifically or Canada in general. This greater visibility through public awareness and advertising could become a large value-added feature for opticians. If online advertising is provided for opticians, then a willingness to pay for subscription fees to OpticiansDeliver.ca increases. After a free trial at launch, the AOA may consider a fixed subscription fee to help pay for the costs of running OpticiansDeliver.ca. Chapter 5 explores this fee and associated charges to encourage quick adoption of this website by users.

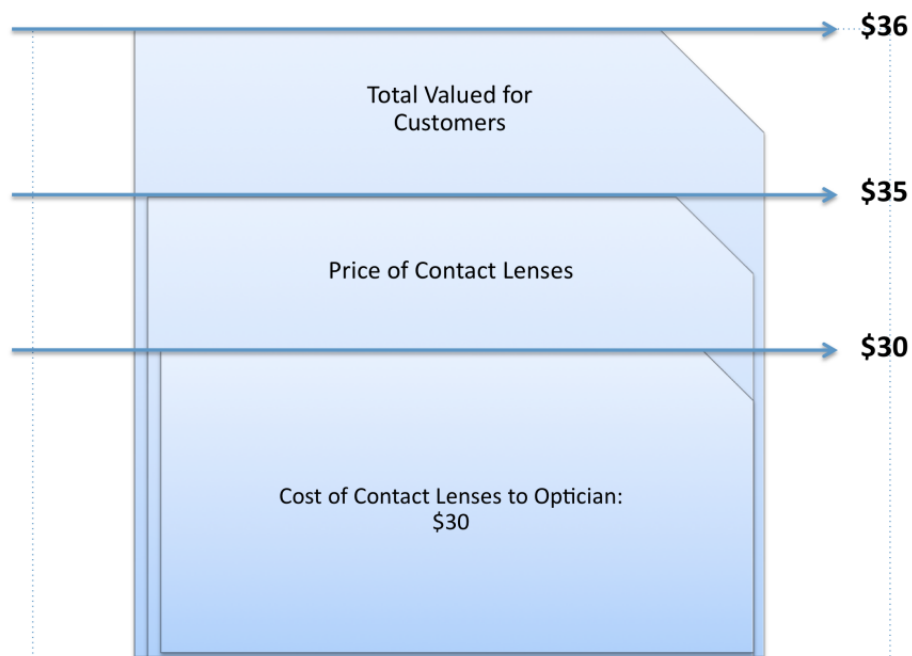
### **2.3.4 Revenue Recovery**

If opticians offer a more competitive product through unbundling, then they can recover lost contact lens sales. Once opticians unbundle services, they will be able to bring the price of contact lenses within range of its online competitors. For example, assume the price of a box of contact lenses is \$30 at a non-optician online store, and \$55 at Oliver the optician's brick-and-mortar optical store. Oliver's price is nearly double because he bundles all his services into the price of contact lenses. It is difficult to explain an additional \$25 worth of value-added services to consumers, so consumers choose to buy from the non-optician online store. In the alternative scenario, if Oliver joins OpticiansDeliver.ca, he can unbundle his services and charge \$35 per box. Oliver's contact lenses may still be \$5 more expensive than the cost of online retailers but it is now within a competitive range that it is easier to explain to the consumer. Once the health care consumer realizes there is a \$6 benefit when buying from Oliver on

OpticiansDeliver.ca, the consumer will be \$1 better off. On the other hand, the consumer will not be any better off when he or she spends \$30 to buy from an online retailer that sells the bare box of contact lenses at near cost and no additional value or option of in-store services.

So far, the assumption is that consumers are willing to pay more to buy from an optician. Under section 2.4 of this chapter, there is a discussion on what value offered by the OpticiansDeliver.ca will be worth the price difference to consumers, and what is the acceptable price range. The above example is illustrated in Figure 3.

**Figure 3 - Consumer Willingness to Pay**



Source: Author

### **2.3.5 Learning, Setup, and Maintenance**

OpticiansDeliver.ca will be easy to learn, set-up, and maintain. A series of simple steps will guide the optician to setting up an online store at OpticiansDeliver.ca. With normal website set-up, Oliver the Optician would have to pay annual fees for domain registration, web hosting, secure socket layer (SSL) certificates, and other software or

services required to operate an online store. Oliver would also market and search engine optimize his own website, in order to make his website more visible among other online websites. However, OpticiansDeliver.ca simplifies the above steps by building and maintaining the online tool for the optician.

Since the AOA pays for the costs of setting up and maintaining OpticiansDeliver.ca, it may be appropriate to charge members for using it. After a free trial at launch, opticians using this tool might pay a flat-rate subscription fee to help with the costs of operating the site. Optician users could also afford a monthly or annual subscription fee but since this is an initiative of an opticians' association, so subscription fees will only help recover costs.

### **2.3.6 Better Tools for Business Management**

Online shopping means better tools for measuring sales projections and inventory management because free powerful online tools are available for e-commerce. Opticians who join OpticiansDeliver.ca will be able to use popular online tools to analyse their sales projections, and help manage in-house inventory. This is especially relevant to Oliver, the independent optical entrepreneur, who needs all the available help to make his business more efficient.

## **2.4 Value Propositions for Consumers**

Six value propositions offered to health care consumers are listed in Table 3. These values appeal to different types of consumers, and a summary of consumer type is discussed after the following value propositions:

**Table 3 – Value Propositions for Consumers**

<b>Value Propositions for Consumers</b>	
2.4.1	Only Pay for Services Needed
2.4.2	Customer Service from a Network of Opticians
2.4.3	Online Contact Lenses Sold by Opticians
2.4.4	Guaranteed Insurance Coverage
2.4.5	Convenience and Mobility
2.4.6	Combined Online and In-store Options

Source: Author

### **2.4.1 Only Pay for Necessary Services**

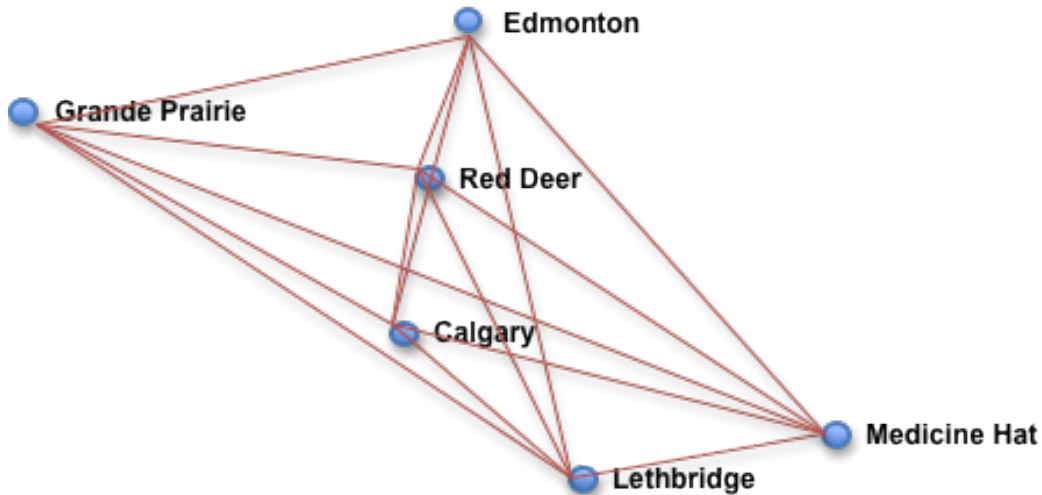
As long as bundling persists, consumers who do not require contact lens fittings continue to pay for the bundled price of a box of contact lenses for as long as they buy from their optician. This makes the optician less price competitive in an ever-more competitive industry. As for other services, health care consumers are not informed about the services they need and when they need it. They do not want to pay a high price for bundled packages upfront, and would rather pay for what they need when they need it. Opticians that join OpticiansDeliver.ca will be able to unbundle their services for consumers, offering health care consumers choice.

### **2.4.2 Customer Service from a Network of Opticians**

As part of a concerted effort, opticians who join OpticiansDeliver.ca will encourage healthcare consumers to “ask for an optician” by agreeing to provide services for each other’s consumers. Contact lenses can be serviced and supported by a network of opticians. This will ease the sense of guilt consumers have about buying contact lenses from online retailers, then bringing lenses into an optician when they experience problems. Consumers who shop on OpticiansDeliver.ca will be able to visit any optician on the network, guilt-free.

The result is a “network effect” on the supplier network (Metcalfe, 2007), where a new optician is attracted to participate in the OpticiansDeliver.ca model as the optician’s services for its consumers will be enhanced by the accessibility and support of existing opticians in the same network. Once the network reaches a critical mass, both consumers and opticians will reap the benefits of this network, as more opticians are available online. As illustrated in Figure 7, when going to a member optician of AOA in any city, health care consumers can be assured that they are welcome to receive services in all other cities.

**Figure 4 - Network Map of Major Alberta Cities**



Source: Author

Each additional optician who joins becomes another point on the grid that can support and broaden this network, and each optician can become an advocate for the network, making the support network wider and more effective. Small optical stores can appear much bigger by conveying to the customers that they are well looked after by any optician on the network. Opticians on the OpticiansDeliver.ca network will service each other's consumers, and share patient files that help other optician members to provide relevant services on a need basis.

### **2.4.3 Online Contact Lenses Sold by Opticians**

Online contact lens products sold by regulated opticians are different than those sold by non-optician online retailers. For various reasons already mentioned, opticians do not sell contact lenses online. Therefore, all online retailers for contact lenses are simply warehouse-like businesses where consumers buy products directly, without a visible connection to any health professional. If something is not right, there is no regulatory body to complain to or an enforcement mechanism to resolve complaints. The health care consumer will have little recourse and must depend on the goodwill of the online retailer.

Consumers of OpticiansDeliver.ca are assured that opticians selling contact lenses know what they are doing because they are registered with the opticianry regulatory body in Alberta. Opticians are required to carry liability insurance to cover any

losses, and risk losing their license if there is disciplinary action. The OpticiansDeliver.ca model can be compared to Amazon.com, which has registered and approved sellers who are accountable for any problems. Whereas buying from other online retailers will be more like buying a watch from Craigslist or a garage sale “buyer beware” because the only real recourse consumers have is through litigation.

#### **2.4.4 Guaranteed Insurance Coverage**

There is guaranteed insurance coverage for health care consumers who buy from opticians. Some insurance companies offer optical insurance coverage even if the insured does not purchase from a health professional, while other insurance providers only cover purchases from a health professional. As a result, the sure way to have guaranteed optical insurance coverage when shopping online is to purchase from a source like OpticiansDeliver.ca. Insurance coverage is highly advantageous to opticians because it serves as a subsidy. Consider this example: Before opticians sold contact lenses online, Harry the health care consumer, has \$100 worth of extended health insurance coverage for eye care per year. Harry is presented with a dilemma: Buy an annual supply of contact lenses from an online retailer for \$100 by paying out of his own pocket, or buy in-store from an optician for \$200 then send the receipt to the insurance company for a \$100 refund. There is no real difference to Harry in this scenario but filling out paper work is a hassle, so Harry buys online.

OpticiansDeliver.ca presents a situation to Harry's advantage. Opticians in the network sell an annual supply of contact lenses online at \$125. With insurance coverage, Harry is reimbursed \$100 per year and only has to pay \$25 per year out of his own pocket. In this new scenario, Harry would choose to purchase from OpticiansDeliver.ca because he saves \$75.

#### **2.4.5 Convenience and Flexibility**

Convenience and flexibility improves for the healthcare consumer who typically shops at a brick-and-mortar optical store. If a contact lens wearer wants to refill contact lenses while on vacation, the optician can ship the contact lenses overnight to the consumer. The consumer no longer has to worry about running out of contact lenses in an unfamiliar country, or having to find a new optician in a new city.

## 2.4.6 Combined Online and In-store Options

OpticiansDeliver.ca enables opticians to offer online and in-store shopping options. Currently, there is no overlap between the distribution methods of online retailers and brick-and-mortar optical stores. Online retailers do not offer in-store services, and brick-and-mortar optical stores do not offer contact lenses for sale online. However, with OpticiansDeliver.ca, it is beneficial for the healthcare consumers to know there is a brick-and-mortar optical store they can go to buy a product without having to wait for shipping or simply browse and try the products in-store.

This is the very same advantage the bookstore, Chapters, has over Amazon.com. Chapters' customers can purchase a book in-store if they do not want to wait for shipping, or purchase online if they are willing to wait. While, a Amazon.com customers determine whether a book is worth reading based on reviews, then they order the book from the online store and return it if it does not meet expectations. The customer would have to pay for shipping to see the product, and shipping to return the product if it does not meet expectations. More importantly, Chapters customers may go to the brick-and-mortar store to flip through a book and see if it meets expectations, then decide whether to buy it in-store from Chapters or online at Chapters.ca. As a result, the consumers bear less risk when making purchases because they can evaluate the product at a brick-and-mortar store. Likewise, OpticiansDeliver.ca enables the consumers to go in-store to talk to opticians about a new type of contact lens, and proceed further to pay for fittings and trial lenses. Once consumers had an opportunity to evaluated the new type of contact lenses in-store, they can then decide whether to purchase in-store or online.

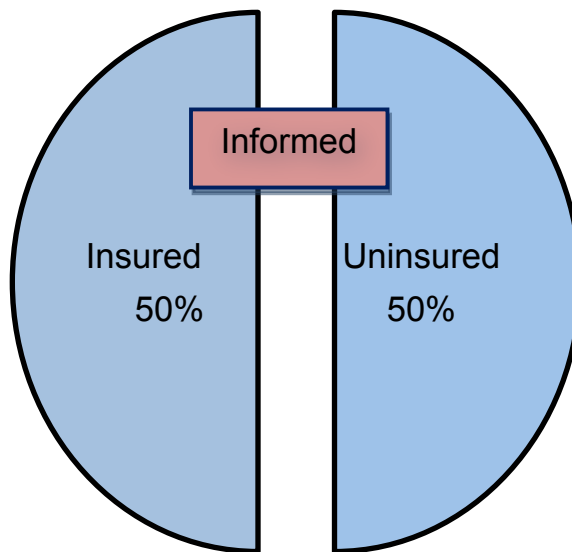
The benefits of already having an in-store location should not be underestimated. Since opticians already have on-going relationships with contact lens manufacturers and need to stock inventory for brick-and-mortar store locations, opticians have the option to request manufacturers to drop-ship contact lenses directly to health care consumers, especially on larger orders. Drop shipping is when the optician requests the contact lens manufacturer to send products directly to the health care consumer, thereby saving the optician the cost of shipping. This allows opticians to either pass on some cost savings from drop shipping to health care consumers or keep the savings to themselves. According to a project advisor, Ciba Vision currently offers drop shipping directly to health care consumers. Opticians can ask their contact lens manufacturers for a price

list that shows the quantity or purchase value that qualifies for drop shipping. Even without drop shipping, opticians ship the inventory available in-store, thereby increasing the speed of inventory turnover.

## 2.5 Customer Types

Health care consumers who purchase from opticians are generally informed about the value offered by an eye-health professional. As illustrated in Figure 5 below, informed consumers are separated into two categories by their insurance coverage, namely, Informed-insured, and informed-uninsured, and the rest are uninformed consumers. Each type of consumer responds to price differently by behaving in different ways.

**Figure 5 - Customer Characteristics**



Source: Author

**Insured and Informed** customers welcome the option of buying on OpticiansDeliver.ca and being reimbursed by their insurance providers. They finally have an official means of having insurance coverage for online contact lens purchases. These consumers no longer have to unnecessarily pay for contact lenses out-of-pocket. Instead, they can use the savings to pay for optician services.



**Uninsured and Informed** customers perceive the value-added features of OpticiansDeliver.ca as something they would pay for only when needed. Most consumers do not like to pay for upfront services, and would prefer to delay such services for as long as possible. They are likely the same consumers who obtain contact lens fittings to purchase contact lenses online, but still take contact lenses to an optician if they have troubles or questions. A small proportion of the consumers in this group will however accept higher prices from opticians in OpticiansDeliver.ca in order to maintain the relationship for future in-store services.

**Uninformed** contact lens wearers are customers who generally undervalue the importance of the services opticians offer. Some even consider lenses simply as, “just two pieces of plastic.” They have the potential to become better informed to appreciate the knowledge and expertise behind eye care. This group of consumers is simply looking for the lowest price. They often wear the same lenses until they feel discomfort before changing for a new pair of contact lenses. Many often view a “fitting” as red tape that they just have to deal with. Ultimately, the most important factor that determines their buying decision is the price per box. They are likely to go to an optician who offers “free fittings,” and then ask for the fitting details so that they can buy in bulk online.

The above characterization illustrates the representative types of consumers, but not every consumer fits neatly into a type. For the purpose of this report, these types help the AOA model to focus on the right types of consumers. To enhance the usage of OpticiansDeliver.ca, opticians should focus on selling to two types of consumers: insured-informed consumers and some uninsured-informed consumers. Still, they must constantly promote consumer awareness of value-added services and the importance of these services for better eye care. The long-term goal is that more contact lens wearers would become informed consumers.

According to Statistics Canada and Essilor International as cited in *The Globe and Mail* (Globe and Mail, 2009):

- 17 million Canadians require corrective lenses
- 19% North Americans wear only contact lenses
- 50% of Canadians have eyewear insurance

There are 17 million Canadians who require corrective lenses, and 19% of them wear only contact lenses, which suggests there are roughly 3.23 million contact lens wearers in Canada. Furthermore, according to an Opticians Association of Canada survey

conducted by Ipsos Reid (attached as Appendix B), 31% of 3.23 million consumers are willing to purchase on the Internet, which means there are just over 1.00 million potential health care consumers who might buy from OpticiansDeliver.ca, and half of these consumers have eyewear insurance. With the above approximations, consumers can be further divided by consumer characteristics:

- Approximately 500,000 consumers have eyewear insurance coverage, and is the primary target for OpticiansDeliver.ca
- Approximately 500,000 consumers do not have eyewear insurance coverage, and is the secondary target for OpticiansDeliver.ca

These are approximations as there are possible regional differences between Canadian and North American preferences. Additionally, the 31% of consumers who are willing to purchase from online retailers could increase if more health care consumers become comfortable with purchasing health products online.

## **2.6 Challenges to Adopting an Online Model**

There are challenges to overcome before opticians and healthcare consumers embrace OpticiansDeliver.ca. Either the AOA model has to make accommodations for these challenges or opticians have to adjust their state of mind to re-examine the current business climate.

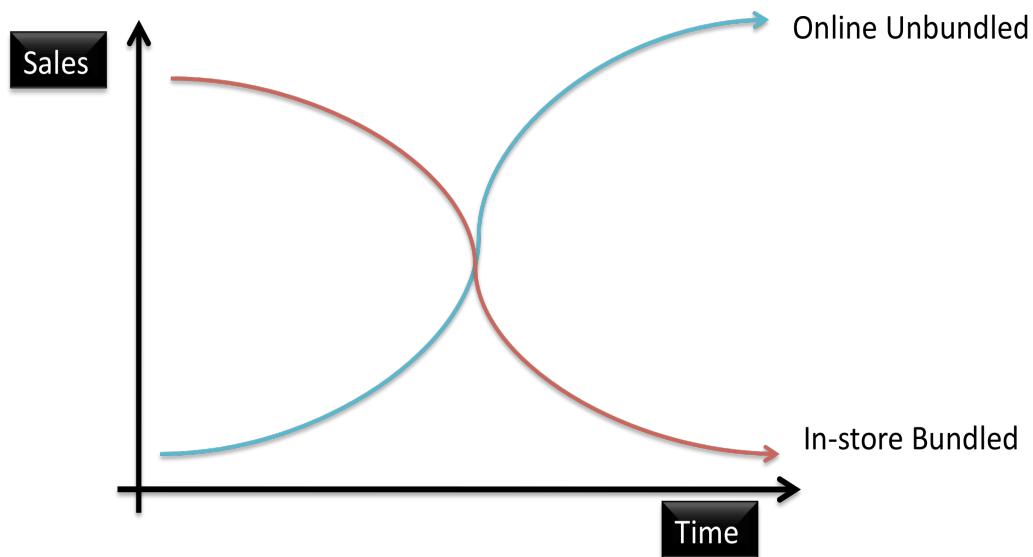
### **2.6.1 Cannibalism**

When asked about selling contact lenses online at an unbundled price, many opticians' instinctive response is apprehension of cannibalism. "Why would I go after my own in-store sales? If I ask my customers to go online, they will stop coming into my store." Research findings show 31% of consumers would buy contact lenses online, so opticians should offer an online option to these consumers. The other 69% of consumers who prefer to purchase in-store will likely become more comfortable with purchasing online and gradually shrink in size. Opticians must be persuaded to recognize that the status quo is a declining business model, and online sales of contact lenses are continuing to grow.

The figure below (Figure 6) demonstrates this trend and the choices opticians have to make: Continue on the curve of a certain declining business model (Red), or

innovate and become part of an uncertain growing business model (Blue). This is not drawn to scale but is used to illustrate the current trend. In the declining phase of the current business model, those who innovate and shift their current sales to an online model are better adapted for change in the industry. Those who do not change will likely resort to providing niche services.

**Figure 6 - Trend of Two Business Models**



Source: Author

A good example of a brick-and-mortar to online business model is Chapters the bookstore. Over the last 20 years, many independent bookstores have closed due to the rapid growth of online bookstores like Amazon.com. Consumers have the option to browse books at their leisure in a brick-and-mortar store, and then go on Amazon.com to order the same books for half the price. Bookstores with no online alternative that offers lower prices have gradually disappeared. This sounds similar to some brick-and-mortar optical stores that offer free services or free advice to their consumers. These consumers then take that advice to buy contact lenses online.

If Chapters had kept the old business model of selling books in-store, then Chapters would only sell books in their brick-and-mortar stores in an ever-shrinking method of distribution. Chapters would become an antiquated and old-fashioned store that only sells books in-store. Over the past decade, book lovers have found fewer and

fewer independent bookstores, and saw more and more online bookstores. Fortunately, Chapters did not become antiquated because it also began selling books online.

Online retailers such as Amazon.com continued to look for new ways of selling books. Now Amazon.com allow customers to purchase e-books online through an e-book reader called the “Kindle”, so Chapters quickly followed-suit and also added e-book readers to their business model in a growing but uncertain market. Chapters has an online store on Chapters.ca, and an e-book reader called the "Kobo" ([www.kobobooks.com](http://www.kobobooks.com)) that allows them to compete with Amazon’s “Kindle.” Opticians must also innovate and adopt new business models, even though it may appear that one is undercutting sales by offering a competing product online. It is really all about offering an online alternative for current customers who are looking for a different way of buying contact lenses.

### **2.6.2 Potential Liabilities**

Opticians will want to know the extent of their liabilities. If opticians provide contact lens fittings details to consumers, would opticians be liable if consumers bought elsewhere? According to the AOA, opticians would only be liable for their mistakes relating to fitting, and not for the mistakes of online retailers selling the contact lenses.

### **2.6.3 Higher In-store Prices**

Opticians who make goods and services immediately available in-store should continue to charge higher prices in-store, just like how Chapters sells books at its full price in stores and at a discount online. If customers enjoy and value going into a bookstore and ordering a coffee while they browse a large selection of books, then customers will pay the full cover price for books. However, customers who do not require in-store value-added services will not to pay for them when they buy books online. Price differences are necessary in this new climate and exist in many industries. Online prices are lower than in-store prices, leaving the consumer with the choice to “get it now” or wait for shipping. Opticians must be comfortable with charging different prices for online and in-store consumers.

#### **2.6.4 Exposure to More Competitors**

Health care consumers will not immediately know who the other opticians are on OpticiansDeliver.ca and where they are located. In the Age of Information, consumers should be able to order from any optician on the network without restrictions. The benefit of this AOA model is that every optician who unbundles their services will end up with a similar cost structure for contact lenses. Once this happens, the contact lenses sold online should result in a similar price range, in the same way Amazon.com sellers often price the same products to within a few dollars of each other.

#### **2.6.5 Competition from Products Priced for Other Markets**

There is a growing awareness that some online retailers are selling products priced for a different market at below the cost of Alberta opticians. Grey market products exist in many industries, from computer electronics to software, and contact lenses are no exception. For example, Microsoft software in Thailand is a fraction of the cost in Canada. Consumers in developing countries need the same products, so price differences between countries reflect drastically different income levels. Manufacturers do not like retailers taking products meant for one market (Thailand) to be sold to another market (Canada). In a globalised economy, consumers end up with more choices with better access to information and the movement of goods.

#### **2.6.6 Giving Consumers What They Want**

Over the past decade, opticians saw a large change to the industry, as the Internet allows for easier online shopping, better price comparisons, and exposure to more competition. All this increases the purchasing power of consumers. Online retailers have found ways to give consumers what they want by unbundling services, and just selling contact lenses. Opticians must realize they are not giving in to online retailers by competing online; rather, opticians are giving health care consumers what they want.

## **3: CHAPTER 3 – RESEARCH FINDINGS**

Chapter 3 is an interpretation of findings and quantitative data to support the value propositions for OpticiansDeliver.ca. Findings include interviews with opticians in Alberta and British Columbia and an interpretation of how OpticiansDeliver.ca is compliant with rules and regulations. Quantitative research data is available in a referenced 2009 Ipsos Reid survey, which quantifies the attitudes and behaviours of health care consumers.

### **3.1 Qualitative Findings**

Sometimes consumers initiate the consumption of value-added services. They come in to the optician when they realize the need for a specific service or when there is a problem: e.g. they cannot see as well as before or feel discomfort with their contact lenses. At other times, opticians initiate the consumption of services due to a requirement of the standards of practice, or when opticians believe a particular service is necessary for the consumer. Services initiated by opticians are addressed in this section are directly related to the standards of practice. By interpreting the standards of practice, this report will show that it is entirely possible to sell contact lenses online and abide by the AOA rules.

#### **3.1.1 Rules and Regulations: Standard of Practice 3**

Let us first examine the standard of practice that could be a barrier to the sale of contact lenses online (AOA, 2010, Standard of Practice, p.6):

A Contact Lens Practitioner [optician] must be on the premises when contact lenses are being dispensed subject to the requirements for dispensing corrective lenses in Standard 7. A Contact Lens Practitioner may put aside contact lenses, for which the client has already been assessed for pick up by the client. Without permission of a Registered Contact Lens Practitioner, no one shall dispense contact lenses from a location. The Contact Lens Practitioner will be held accountable for all contact lenses sold, dispensed or adjusted from the dispensary.

At first glance, it appears that an optician must be on premise, which would mean contact lenses could only be dispensed or sold in-store. However, this would only be a partial understanding of the standards of practice because contact lenses may be “put aside” for pick up by the client (consumer), as long as the client has already been assessed and the optician is held accountable for contact lenses sold. Putting aside the contact lenses for pick up intends to make it convenient for opticians and health care consumers. There is no real difference if consumers pick up contact lenses in-store, at the post office, or most importantly, at their mailboxes at home.

### **3.1.2 Rules and Regulations: Standard of Practice 5**

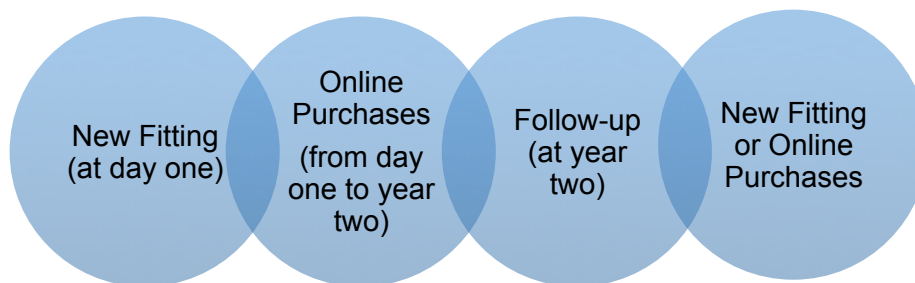
After completing new fitting requirements, health care consumers can begin ordering contact lenses online at [OpticiansDeliver.ca](http://OpticiansDeliver.ca), while opticians will abide by the AOA Standards of Practice and recommend follow-up services at regular intervals (AOA, 2009, Standard of Practice 5, p.9):

At each subsequent visit date and changes made must be recorded. Initial follow up rechecks should be done within the recommended lifetime of a disposable lens or within one month for a non-disposable lens. This recheck must be after sufficient trial period according to the lens specifications. Annual follow up is recommended after initial fitting is complete and subsequent visits are recommended at least every two years. At each subsequent visit date and changes made must be recorded. Initial follow up rechecks should be done within the recommended lifetime of a disposable lens or within one month for a non-disposable lens. This recheck must be after sufficient trial period according to the lens specifications.

An annual follow-up is recommended after the initial fitting is complete, and subsequent follow-up visits are recommended at least every two years. Opticians could also follow up via other means: phone, email or online questionnaires. Opticians can conduct follow-up through a series of questions to help gauge the health of consumers, and allow consumers to continue to receive refill shipments of contact lenses. If no problems are identified, then consumers continue to make online purchases but if there are problems, then opticians would troubleshoot or perform a new fitting. At that point, an optician would ask the consumer who is experiencing problems to come in for an in-person assessment, and the optician may stop further shipments of contact lenses to

that consumer until the problems are resolved. Consumers can continue to order contact lenses on OpticiansDeliver.ca as long as their optician believes, in their professional opinion that the consumer can continue to wear contact lenses without harm. OpticiansDeliver.ca aims to reach health care consumers who appreciate the care offered by opticians. If some consumers do not appreciate value-added care, then they should purchase from non-optician online retailers that sell bare boxes of contact lenses. Figure 7 shows the ideal cycle of services provided by opticians to healthcare consumers.

**Figure 7 - Ideal Service Intervals**



Source: Author

### **3.1.3 Rules and Regulations: Release of Consumer Information**

Provincial regulators in Alberta and British Columbia have standardized forms for release of information and requirements of what to include in consumer (patient) files. OpticiansDeliver.ca would only need to adapt these forms for online use. Standardized online forms can help digitally transmit consumer information so multiple opticians can provide service to the same person. This method of transmission allows for two things: a way to document health care consumer permission to release information to a different optician, and easy sharing of files between opticians on the network. The exchange of consumer (patient) information is crucial for opticians to operate smoothly in a network, and templates can be developed gradually by the community of opticians on OpticiansDeliver.ca.



### **3.1.4 Findings: Ambiguous Rules and Regulations**

Rules and regulations are general enough to apply with discretion to most scenarios. In uncertain cases, the OpticiansDeliver.ca can easily circulate or publish articles online to give opticians better clarity. The publication of articles to clarify ambiguity is a regular part of the AOA's administrative work, so similar publications on OpticiansDeliver.ca will mostly be re-posts of information already on the AOA website. Re-posts are a way of highlighting specific articles that are relevant to opticians who dispense contact lenses online.

### **3.1.5 Findings: Educating Users**

In my interviews with opticians and stakeholders, there was a consensus that educational information for opticians and consumers must be updated on OpticiansDeliver.ca. For example, health care consumers may not understand why it is so important that they see an optician after wearing the same brand of contact lenses for two years. To educate consumers, an optician on the network may volunteer to write an article or produce a web video that will become an archive of online advice for consumers. This archive of educational content will help consumers, as well as opticians, keep up with changes in eye care and technology. For example, a contact lens specialist noted that certain new contact lens products may cause discomfort for some wearers during an initial period of adjustment. This will be useful information for consumers who are switching brands, reminding consumers that they may need to see an optician before switching and during the initial period of adjustment. Depending on the number of optician volunteers who are willing to contribute content, consumers could see other topical articles or videos on OpticiansDeliver.ca. The administrative costs of educating users are low for the AOA because it could utilize the time and knowledge of a pool of opticians to write articles and generate useful content.

## 3.2 Opticians Interviews

**Table 4 - Optician Contributors**

<b>Location</b>	<b>Experience</b>	<b>Initials</b>
Alberta	20+ years of Experience	R.M.
Alberta	20+ years of Experience	D.J
Alberta	20+ years of Experience	I. M.
Alberta	20+ years of Experience	S.S.
British Columbia	20+ years of Experience	R.P
British Columbia	20+ years of Experience	Z.M.
British Columbia	20+ years of Experience	K.S.
British Columbia	20+ years of Experience	R.S.
British Columbia	20+ years of Experience	D.S.
British Columbia	20+ years of Experience	J.M.

Source: Author

The project manager interviewed nine opticians in Alberta and British Columbia. All of whom have over 20 years of experience and have operated a contact lens dispensary. Excerpts from this report were circulated to them prior to the interview, and interviewees were asked to give feedback. One of the most important outcomes from interviews was a list of suggested fees for services opticians typically provide. This list of suggested fees in Table 5 is not exhaustive but is only a reflection of what happens in a typical contact lens dispensary. The suggested fees are only a guideline, and it is ultimately up to the opticians on OpticiansDeliver.ca to set their own fees.

**Table 5 - Types of Services and Suggested Fees**

<b>Types of Services</b>	<b>Details</b>	<b>Fees</b>
Initial Fitting	Spherical lenses	\$50
	Toric lenses	\$60
	Multi-focal lenses	\$60
	Mutli-focal Toric lenses	\$75
New Fitting	Spherical lenses	\$25
	Toric lenses	\$30
	Multi-focal lenses	\$30
	Mutli-focal Toric lenses	\$50
Follow-up Assessment	Two weeks after initial fitting	-
	Two years after initial or new fitting	\$25
Troubleshooting	Existing patient walk-in	\$25
	New patient walk-in	\$25
Auto-refraction	For changes in lens power	\$50

Source: Author

### **3.2.1 Issue Raised: Switching Costs**

Switching costs are defined as the time, monetary, or even emotional costs of changing the way one conducts business. This issue was raised earlier in Chapter 1: continue to stay on the curve of a certain declining business model or adopt an uncertain growing business model. This is one of the most difficult decision for opticians, and sympathetically so. An optician who pays \$5,500 a month for 1,100 square feet of retail space has large overhead costs. If opticians tell in-store consumers about unbundled online contact lenses, potential consumers may just go online. This might not be worth the risk for some opticians. Owners of a previously flourishing business model are often the least willing to respond to a large change because they have the most to lose. Those with high overhead costs will have higher switching costs and be less willing to send their customers to OpticiansDeliver.ca. This is very rational because they worry that online consumers will not help pay for in-store overhead costs.

The switch has to make business sense for individual opticians. Some opticians will have lower switching costs because they have fewer in-store overhead costs or have seen online retailers already erode a large client base. The risk is lower for these opticians, and so they would be more willing to use OpticiansDeliver.ca. Opticians who have mobile practices without high overhead costs will have the least to lose, and thus they will probably be the most willing to adapt. OpticiansDeliver.ca can be a very useful

tool but it is a not a one-size-fits-all tool. Switching costs vary among opticians and is an issue that cannot be resolved by this report.

### **3.2.2 Issue Raised: Incompliant Consumers**

Some contact lens wearers are also uninformed as to how long contact lenses can be worn or when to see an optician for a follow-up assessment. If consumers are not compliant with wear schedule, then it could impact the ability for opticians provide assessments and follow-up services. This would cause opticians to discontinue the online sales of contact lenses. Education is the best option for this type of consumer. Some consumers will try to extend the recommended wear schedule of their contact lenses regardless of where they purchased them.

### **3.3 Price analysis – Cost-Benefit Analysis**

The following price analysis contains a series of assumptions to help keep scenarios simple and easy to understand. For example, opticians know that consumers can go elsewhere but the subject of customer retention is a discussion not included this analysis. Customer retention is always an issue regardless of in-store or online purchasing. The assumption is that “Harry” the health care consumer remains loyal to “Oliver” the optician’s store.

Also not addressed is the loss of profitability when current consumers switch from bundled services to unbundled services. The idea is that if opticians continue to bundle, consumers who see the benefit of unbundled pricing would eventually purchase non-optician other online retailers and this type of consumers will be lost. When opticians offer unbundled pricing, they are trying to recapture clients that shop online and want unbundled pricing. The following example describes how this group of consumers can be retained. Opticians should consider their own businesses when reading these scenarios and see if it makes business sense to sell unbundled contact lenses online.

### 3.3.1 Basic Lenses

Consider this example of what happens when services fees are unbundled from contact lenses:

1. Oliver the optician sells a box of Acuvue Oasys two-week disposable contact lenses on OpticiansDeliver.ca for \$40, and his wholesale cost is \$35
2. Harry the customer orders Acuvue Oasys from OpticiansDeliver.ca, two boxes for the left eye, and two boxes for the right eye for a total of four boxes
3. There are six lenses per box for a total of 12 lenses per eye
4. Each lens can be used for 2 weeks, so the supply would last for 24 weeks
5. Oliver charges \$10 for shipping

<b>Income Statement</b>	<b>Amount</b>	<b>Description</b>
Revenue	\$170.00	For four boxes
Cost of Goods Sold	\$140.00	For four boxes
Cost of Shipping	\$10.00	
Profit	\$20.00	For four boxes
Profit Margin	\$5.00	Per Box

### 3.3.2 Add Drop Shipping

Drop shipping is when contact lenses are sent from the contact lens manufacturers directly to the consumers' homes or workplaces. Instead of shipping contact lenses to opticians, manufacturers ship contact lenses ships to the contact lens wearers, and opticians avoids the cost of shipping. The two largest manufacturers of contact lenses, Johnson & Johnson and Ciba Vision, offer this option to opticians and opticians may keep the savings. Companies typically indicate the quantity or value of total purchase required to qualify for drop shipping. Opticians can ask Ciba Vision and Johnson & Johnson for drop shipping and bulk discount rules. As of 2008, Johnson & Johnson and Ciba Vision are the two largest contact lens companies, making up 60% of the contact lens market. According to Contact Lens Spectrum Magazine, "Worldwide and U.S. market share estimates by company are similar with Johnson and Johnson leading at nearly 48 percent, Ciba Vision at 18 percent, CooperVision at 18 percent, and Bausch & Lomb at 12 percent." If CooperVision and Baush & Lomb followed suit, then the four largest contact lens companies making up 90% of the contact lens market would offer

drop shipping. Meanwhile, opticians should continue to charge for shipping for all shipments regardless of the manufacturer, so opticians receive a better profit margin when the manufacturers drop ships and maintain a simple way of calculating shipping costs by charging the same shipping fee for all brands of contact lenses (Contact Lens Spectrum, 2008).

Consider the same example with drop shipping:

1. Roughly 60% of all purchases will be from a company that offers drop shipping, and so drop shipping applies to 60% of all purchases made through Oliver on OpticiansDeliver.ca
2. In 60% of all purchases, Oliver still charges a standard shipping fee

<b>Income Statement</b>	<b>Amount</b>	<b>Description</b>
Revenue	\$170.00	For four boxes and one drop shipment
Cost of Goods Sold	\$140.00	For four boxes
Cost of Shipping	\$0.00	
Profit	\$30.00	For four boxes
Profit Margin	\$7.50	Per Box

### 3.3.3 Add Services: Fitting Services

Finally, consider the same example with drop shipping and value-added service fees:

1. Price remains at \$40 per box and wholesale costs remain at \$35 per box
2. Assume Harry is a new consumer and a \$50 fitting fee is charged for fitting Acuvue Oasys (spherical lenses).
3. Harry continues to order and wear the same lens for 101 weeks or just under two years, and after two years he pays \$25 for a follow-up fitting
4. Over the past two years, a total of \$75 worth of services fees have been collected, and 16 boxes of contact lenses sold

<b>Income Statement</b>	<b>Amount</b>	<b>Description</b>
Revenue (Goods)	\$680.00	For 16 boxes and four drop shipments
Revenue (Service)	\$75.00	For two services
Cost of Goods Sold	\$560.00	For 16 boxes
Cost of Shipping	\$0.00	
Profit	\$195.00	For 16 boxes, four drop shipments and two services
Profit Margin	\$12.18	Per box

### **3.3.4 Recovering Lost Customers**

Oliver the optician recovers \$195 worth of profit from a consumer who would have purchased from a non-optician online retailer. Harry the consumer now pays for services only when he needs it and immediately sees what he is paying for. Now suppose a non-optician online retailer offers a promotion and charges only \$26 for a box of contact lenses. This scenario originated from an optician interviewee who mentioned that an online retailer once promoted a price that is \$4 lower than his wholesale cost. Using number from the above example, Oliver could still offer a competitive price if he charges \$31, leaving a profit margin of \$1.00 per box. Oliver earns a profit of \$16 from 16 boxes of contact lenses and the same \$75 worth of service fees, which is total of \$91 from a mix of goods and services over two years. Even under intense price competition, Oliver can still remain profitable by relying on service fees. Moreover, if the contact lens manufacturer offers drop shipping, then Oliver would gain an additional \$10 per order and \$40 over two years, and still earn \$131 from each consumer.

### **3.3.5 Different Prices In-store and Online**

Each optician interested in this model should make their own calculations and set their own fees to see what makes the best business sense. When evaluating whether this tool is a good fit, opticians should not incorporate the overhead costs of running a brick-and-mortar store into the price of a box of contact lenses sold on OpticiansDeliver.ca. Opticians should not expect to charge the same low online prices in their brick-and-mortar stores because there are unique overhead costs to consider when determining the in-store prices. If customers decide to purchase in-store, then they should pay in-store prices because prices include costs of making the contact lenses available in-store, and the value of receiving the product immediately.

### **3.3.6 Value in Familiarity – a \$5 price difference**

The price difference between OpticiansDeliver.ca and other online retailers is directly related to how consumers perceive value offered by opticians. An extra \$5 per box will give health consumers someone to deal with directly: A name, a face and a location to

troubleshoot problems. Currently, there are consumers who buy online most of the time but buy small quantities in-store to maintain contact with their opticians. These consumers feel awkward about going to see their opticians when they have been buying from non-optician online retailers. OpticiansDeliver.ca allows consumers to buy and receive service from its network of opticians without feeling awkward about bringing in a box of contact lenses they purchased from OpticiansDeliver.ca. There is certainly value for consumers to know a familiar optician or a network of opticians to look after them.

In its infancy, opticians might only charge a small price difference but as OpticiansDeliver.ca differentiate opticians from other online retailers, the willingness for consumers to pay may increase. As long as OpticiansDeliver.ca can offer additional value, consumers would be willing to pay more for OpticiansDeliver.ca than other online retailers. Whether the price difference should be within \$5 depends on individual opticians on OpticiansDeliver.ca. This \$5 difference is only an approximation and is not a rule. Opticians will have the opportunity to test their prices once OpticiansDeliver.ca is operational. The reason \$5 was chosen is that online retailers offer \$5 off per box if consumers buy more than eight boxes at a time. If consumers are willing to pay \$5 more to not have to buy bulk, they may consider \$5 as an acceptable difference. If the skills of opticians are valued, then there is leeway to charge for that ability or specialization. The next section explores a recent Canada-wide survey commissioned by the Opticians Association of Canada and conducted by Ipsos Reid in early 2009. This survey shows the views of consumers throughout Canada about eye care.

### **3.4 Quantitative Research Findings**

The Opticians Association of Canada graciously provided the Ipsos Reid survey for use in this report. This survey presents quantitative data that show pertinent information about health care consumers. The survey was abridged to 11 questions for the purposes of this project. One representative response was selected for each question, while the other responses to the 11 questions are available as Appendix B.



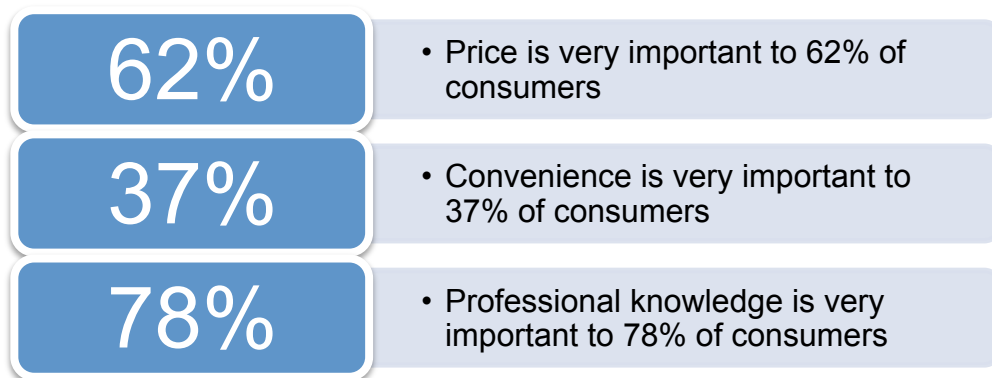
**Table 6 - Survey Questions and Responses**

<b>Question #1</b>	Please rate how important the following features are to you when purchasing prescription eyeglasses or contact lenses? (Price) Response: 37% say it is very important
<b>Question #2</b>	Please rate how important the following features are to you when purchasing prescription eyeglasses or contact lenses? (Convenience) Response: 62% say it is very important
<b>Question #3</b>	Please rate how important the following features are to you when purchasing prescription eyeglasses or contact lenses? (Knowledge and professionalism of the service provider) Response: 78% say it is very important
<b>Question #4</b>	Where would you prefer to purchase your prescription eyeglasses or contact lenses? (First Choice) Response: 44% say it is "An independent eyewear shop", and 2% say it is "The internet"
<b>Question #5</b>	Where would you prefer to purchase your prescription eyeglasses or contact lenses? (Total choices) Response: 76% say it is "An independent eyewear shop", and 31% say it is "The internet"
<b>Question #6</b>	Why do you choose to purchase through...? Response: 26% say it is due to "Better price/ cost/ cheaper"
<b>Question #7</b>	Please rate how important the following services are to you for your optician to provide? (Properly fitting your new eyeglasses and contact lenses) Response: 96% say it is somewhat or very important
<b>Question #8</b>	Please rate how important the following services are to you for your optician to provide? (Testing your eyesight) Response: 83% say it is somewhat or very important
<b>Question #9</b>	How obligated do you feel to purchase eyewear from the person who tests your eyesight? Response: 62% say they are not obliged, and 38% say they are obliged
<b>Question #10</b>	When buying prescription eyeglasses or contact lenses, how much of a convenience is it to be able to purchase at the same location where you have your eye sight tested? Response: 73% say it is a moderate or great convenience
<b>Question #11</b>	How much value do you place on the services provided by an optician? Response: 85% say it is a moderate or great deal of value

Source: Opticians Association of Canada

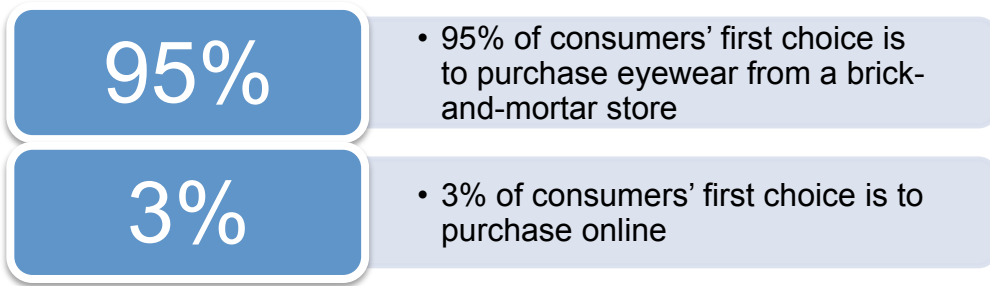
### 3.4.1 Consumers Want a Professional

Health care consumers want an eye care professional more than price or convenience. The responses from the first three questions show the relative importance consumers place on price, convenience, and professional knowledge. Not surprisingly, 62% of consumers considered price as very important, while 37% considered convenience as very important. This suggests that some consumers do not mind going out of their way and sacrifice some convenience for better price. It is understandable that price is more important than convenience, since consumers do not purchase contact lenses very often. However, 78% of health care consumers consider professional knowledge as very important when purchasing prescription eyewear. This means opticians' professional knowledge is more attractive to consumers than price or convenience.



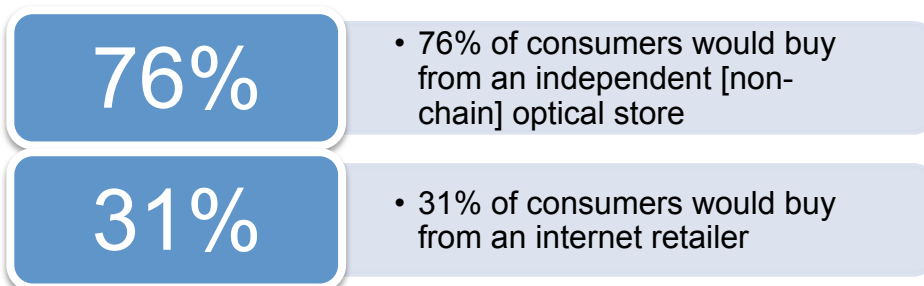
### 3.4.2 Consumers Prefer Dealing with a Person

A brick-and-mortar optical store is the first place of choice to purchase eyewear for 95% of consumers. So why do so many consumers choose to go online? The single most important reason is price: A total of 26% of consumers said price was most important, which was the most popular response in question six. Consumers compare higher bundled in-store prices to lower unbundled online prices, so opticians must offer unbundled contact lenses to remain competitive. In question 11, 85% of consumers responded that they greatly or moderately value the services of an optician. Not surprisingly, consumers who value services provided by opticians and they should be willing to pay for unbundled services.



### 3.4.3 Price is Most Important

When asked where do consumers prefer to purchase their eyewear, 76% of consumers indicated they prefer to purchase from independent stores, while 31% prefer to purchase from online retailers. This appears to contradict the fact that 95% of consumers consider it their first choice to purchase from a brick-and-mortar optical store. A way to interpret this is health care consumers would much rather buy eyewear in-store than anywhere else; perhaps so they can bring it in for service and see the health professional. However, the prices of contact lenses appear too high due to bundling, so consumers would rather to purchase from online retailers as a second-best option. Until now, in-store and online retailers have kept to their own distribution methods, and have not crossed paths to offer both in-store and online options. If consumers buy from an online retailer, they will not receive service in-store, or if they buy in-store, they will pay higher bundled prices. By unbundling services, consumers only pay for services when they are needed. This is what consumers want: low per-box price of contact lenses, and the option of going in-store for services.

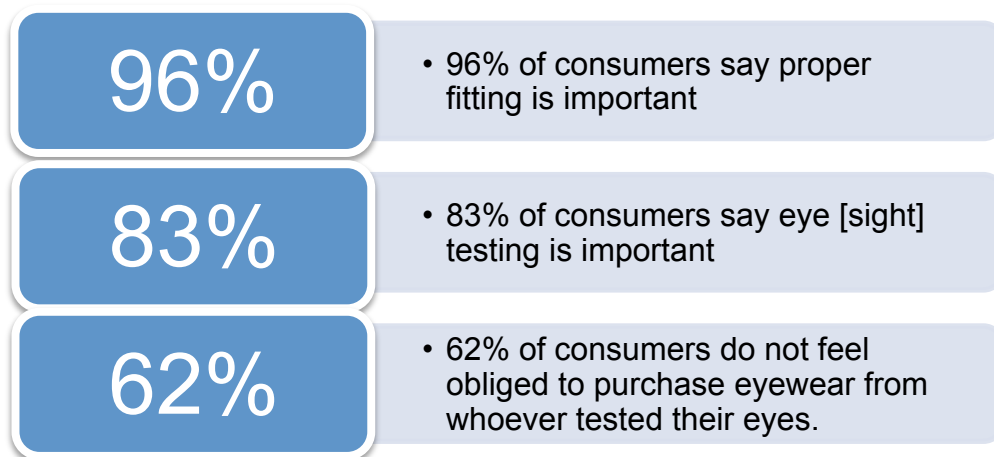


The single largest reason why consumers choose their place of purchase is price (26%), while the second reason is better selection (11%) and the third reason is professional knowledge (9%). This also supports the fact that many who are willing to buy from online

retailers ultimately choose based on price. However, this price only appears high because consumers must pay for the cost of future service every time they buy contact lenses.

### 3.4.4 Value but Not Obligation

The majority of health care consumers consider opticianry services important. Specifically, 96% of consumers consider a proper fitting from an optician as important and 83% consider a sight test as important. If health care consumers consider these services important or valuable, then consumers are ready to pay for them. Opticians already know that many health care consumers have no reservations about going elsewhere to buy eyewear, and the Ipsos Reid survey suggests that 62% of consumers do not feel obliged to purchase eyewear from whoever tested their eyes. It is not difficult to take this a step further and compare an eye test to a fitting or follow-up, and suggest that consumers do not feel obliged to purchase contact lenses from those who performed any type of opticianry service.



### 3.4.5 Consumers Prefer to Purchase Eyewear from Optician

Even though consumers do not feel obliged to buy eyewear from an optician, they still prefer to buy it from where they received service. It is convenient for consumers come to the optician for a fitting, then buy contact lenses from the same optician in-store or online. This is similar to locating a pharmacy right outside a physician's office. Question

10 shows that 73% of health care consumers consider it a moderate or great convenience to purchase eyewear from the same location where they received a sight test. We can substitute “sight test” with any other services that is an additional set of assessments, such as contact lens fittings. If not for price, the majority of consumers’ first choice is to purchase eyewear from their opticians. If there are lingering doubts as to whether health care consumers truly want unbundled services, then consider this: Reasonable consumers should prefer to pay for services separately because it means they only pay when they need those services, and not bundled into the price of contact lenses.

## **4: CHAPTER 4 – REQUIREMENTS AND DECISION CRITERIA**

This chapter is the technical portion of this report for the discussion of options and requirements of OpticiansDeliver.ca.

### **4.1 Technical Requirements**

Technical requirements are a general description of what functions the website must have to be useful to opticians and consumers. A high level, bird's eye view is appropriate at this point because an exhaustive list of every feature would be better explored in a separate report. If the AOA proceeds with implementing OpticiansDeliver.ca, it would elaborate in more detail each major feature listed in the table below. At this point, these features are just a description of the most important requirements. The best way to meet these technical requirements is to find solutions already created by other enterprises, which are readily available for sale to the AOA. It is certainly easier and most cost effective to purchase these specialized solutions “off-the-shelf” than to “reinvent the wheel” and create a customized solution. The technical requirements or features are grouped into solutions in Table 7, since most “off-the-shelf” or existing solutions satisfy more than one feature.

**Table 7 - High-level Technical Requirements**

<b>Solution</b>	<b>Feature</b>	<b>Description</b>
<b>4.1.1</b> Multi-vendor shopping cart	Online shopping mall	Multiple optician mini-stores operate independently on one website
	Mini-stores	Each optician-user manages their own mini-store. Each mini-store is uniquely identified.
	Price and shipping settings	Each optician-user sets price for goods, services, and shipping
<b>4.1.2</b> CMS	Shipping calculator	Integrated with a major shipping company
	Article publishing	Original web content from opticians: advice, recommendations and reviews
	Communication	Way for opticians to exchange consumer health information
	Communication	Way for opticians to contact one another
	Communication	Way for opticians and consumers to provide feedback
<b>4.1.3</b> Online payment system	Custom design	Design of website must be tied to LicensedOptician.ca campaign
	Point-of-sale account for each optician	Point-of-sale will be controlled by each optician. Payments go directly to the optician, and not through the AOA - AOA does not handle purchase transactions
<b>4.1.4</b> E-commerce security	Subscription fee	Feature for collecting subscription fees from opticians
	E-commerce security	Proper e-commerce credentials: Secure Socket Layer (SSL) certificate for encrypted payment systems
<b>4.1.5</b> Online customers service	Online customer service	Outsourced customer service, so to prevent excess workload for AOA
<b>4.1.6</b> Popular web hosting	Managed web hosting	Website hosting is controlled by the AOA, and not held captive by any programmer or company. The website can be backed-up and moved to a different host.
	Website security	Secure from denial of service attacks that would make website unusable
<b>4.1.7</b> Web analytics	Web analytics	Free web analytics integrated with the website to show important statistics
<b>4.1.8</b> Google	Advertising	Capable of reaching target market
<b>4.1.9</b> Cloud computing	Scalability	Capable of expanding resources to meet increases in demand

Source: Author

### 4.1.1 Multi-vendor shopping cart

Although there are countless shopping cart solutions on the market that can transform any website into an online store, very few solutions allow multiple stores to be hosted on a single website. The purpose of OpticiansDeliver.ca is to group individual optical stores into an online “shopping mall,” or a one-stop destination for contact lens purchases. This narrows the shopping cart selection to one that supports multiple vendors; the term for this type of cart is “multi-vendor shopping cart.” Three key assessment criteria are its price, customization, and specialization. The table below lists the criteria that these solutions will be measured against.

**Table 8 - Assessment Criteria**

	<b>Solution</b>	<b>Criteria</b>
<b>4.1.1</b>	Multi-vendor shopping cart	Price, customization, specialization
<b>4.1.2</b>	CMS	Compatibility with shopping cart
<b>4.1.3</b>	Online payment system	Monthly costs, ease of setup
<b>4.1.4</b>	E-commerce security	Price
<b>4.1.5</b>	Online customers service	Reputation, capacity
<b>4.1.6</b>	Popular web hosting	Reputation, capacity, reliability
<b>4.1.7</b>	Web analytics	Integration, robust statistics
<b>4.1.8</b>	Online advertisement	Market size, visibility, price
<b>4.1.9</b>	Cloud computing	Reliability, capacity, price

Source: Author

GoECart (goecart.com) is a packaged solution, where all the necessary components are provided and ready for the AOA to use. The AOA would pay a monthly or annual fee to maintain the use of the software as a service, with an annual cost of \$8,000 per year, which is the most expensive option. This is very easy to set up but customization is only available through GoECart. Software as a service places control of OpticiansDeliver.ca in the hands of the service provider because GoECart owns the software code, which leaves the AOA in a weak bargaining position if the AOA wants to change the terms of service. GoECart’s software as a service solution is an unacceptable choice for the AOA.

It is better to mitigate the above risk by finding a company that develops a multi-vendor shopping cart solution for an open source platform. There are two popular open source platforms: Drupal and Joomla, where the source code belongs to the community and there are an abundance of programmers who can support the software. Drupal is



the most popular open source platform for building websites and Joomla is the most popular open source platform for building shopping websites. Drupal's shopping cart solutions are ubercart and ecommerce. Neither of these two carts have an adequately tested multi-vendor solution, which means if the AOA wishes to develop on Drupal, it must hire a programmer to develop and test a customized multi-vendor solution. It would be very costly to reinvent the wheel, and the AOA could still end up with a less refined tool than GoECart.

Joomla is the most popular open source platform for online shopping websites, and as a result, there are enterprises that build multi-vendor solutions that are refined and ready to use right away. Joomla is the most realistic platform for the AOA to support OpticiansDeliver.ca. There are three companies that develop on the Joomla platform, and sell their software as a good (not as a service) to the AOA for self-supporting website hosting: Ixxo costs \$1500 (php-shop-system.com), WebGenie costs \$1500 (webgenie.com), and Joobi Jmarket costs \$330 (ijoobi.com). Ixxo and WebGenie offers all their features in one package that is tailored to the multi-vendor shopping cart solution, whereas Joobi tends to have very diversified products and a multi-vendor solution is just one of their many products. Joobi must split their development time and spread their focus among more products than Ixxo and WebGenie. Joobi appears less specialized than Ixxo and WebGenie at making a multi-vendor shopping cart. Therefore, the AOA should consider the software offered by Ixxo and WebGenie as these are the two companies that meet the price, customization and specialization criteria. The respective features of these two offerings are on the website of the respective companies and not listed here, as new software versions include constant updates.

#### **4.1.2 Content Management System**

The Content Management System is the “back-end” of the website where a multi-vendor shopping solution is attached. The Content Managements System (CMS) has to be Joomla if the AOA chooses a cart by Ixxo or WebGenie. A CMS is quite simple to select: Choose the CMS that supports the multi-vendor shopping cart the AOA wants. In this case, the clear choice is Joomla. If the AOA decides to build a custom multi-vendor on Drupal, then Drupal would be the CMS or if the AOA decides to subscribe to GoECart, then GoECart would also have a CMS.

### **4.1.3 Online Payment System: Gateway and Processor**

Each optician must set up an online payment gateway and a merchant account with a processor in order to use OpticiansDeliver.ca. This account will allow the optician to handle transactions via major credit cards: Visa, MasterCard, and American Express. There are a number of gateways and processors available but since the AOA already uses Beanstream as its gateway it would be simple to continue to use Beanstream as the gateway and processor for OpticiansDeliver.ca.

Each optician should then follow the AOA and use Beanstream as its gateway but opticians would still need their own merchant account with a processor. Opticians who already have in-store merchant accounts will need a new separate merchant account for e-commerce, as it is a different type of merchant account. A separate account is necessary to ensure payment transactions are strictly between the optician and consumer without the involvement of the AOA. The AOA will not handle money; opticians would be the ones to collect payments directly from their consumers.

Beanstream is also a processor that offers merchant accounts. As of June 1, 2010, their bulk rates are approximately the following: \$49 for setup, \$20 per month to operate, \$0.20 per transaction, and 2.85% of the sale for each transaction. This is a specific detail that will be negotiated if the AOA decides to go ahead with this model. Opticians may also create a merchant account with their existing processors.

An alternative is “PayPal,” a popular online payment system for websites like Amazon.com. The setup time and costs are much lower for PayPal, while the costs per transaction are higher. Many opticians who already have PayPal will find it easier to use with their store on OpticiansDeliver.ca. It is helpful to offer both options to opticians and let them choose.

### **4.1.4 E-Commerce Security**

Credit card transactions over the Internet contain sensitive information, a Secure Socket Layer (SSL) certificate is required to ensure that data sent and received remains private and uncompromised. It also serves to “certify” that the AOA’s OpticiansDeliver.ca website is a trusted site, and this certificate must be renewed every year. A SSL certificate can easily be purchased from one of the few certificate authorities: VeriSign, GoDaddy, or Comodo.

#### **4.1.5 Online Customers Service**

ZenDesk is the most important service available to the AOA, and would keep additional administrative work away from the AOA staff. At \$19 per customer service agent, ZenDesk can provide online customer service and support for OpticiansDeliver.ca, by assigning agents to a virtual help desk and respond to user enquiries through email. A virtual help desk box will appear on OpticiansDeliver.ca that allows optician or consumer users to ask question, and receive fast responses via email. If OpticiansDeliver.ca requires more agents, then the AOA can pay for an additional customer service agent at \$19 per month. Most enquiries from users will have standard responses but ZenDesk can also learn and develop new responses as long as AOA administrative staff give instructions to ZenDesk on a regular basis.

#### **4.1.6 Popular Web Hosting**

Web hosting services are offered by companies that place all OpticiansDeliver.ca website data on their computer hardware, and allow internet users to access this data anytime from anywhere. The most important factors are reputation, capacity and reliability. The reputation factor is simple: Companies do not want their data to be stored in a less than reputable location. By storing website data on a popular host, OpticiansDeliver.ca will be familiar with its reputation from user reviews, and be reassured that there is excess capacity. With a smaller hosting company, OpticiansDeliver.ca may find the host unwilling to expand their capacity, which would in turn limit the ability for OpticiansDeliver.ca to grow. Reliability is measured by the amount of uptime and speed. Uptime is the percentage of time the hosted website is available to Internet users. Speed is how fast the website exchanges data with the internet user. The following hosts are suitable, and all aim to have at least 99.9% uptime, which is equivalent to 86.4 seconds or less of downtime per day: GoDaddy, Bluehost, and Justhost. By using a hosting company, the AOA would not have to have pay for the costly maintenance to solve hosting problems or handle issues such as denial of service attacks, which is when a third party tries to “attack” a website so that the website becomes inaccessible to normal internet traffic. The switching costs are quite low for changing web hosting companies, and a copy of the website can be backed-up and moved to a different location. The choice of hosting service will also depend on the preference and experiences of whoever implements OpticiansDeliver.ca.

#### **4.1.7 Web Analytics**

The definition of web analytics is the measurement, collection, analysis and reporting of Internet data for the purposes of understanding and optimizing Web usage (Web Analytics Association, 2010). Google Analytics is by far the most popular tool for measuring the performance of a website by collecting statistics about a website and generating useful reports from those statistics. An important aspect of this tool is that it integrates with Google's online advertising that will be discussed in full in the next section. There are other alternatives but Google Analytics is free and is very well-integrated to use with Google's online advertising.

#### **4.1.8 Online Advertising: Google AdWords**

Google is the leader in searches and online advertising, so OpticiansDeliver.ca should use Google AdWords to place online advertisements beside internet search results. Figure 8 displays what most users are already familiar with on Google, where advertisements are attached to search conditions of certain words or phrases. The graphic below shows the search results for "contact lenses". The best bidder will occupy the spot on the top left hand corner, the second best bidder will occupy the space immediately below it, and finally work its way down and to the bottom right hand corner. The blue arrows represent space available for sale through bidding.

Figure 8 - Google Adwords

The screenshot shows a Google search for "contact lenses". The search bar at the top contains the text "contact lenses" and a "Search" button. Below the search bar, it indicates "About 12,400,000 results (0.19 seconds)" and a link to "Advanced search". On the left side, there are navigation options: "Everything" (selected), "More", "The web", "Pages from Canada", "Any time", "Past 24 hours", and "More search tools". The main search results are divided into two sections: "Organic results" and "Sponsored links".

**Organic results:**

- Contact Lenses** - [www.ClearlyContacts.ca](http://www.ClearlyContacts.ca) - Make the Most of Your Insurance Dollars. Save 70% on Contacts!
- Contacts Lenses - 70% Off** - [www.Lens.com](http://www.Lens.com) - Low Prices, Instant Savings & Fast Delivery on All Contacts Online.
- Buy Contact Lenses Online** - [www.VisionDirect.com](http://www.VisionDirect.com) - Acuvue Oasys Only \$16.52 Reg \$26.99 Discover More Deals. Free Shipping.
- Contact Lens at Clearly Contacts® - the easy way to buy Canadian ...**  
Discount Contact Lenses Online. The exact same contact lenses prescribed by your doctor, delivered to you for less. All major brands of discount contact ...  
[Glasses - Monthly Wear Contacts - Sunglasses](#)  
[www.clearlycontacts.ca/](http://www.clearlycontacts.ca/) - Cached - Similar
- Halloween Contacts, Halloween Contact Lenses | Theatrical Contact ...**  
Halloween Contact Lenses, Halloween contacts. Special effects contact lenses are the perfect way to finish off your Halloween costume.  
[www.clearlycontacts.ca/...lenses/cHalloweenLenses-p1.html](http://www.clearlycontacts.ca/...lenses/cHalloweenLenses-p1.html) - Cached - Similar
- Contact lens - Wikipedia, the free encyclopedia**  
A contact lens (also known simply as a contact) is a corrective, cosmetic, or therapeutic lens usually placed on the cornea of the eye. ...  
[History - Types of contact lenses - Manufacturing of contact lenses](#)  
[en.wikipedia.org/wiki/Contact\\_lens](http://en.wikipedia.org/wiki/Contact_lens) - Cached - Similar

**Sponsored links:**

- Contact Lenses Canada**  
Canada's Best Price - Free Shipping  
Call Us Today! 1-888-404-7317  
[VisionPros.ca](http://VisionPros.ca)
- 1800CONTACTS.com**  
Need contact lenses? Free shipping + Easy ordering at 1-800 CONTACTS.  
[www.1800contacts.com](http://www.1800contacts.com)
- Discount Contact Lenses**  
Fast, convenient & inexpensive.  
Shop online and save!  
[www.DiscountContactLenses.com](http://www.DiscountContactLenses.com)
- Contact Lenses Canada**  
Fast & Free Shipping, Pay CAD,  
All Major Brands of Contact Lenses  
[www.TodaysLens.ca](http://www.TodaysLens.ca)
- Vancouver Contact Lenses**  
We Offer Quality Eye Contact Lenses. See Our Optometrist Today!  
[www.DellaOptique.ca](http://www.DellaOptique.ca)  
Vancouver

Source: Author

Google AdWords allows a party to choose words like, “contact lenses,” then bid for a position to place the party’s advertisement. The winning bid is based on the price of the bid, the quality, and relevance of the advertisement, e.g. how relevant the advertisement is to the Internet user, the content quality of the bidder’s website, and the speed in which the bidder’s website loads. There are also other hidden criteria Google does not make open to the public. As mentioned above, Google AdWords is integrated with Google Analytics, which will provide data to help AOA understand whether online advertising is paying off (Wired, 2009).

Choosing the exact words will be more of an art than science. Another option is to use Google “Double Click” to place advertisements on specific websites. Google has an “Ad Planner” that will tell the AOA the websites health care consumers are likely to visit. However, online advertising will only be worthwhile after there is a critical mass of optician users on OpticiansDeliver.ca. Other forms of advertising include “word of mouth” advertising that can be spread in-store by opticians or through affiliated websites.

#### **4.1.9 Cloud Computing**

To minimize any unnecessary commitments involved with OpticiansDeliver.ca, the AOA should take advantage of Cloud computing, which avoids the purchase of expensive computer hardware and equipment. Instead, hardware is purchased as a service. Hardware as a service can be cancelled anytime and capacity can be increased by increasing the service fees. This allows the AOA to avoid any sunk costs because it would limit the AOA's ability to terminate this project or make drastic changes. Most importantly, if there is fast user growth, a static OpticiansDeliver.ca would be more prone to Internet traffic congestion. Cloud computing allows OpticiansDeliver.ca to be dynamic and quickly increase capacity to respond to the growth in users.

To easily manage this system from any location, cloud-based storage systems can allow the AOA to store files online without needing to purchase equipment. Tools like Dropbox allow a number of users to share common file folders, while maintaining one coherent file. There is no need to implement this immediately, as this service can begin whenever the need arises with very little setup time and costs.

#### **4.2 User-Experience Requirements**

In this section, the report explores user-experience requirements that relate to the quality-of-service, in terms of how smoothly OpticiansDeliver.ca will operate, and how easy it is for opticians, health care consumers, and administrators to use. The features pertaining to user-experience are categorized into solutions because most "off-the-shelf" solutions that can be purchased satisfy more than one feature.

**Table 9 - Description of User-Experience Requirements**

	<b>Solution</b>	<b>Feature</b>	<b>Description</b>
<b>4.2.1</b>	Open source	Easy succession Planning	This can be handed off to the next systems administrator. Source Code must be supported by an enterprise or community of programmers
<b>4.2.2</b>	Limited administration	Gains trust of users	The admin does not take unnecessary control, and must justify any controls taken from optician-users
		Streamlined processes	The admin is not required to be involved for order process – only maintenance and upgrade
<b>4.2.3</b>	Easiness to learn	Testing group	Easy to learn for optician-users, consumers, and administrators

Source: Author

#### **4.2.1 Open Source – Succession Planning**

Joomla is the most suitable open source platform to help the AOA achieve succession planning. Any Joomla programmer can work on the website and any non-technical person can operate the website using the popular content management system. If OpticiansDeliver.ca is built on Joomla, there is a community of programmers who can be contracted with competitive prices to build and customize the website. No programmer can take OpticiansDeliver.ca captive by withholding specialized knowledge or claiming ownership over the source code. This achieves the goal of succession planning by enabling any programmer or administrator to work on the website.

**Table 10 - Assessment Criteria**

	<b>Solution</b>	<b>Criteria</b>
<b>4.2.1</b>	Open source	Size of community, enterprise option, specialization
<b>4.2.2</b>	Limited administration	Staff hours, streamlined process
<b>4.2.3</b>	Small testing group	Test hours

Source: Author

#### **4.2.2 Limited Administration – Trust of Users**

This feature can be created by ensuring the AOA is not involved in any sales or transactions on OpticiansDeliver.ca. In fact, the job for the AOA to do is to keep the website operational, and post “advice columns” submitted by opticians to the website. As part of maintenance, the AOA would conduct checks to verify that registered optician users are members in good standing, which is part of the regular business of the AOA. This would only happen once a year or in special circumstances, which could occur when an optician’s license is suspended. The streamlined processes of the website would allow consumers and opticians to conduct business seamlessly without involvement from the AOA. This also allows the AOA administration to minimize the additional work involved with running OpticiansDeliver.ca.

#### **4.2.3 Easy to Learn – Small Testing Group**

Once OpticiansDeliver.ca is developed, an initial limited release to a testing group of opticians will help identify any difficulties and make iterative improvements. Testing group opticians should be permitted to use this service for free because they are providing useful feedback. These opticians are innovators, who are first to try a new technology and will enjoy developing and perfecting OpticiansDeliver.ca (Rogers, 1962, pp. 150). The opticians interviewed for the purpose of this report are prime testing group candidates, and an announcement on the AOA and OAC website can help garner more volunteers to test the limited release. It should take opticians no longer than an afternoon or evening to set up an account, and support during setup will be available through ZenDesk. If it takes too long for opticians to learn and use the system, there is a higher chance they may abandon it before fully exploring the full features of the tool. Health care consumers must be able to register in matters of minutes, as it should be no more difficult than setting up an account with other online stores. Support for consumers will also be available through ZenDesk.

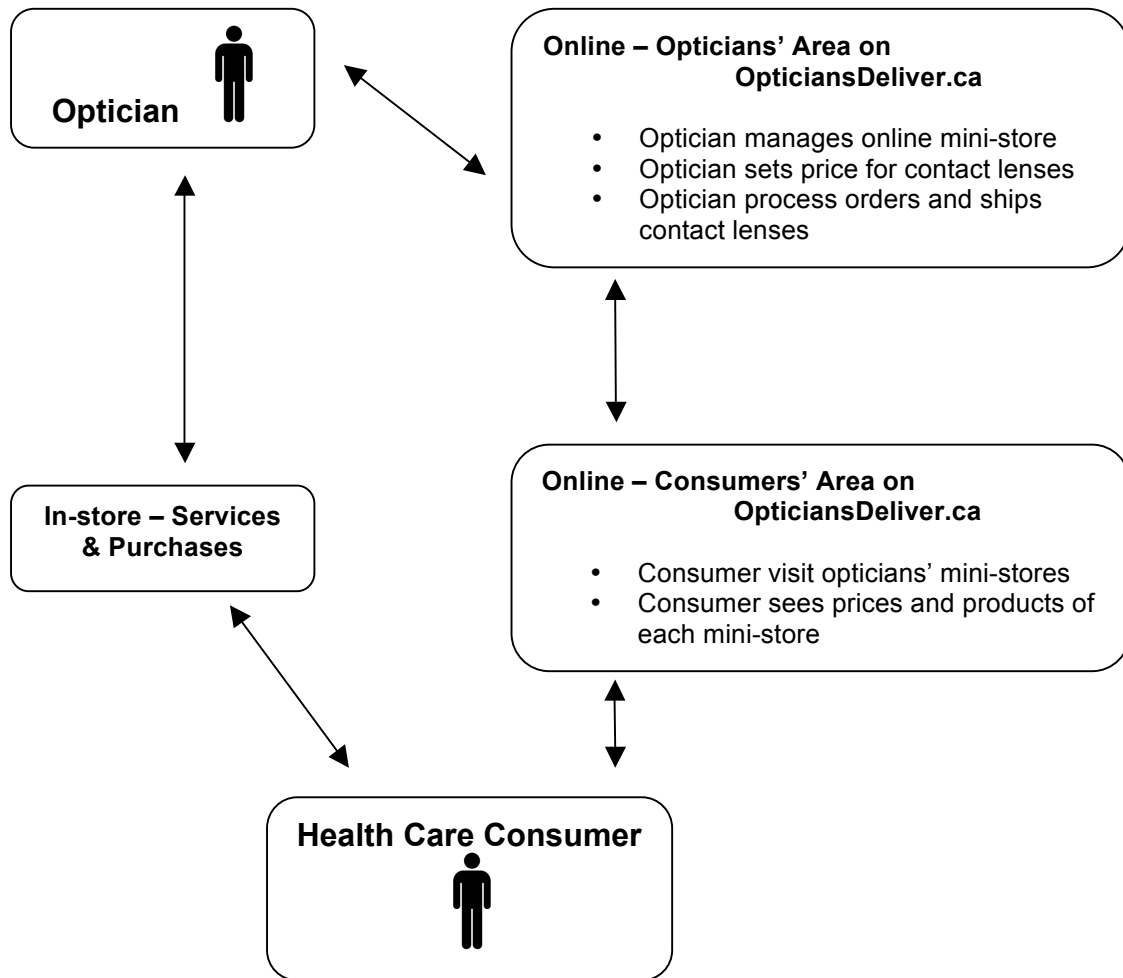
### **4.3 Interactions between Users**

The above technical requirements and user-experience requirements suggest that a multi-vendor open source shopping cart is ideal for OpticiansDeliver.ca. A multi-vendor shopping cart typifies the user interactions on the website. In addition to the traditional



in-store services, an optician can also interact with their consumers on the online mini-stores. Figure 9 illustrates interactions from the perspective of the optician and consumer.

**Figure 9 - Interactions between Opticians and Consumers**



Source: Author

## 4.4 Careful Marketing

Since this project is sponsored by the Alberta Opticians Association as well as the Opticians Association of Canada, and aims to promote the interest of opticians, some opticians may have an adverse reaction to the appearance that OpticiansDeliver.ca is competing for resources with other optical stores. The AOA and OAC must proceed carefully concerning marketing, or more specifically, how Google AdWords is used. Purchasing Google AdWords is completed through a bidding process, so there will be other optical stores in Canada bidding for the same words. Opticians who do not use OpticiansDeliver.ca may react negatively to the idea that their association is in direct competition with them for online marketing. Perhaps the best way to achieve online visibility is to piggy-back on the "Licensed Optician" campaign and gain visibility from that project. "Licensed Optician" is collaborative effort between all the provinces in Canada, and attempts to promote the awareness of the profession as a whole (Chakravorti, 2004, pp. 58-67). If Google AdWords is used by LicensedOptician.ca, then opticians may not mind that Internet traffic is directed to the awareness of the entire profession.

The advertisement would link to LicensedOptician.ca, which is used by the entire profession, and once users arrive at LicensedOptician.ca, they can the website for an optician near them. The ability to search for an optician is currently a feature of LicensedOptician.ca, and each optician's store location is identified on the map. The AOA can collaborate with the Opticians Council of Canada to allow an icon to appear beside the names of the opticians who sell on OpticiansDeliver.ca. This potential collaboration between OpticiansDeliver.ca and LicensedOpticians.ca will require buy-in from the Opticians Council of Canada. The timing of online advertisement for OpticiansDeliver.ca is very important. It will not be implemented at the launch of OpticiansDeliver.ca in Alberta; rather, it should only be implemented after more Canadian provinces have expressed interest in this model.

## 5: CHAPTER 5 - RECOMMENDATIONS

### 5.1 When to Implement

The purpose of this project is to build a model so that the AOA Council can decide whether it is desirable and financially feasible to proceed to next step and commit more resource by implementing the website. After completing the value proposition (chapter 2), analysis of research findings (chapter 3), and requirements (chapter 4), the case is clear: change is necessary to avoid certain decline in the current business model for opticians. Figure 10 is the proposed logo designed by Brad Swaim for the AOA.

**Figure 10 - Proposed Logo for OpticiansDeliver.ca**



Source: Author

The “Licensed Optician” professional awareness campaign is under way, so the AOA can gauge enthusiasm and monitor whether there is room for further collaboration among opticians. OpticiansDeliver.ca is not just an online shopping mall but also a form of collaboration that requires a critical mass of opticians across Alberta. This critical mass will be the first to test and use OpticiansDeliver.ca. The AOA Council could consider setting the minimum optician users required to implement the website at no less than 10 to 15 users (Van Siyke, Ilie, Hao, & Stafford, 2007, pp. 270-283). The duration of building, testing and modifying the website is less than 10 weeks. See

section 5.3.1 for an approximate timeline of how the AOA can launch this website within 10 weeks.

## 5.2 What to Implement

This table lists the recommended components that the AOA should build into OpticiansDeliver.ca:

**Table 11 - Recommended Components**

	<b>Solution</b>	<b>Recommended Components</b>
<b>4.1.1</b>	Multi-vendor shopping cart	Ixxo Cart
<b>4.1.2</b>	CMS	Joomla
<b>4.1.3</b>	Online payment system	Beanstream and PayPal
<b>4.1.4</b>	E-commerce security	GoDaddy
<b>4.1.5</b>	Online customers service	ZenDesk
<b>4.1.6</b>	Popular web hosting	GoDaddy
<b>4.1.7</b>	Web analytics	Google Analytics
<b>4.1.8</b>	Online advertising	N/A
<b>4.1.9</b>	Cloud computing	N/A

Source: Author

The optimal choice is to use Joomla as a CMS, since Joomla has the largest open source community for online shopping carts. Ixxo Cart is a good choice due to its cleaner interface and more frequent updates to the system: Over the past 2 years, Ixxo Cart has consistently provided updates every 2 months. The project manager has used the research and development fund to purchase a license and examine how well Ixxo Cart fits the needs of the AOA, and have determined that the fit is quite close. The project manager has installed Ixxo Cart on a test website for the AOA to evaluate. Cloud computing and online advertising have are purposely omitted from the list because there is no immediate need for them.

## 5.3 Cost estimates for Phase One

The cost of building OpticiansDeliver.ca will involve a series of sunk costs. Once spent, the AOA cannot recover these costs. Specifically, this is referring to the labour cost of implementing and customizing the online store. Based on consensus from the open

source community and the complexity of the AOA model, a Joomla website should take no more than 100 hours to set up before it is operational.

### 5.3.1 Start-up Costs

The cost of hiring a contractor to build this website will be proportional to the total number of hours to set up the website. If the AOA allocates 88 hours at \$80 per hour, then the cost will be \$7040. Table 12 lists a generous estimate of the time required for various stages of building the website.

**Table 12 - Time Costs**

<b>Time Costs</b>	
Set-up of Joomla CMS	6 hours
Installation and configuration of Joomla components	12 hours
Installation and configuration of multi-vendor components	30 hours
Design /configuration of website look-and-feel	40 hours
<b>Total Estimated Hours:</b>	<b>88 hours</b>

Source: Author

The AOA may wish to offer an \$8000 fixed fee to the selected contractor, so there will be no cost variance. The project manager has purchased a user license for Ixxo Cart with the budget for this project, so a potential contractor can look at the software and provide a more accurate estimate. Contractors will be more willing to charge a fixed fee if they know exactly what they are working with.

Based on an estimated 88 hours required to build the website, if a contractor allots six hours a day to build this website, then OpticiansDeliver.ca can be ready for testing in 15 work days, which is equivalent to three weeks. The AOA would then allow six additional weeks for a limited release to 10 to 15 opticians to test and give feedback. After testing, the AOA would allow an additional week to incorporate any feedback as changes to OpticiansDeliver.ca. OpticiansDeliver.ca can be operational in approximately 10 weeks. However, this estimate depends on the availability of the contractor, the willingness of opticians to test the limited release, and the scale of changes made to the website after testing.

### 5.3.2 Operating Costs

The table below include monthly costs (rounded up to the nearest dollar), and applicable one-time costs. Some monthly costs are calculated by dividing an annual subscription fee into 12 equal payments.

**Table 13 - Operating Costs**

<b>Operating Costs</b>	<b>Monthly</b>	<b>One-Time</b>
Joomla	\$0	\$0
Beanstream	\$20	\$50
GoDaddy hosting	\$8	
GoDaddy SSL	\$1.17	\$0
ZenDesk	\$57 (based on 3 representatives)	\$0
Google Analytics	\$0	\$0
Domain registration	\$2	\$0
Administrative	Already paid for by AOA	
<b>Total:</b>	<b>\$101</b>	<b>\$50</b>

Source: Author

### 5.3.3 Subscription Fee

If an optician were to set up their own e-commerce store, they must purchase their own hosting, SSL certificate, and domain registration, which cost \$12 per month or \$144 per year. Opticians would save at least \$144 per year without considering all other available features of this tool and the setup time saved. After the initial limited release, the AOA could consider charging \$12 per month/\$144 per year to recover some of its costs. The AOA may consider charging a fee so optician users would value this service but keeping the fee low, so more opticians will be willing to use this tool.

### 5.3.4 Break-even analysis

Assume the total cost of starting up and operating OpticiansDeliver.ca for one full year is \$8,000 for the contractor, and \$1212 for annual costs plus a one-time cost of \$50 for the online payment system. The total cost for year one is \$9,262 but only \$1212 for year two and year three. If this website has a shelf life of three years, then costs will be \$9,262 for year one, \$1212 for year two, and \$1212 for year three. The total cost over three years will be \$11686, which averages to about \$3895 per year. The AOA could try to afford

\$3895 per year without collecting subscription fees from opticians or collect a fee of \$144 per year from optician users to help pay for the costs. If 15 opticians each contribute \$144 per year, then it would only cost the AOA \$1735 per year to operate, a decrease from \$3895 to \$1735. The financial impact is listed in the income statement below:

<b>Income Statement</b>	<b>Amount</b>	
Revenue	\$2160	Per year (from 15 opticians)
Cost	\$3895	Per year
Deficit	\$1735	Per year

Alternatively, if the OAC were willing to share 50% of the costs, then the \$3895 cost per year would be paid for by two organizations, at \$1947.50 per organization. Moreover, if the AOA is willing to open this model to the rest of Canada, then any provincial organization can give their own optician members access to this tool by paying for a portion of the costs to run OpticiansDeliver.ca. This way, the model would be paid for and supported by provincial and national associations without the need to collect subscription fees.

## **5.4 Going Forward and Next Steps**

### **5.4.1 Go**

The above break-even analysis offers different options to fund phase one. The next step for the AOA is to consider whether it wishes to implement OpticiansDeliver.ca, and if yes, then it may also consider how to collaborate with the OAC to bring in users from neighbouring provinces like Manitoba or British Columbia. The underlying belief is that if in the AOA model works in Alberta, it can also work in other Canadian provinces. As the user base grows, the AOA and OAC should consider developing future phases for OpticiansDeliver.ca. The AOA should seriously consider future phases in the subsections below if OpticiansDeliver.ca is successful.

### **5.4.2 No Go**

If both the AOA and OAC decide not to go ahead with implementing this model, the two organizations may establish some additional conditions before going ahead with this

model. These conditions could include consultation with stakeholders, expression of serious interest by a sizeable group of opticians, or modifications to this proposed business model. It is understandable that more iterations of this model may be necessary to launch OpticiansDeliver.ca. While the AOA and OAC may consider their options, the project manager has registered the domains for OpticiansDeliver.ca and OpticiansDeliver.com under the AOA, so domains are protected. These domains as well as other suitable domains should be registered and renewed each year, so names will be protected if the AOA does decide to wait.

#### **5.4.3 Future Option: Phase Two – Buying Group**

The AOA should seriously consider further phases to this project as the user base grows and OpticiansDeliver.ca is successful. Almost every optician interviewed has expressed the interest in a buying group where they could use bulk group purchases to lower the price of contact lenses from manufacturers. Opticians want to reach the volume discount achieved by non-optician online retailers and have suggested that the OpticiansDeliver.ca network could be that solution. Once opticians become comfortable with using this tool and the AOA achieves a level of comfort among optician users, there can be efforts to organize an OpticiansDeliver.ca buying group as a separate project.

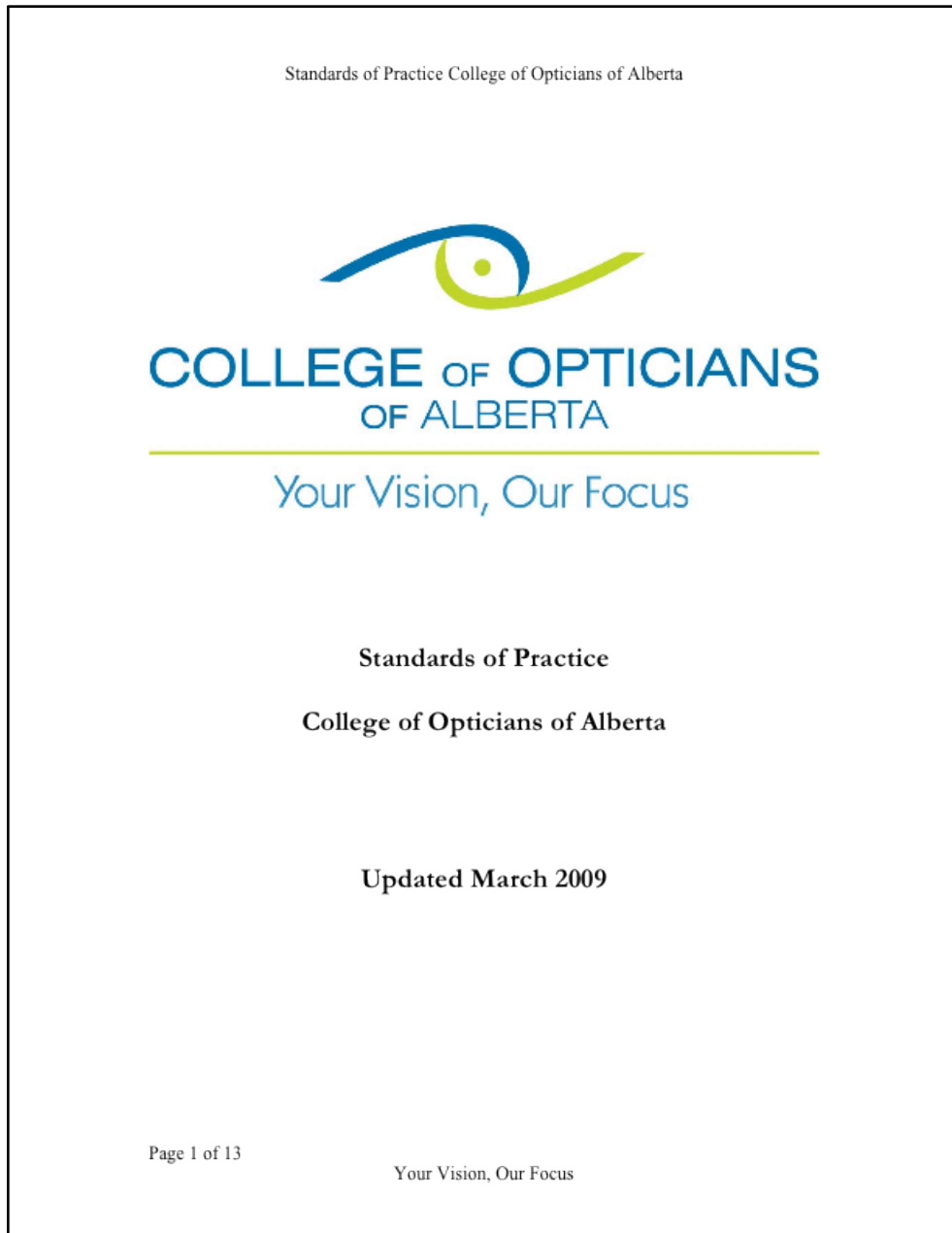
#### **5.4.4 Future Option: Phase Three – Marketing**

Phase three is essentially a buying group for marketing that complements previous successful phases. Once opticians are selling online (phase one) and have lowered their costs through a buying group (phase two), there may be interest in marketing campaigns. This future option is in phase three because marketing campaigns are costly, and will require users to provide proper funding to OpticiansDeliver.ca by paying higher subscription fees. The aim of marketing is to drive more consumers to OpticiansDeliver.ca and improve sales revenue for opticians.



# APPENDICES

## Appendix A: AOA Standards of Practice



Standards of Practice College of Opticians of Alberta

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## Standards of Practice College of Opticians of Alberta

### **College of Opticians of Alberta**

#### Regulating Opticians

#### **Introduction**

The College of Opticians of Alberta (COA) registers opticians in Alberta. All registrants of the COA must meet competency based educational requirements and pass examinations related to dispensing. (See appendix A for definition) Registration also requires that Opticians keep their knowledge and skills current through continuing competency.

The COA regulates the practice of opticianry and governs its members in accordance with legislation, regulations, by-laws, *standards, policies, code of ethics and codes of conduct*. In addition, it has among its objectives the development, establishment and maintenance of standards of practice to assure the quality of practice of the profession. In carrying out its objectives, it has a duty to serve and protect the public interest.

All opticians shall conduct themselves in a manner that is consistent with applicable legislation and the regulations, by-laws, rules, codes, policies and standards of practice and ethics of the College of Opticians of Alberta.

#### **Purpose and Scope of the College of Opticians of Alberta Standards**

The Standards of Practice serve the following purpose:

1. The Standards of Practice set out the College's expectations for how members will conduct themselves in their practice.
2. They provide the College of Opticians of Alberta with benchmarks against which it can measure members' conduct in the course of investigating complaints.
3. They provide the COA with benchmarks against which it can measure members' conduct in the course of performing peer assessments and quality assurance reviews.
4. They provide the public with a clear understanding of the quality of care they *can expect* to receive from an Optician.

The College of Opticians of Alberta is legally required:

1. To develop, establish and maintain programs and standards of practice to assure the quality of the practice of the profession of Opticianry.
2. To develop, establish and maintain standards of knowledge and skill and programs to promote continuing competence among the members;
3. To develop, establish and maintain standards of professional ethics for its members.

Standards of Practice College of Opticians of Alberta

**Practice Statement from the Health Professions Act**

In their practice, opticians do one or more of the following:

1. based on an optical prescription, design, supply, prepare, adjust and dispense optical appliances and prostheses, including corrective lenses,
2. promote eye health and the correct use of optical appliances and prostheses through education of consumers and regulated members,
3. perform refractions and identify the need for corrective lenses,
4. conduct or collaborate in optical related research,
5. when providing professional services referred to in this section, conduct assessments and make referrals where appropriate, and
6. provide restricted activities authorized by the regulations.

### **Standard 1**

#### **Each Registered Optician is responsible for ensuring that they maintain appropriate levels of professional competence.**

All opticians are subject to requirements of a continuing competency program. This contains several steps

1. a self assessment which involves comparing themselves to the competency profile.
2. design of a plan to address areas where competency can be improved.
3. collection of the required credits in the appropriate areas to address identified goals
4. report of successes to the College.

All opticians are also subject to practice audits in the form of peer assessments as part of the competency program

### **Standard 2**

#### **Each Registered Optician is responsible to practice at all times within their competence limitations.**

Even if you are licensed to perform a task, if you have not maintained competence in that area you should not perform the duties involved.

### Standard 3

**Each Registered Optician is responsible for ensuring that their place of employment has available for their use appropriate facilities, tools and equipment to allow them to comply with the standards of practice.**

#### **Eyeglasses**

A licensed eyeglass optician must be on the premises when eyeglasses are being dispensed subject to the requirements for dispensing corrective lenses in Standard 7. With permission of a Registered Optician, a non-licensee may deliver eyeglasses. The registered optician will be held accountable for all eyeglasses sold, dispensed or adjusted from the dispensary. Annual Certificate of Registration must be prominently displayed for every optician in a dispensary.

Each registered optician is responsible for maintaining in good condition, adequate tools, instruments and items necessary for fitting, dispensing and adjusting eyeglasses. The following tools and instruments must be on the premises at all times:

1. lensometer;
2. adjustment and bench tools;
3. lens clock (gauge);
4. pupillometer and/or mm pd ruler and penlight;
5. frame heater;
6. pd ruler;
7. tool to measure vertex distance;
8. thickness calipers;
9. distance and near visual acuity charts
10. tolerance charts;
11. frame and lens cleaning products; and
12. other such equipment and instruments as the COA indicates from time to time are necessary to maintain the standard of practice of the profession.

#### **Contact Lenses**

A Contact Lens Practitioner must be on the premises when contact lenses are being dispensed subject to the requirements for dispensing corrective lenses in Standard 7. A Contact Lens Practitioner may put aside contact lenses, for which the client has already been assessed for pick up by the client. Without permission of a Registered Contact Lens Practitioner, no one shall dispense contact lenses from a location. The Contact Lens Practitioner will be held accountable for all contact lenses sold, dispensed or adjusted from the dispensary.

Each contact lens practitioner is responsible for maintaining in good condition, adequate tools, instruments and items necessary for fitting, dispensing and adjusting contact lenses.

## Standards of Practice College of Opticians of Alberta

The following tools, instruments and items must be on the premises:

1. keratometer/ophthalmometer;
2. slit lamp/biomicroscope;
3. lensometer;
4. method of disinfecting tools, equipment and lenses.
5. distance and near visual acuity charts.
6. appropriate solutions for caring for lenses
7. currently dated solutions for caring for lenses
8. currently dated starter kits for patients
9. diagnostic trial lenses
10. sodium fluorescein

If fitting Rigid Contact lenses must also have:

11. radiuscope or equivalent;
12. loupe

### Standard 4

#### **Each Registered Optician is responsible for ensuring that their place of employment is a clean and safe environment.**

Each eyeglass dispensary must be sanitary, provide proper lighting facilities and mirrors. The dispensary must provide the optician easy accessibility to hot and cold running water.

An optician must know *and apply* safe working practices with regards to Infection Control Procedures.

An optician must know *and apply* safe working practices with regards to chemical, electrical, fire and noise hazards. Each optician should have the ability to perform basic first aid including knowledge of CPR .

Policy statements, procedure and equipment manuals, a first aid kit and emergency telephone numbers are to be kept on site in office manuals and should be available at all times.

Each contact lens dispensary must ensure a suitable surrounding to accommodate fitting and measurement equipment and allow for privacy and safety of the patient.

## Standard 5

### **Each Registered Optician is responsible for ensuring that they comply with appropriate Privacy Legislation.**

All information collected in the course of fitting and dispensing ophthalmic appliances belongs to the patient. Each Registered Optician is a custodian of patient information and as such must comply with retention use and disclosure requirements laid out in law.

An Optician must maintain all patient files for a minimum of seven years from date of last entry. Files must be stored in a secure location and not left open for others to view. All Opticians, as regulated health professionals, are responsible to ensure the customer/patient's rights of privacy.

File information being disposed of may be put in the garbage if it is non-identifiable. If personal information is contained this information should be shredded. Upon retirement or closing of a practice files still must be accessible to the patient for seven years. The College office should be notified as to where the files are being sent.

Each fitting must generate and record the following information legibly. Each file must contain:

- Patient's name
- Date each transaction performed,
- Identifier for who performed the fitting and dispensing *of the ophthalmic appliance*
  - Identifier for who is responsible for the fitting and dispensing *if a student has been involved*
- Identifier for who performed follow up care for contact lenses
- Release of information to the patient or another practitioner
  - Date, reason, who released to, authorization if any.
- Name of prescriber and date last seen,
- Patients optical prescription,
- Duplication information if applicable
- Record of payment including third party billings.

#### **For eyeglasses**

Each file must have the following patient information:

- Placement of optical centers vertically if not at datum line,
- Placement of the optical center horizontally
- Placement of bifocal/multifocal heights,

Each file must have the following lens and frame information:

- Lens type including index of refraction and brand,
- Coating or treatments provided for lenses,
- Safety features including special thickness given,



## Standards of Practice College of Opticians of Alberta

### **For Contact Lenses**

Each file must have the following patient information:

1. patient history;
2. visual acuity;
3. keratometer/ophthalmometer readings;
4. observations from a slit lamp/biomicroscope evaluation including pathological or physiological anomalies;
5. base curve, diameter and Rx of contact lenses lens type, including manufacturer and colour
6. patient's wearing expectations
7. solution instructions for lens disinfection
8. placement of bifocal/multifocal heights if applicable.

Each file should have the following lens information:

9. HVID (horizontal visible iris diameter);
10. tear quality TBUT
11. pupil size, when necessary (in bright and dim light);
12. fissure size;
13. expected date of follow up

### **Follow up visits**

At each subsequent visit date and changes made must be recorded. Initial follow up rechecks should be done within the recommended lifetime of a disposable lens or within one month for a non disposable lens. This recheck must be after sufficient trial period according to the lens specifications.

Annual follow up is recommended after initial fitting is complete and subsequent visits are recommended at least every two years.

### **Refracting**

1. If an optician intends to refract, he or she must apply to the College of Opticians of Alberta (COA) for refracting designation through a process established by the COA.
2. An optician must ensure that he or she has the appropriate equipment to perform refraction such as but not necessarily limited to, automated refraction equipment, phoropter, trial lenses, retinoscope and visual acuity charts.
3. An optician must use her or his knowledge, skills and judgment to refer any indication or complications in the patient's visual or general health that comes to the attention of the optician as a result of performing the refraction when and to whom is appropriate.
4. All prescriptions generated for use in preparing eyeglasses, contact lenses or subnormal vision devices must be signed by a lawful prescriber.
5. All prescriptions that are paid for with money or the purchase of product must be sent for signatures even if no actual dispensing takes place.

## Standards of Practice College of Opticians of Alberta

6. In addition to the patient's file, the refraction health record for every patient upon whom an optician has performed a refraction must contain:
  - Date of refraction
  - Name of optician performing the refraction and College registration number,
  - Patient consent form,
  - Results of the refraction
  - Name of Prescriber
  - Signature of Prescriber

### **Required Procedures for Fitting or Re-fitting of Ophthalmic appliances**

#### **Each optician must routinely:**

1. evaluate every optical prescription and advise patient of suitability of lenses and frames with the knowledge of occupational needs, hobbies and cosmetics;
2. evaluate every optical prescription and advise patient of suitability of lenses and frames with knowledge of optics and geometric physics applied to the product purchased;
3. advise patient of the consequences of changes in their prescription with regard to expectations for new eyewear purchased;
4. analyze changes in prescription with regards to medical complications indicated;
5. endeavour to meet the patients needs and expectations with regard to safety aesthetics and price;
6. provide follow up care including adjustment and advice to make wear easier and maintenance more effective;
7. be able to recall or locate applicable information in detail on their patients eyeglasses and or contact lenses;
8. recognize anomalies in prescription and wearing success and to refer the patient to a medical practitioner, if required;
9. evaluate every pair of eyeglasses, or contact lenses using tolerance charts before dispensing, for all possible controllable parameters.

#### Upon dispensing an Optician should verify the following;

- Patients needs have been identified and discussed,
- Vision requirements have been appropriately met,
- Patient understands required maintenance for their eyeglasses and or contact lenses,
- Patient understands the necessity of and availability of follow up care.

## Standard 6

### **Each Registered Optician will recognize limitations in expertise or scope and therefore the need for referral.**

#### **Referrals**

Referral to another suitable health professional will be given, if appropriate, in a timely manner.

If appropriate a referral should be accompanied by supporting documentation including assessments and specifics leading to the referral. Referral letters and the reply to the referral must become part of the patient record. Telephone referrals must be documented in the patient's record. Transfer of information between optical offices and or practitioners must also be recorded in the patient's file. Patients rights of privacy and consent must be adhered to during referral.

#### **Prescriptions**

Prescriptions for eyeglasses, contact lenses or subnormal vision devices do not expire; however an Optician must inform their patient of the importance of regular eye health assessments and recommend that patients have their eyes tested regularly.

For further information see guidelines laid out by the Ophthalmological Society of Canada regarding referrals for eye examinations.

Regulations state 10(2)

A regulated member who dispenses corrective lenses for the purpose of dispensing eyeglasses may do so only

- (a) in accordance with a prescription form a person who is authorized to prescribe corrective lenses, or
- (b) when the lenses are being duplicated with no change in refractive value.

#### **Visual Acuties**

It is recommended that any patient who is not able to reach visual acuities of 20/40 in best corrected eye, with their prescription device, be informed that they are borderline for driving in accordance with "the Canadian Council of Motor Transport Administrators Medical Standards for Drivers"

Although 20/50 is the lower limit for class five licensure in Canada, it is recommended that Opticians refer under 20/40 to determine driving capabilities. When performing a refraction the patient must be informed that they require further assessment.

## Standard 7

### **Each Registered Optician who is a practicum supervisor is responsible all activities carried out by a student under their supervision.**

#### **Students**

Student refers to any person employed in the optical field and registered and currently participating in an approved optical course. A registered eyeglass or contact lens practitioner, optometrist or ophthalmologist may be a practicum supervisor.

It is the responsibility of the practicum supervisor to determine when a student is proficient enough to perform particular duties with on site supervision, i.e. frame adjustment. Until that time all activities of a student must be performed with direct supervision. Delivery of the ophthalmic product does not require supervision.

The practicum supervisor will be held accountable for all activities carried out by a student under their supervision. All aspects of the supervision as laid out by the optical program at NAIT and all activities of the Field supervision program must be complied with.

**For the purposes of this document the following definitions are applicable regardless of their meaning in other documents.**

#### **Direct Supervision**

A registered supervisor is observing and analyzing the performance of the student.

#### **On Site Supervision**

A registered supervisor is on the premises and available to the student for consultation.

#### **Premises**

The premises are defined as the area within the confines of the optical dispensary.

**Dispense** – as defined in Schedule 7.1 of the Health Services Restricted Activities (the objective verification of corrective lenses to the prescription) means to:

- Counsel the patient before, during and after the purchase process on the suitability of the frame, lens and contact lens selection to their prescription and their needs.
- Perform measurements for the ophthalmic appliances
- Analyze the accuracy of the finished product to the tolerance charts and the patient's requirements.
- Manipulate the position of the lenses of a subnormal vision device to ensure appropriate lens positioning for the patient.
- Alter the powers of a lens within mathematically defensible limitations.
- Alter the fit of a contact lens to fulfill the optical and physical needs of the patient.

#### **Delivery**

- Release the ophthalmic appliance to the customer/ patient as put aside by the registered optician/contact lens practitioner
- Mail the ophthalmic appliance on the instruction of the registered practitioner.

**Standard 8**

**Each Registered Optician is responsible for complying with the code of ethics.**

**Standard 9**

**Each Registered Optician is responsible for ensuring that all standard tolerances are met for the accuracy of ophthalmic appliances.**

Standard Tolerance charts are available on the website. Current Canadian Standards always apply.

**Standard 10**

**Each Registered Optician is responsible for ensuring proper laws are adhered to where they are employed.**

A license is not required in order to own an Optical Dispensary.

A license **is** required to operate a dispensary.

When a regulated member operates a dispensary the following requirements must be met:

- that regulated member perform or supervise the performance of the restricted activity of dispensing in accordance with the regulations;
- that regulated member carry errors and omissions insurance in accordance with the regulations;
- that regulated members sign insurance and third party contract forms;
- that regulated members must not support or condone the provision of professional services by an employee who is trained and educated as an optician unless the employee is registered with the College. (It is an offense to hire an unregulated individual who should be regulated.)

## Appendix B: Abridged Survey

1. Please rate how important the following features are to you when purchasing prescription eyeglasses or contact lenses? (Price)

		HOUSEHOLD INCOME			HOUSEHOLD COMPOSITION		YELLOW PAGE LISTING			
			\$30K -			No				
		Total	<\$30K	<\$60K	\$60K+	Kids	No Kids	Optometrist	Optician	Ophthalmologist
			A	B	C	D	E	F	G	H
Base: All respondents	2007	451	704	852	258	1749	1263	579	165	
Weighted	2007	539	668	800	385	1622	1327	555	125	
Very important	1240 62%	371 69% C	425 64% C	443 55%	252 65%	988 61%	811 61%	362 65% H	67 53%	
Somewhat important	649 32%	138 26%	204 31%	307 38% AB	113 29%	536 33%	447 34%	154 28%	47 38% G	
Not very important	72 4%	22 4%	21 3%	29 4%	8 2%	64 4%	43 3%	20 4%	9 7% F	
Not at all important	47 2%	8 1%	18 3%	21 3%	12 3%	34 2%	27 2%	18 3%	2 1%	
Summary										
Top2Box (Important)	1888 94%	509 94%	629 94%	750 94%	365 95%	1524 94%	1258 95%	516 93%	114 91%	
Low2Box (Not Important)	119 6%	30 6%	39 6%	49 6%	20 5%	99 6%	69 5%	38 7%	11 9%	

Proportions/Mean: Columns Tested (5% risk level) - A/B/C - D/E - F/G/H Overlap formulae used.

2. Please rate how important the following features are to you when purchasing prescription eyeglasses or contact lenses? (Convenience)

		HOUSEHOLD INCOME			HOUSEHOLD COMPOSITION		YELLOW PAGE LISTING		
	Total	<\$30K	\$30K - <\$60K	\$60K+	Kids	No Kids	Optometrist	Optician	Ophthalmologist
		A	B	C	D	E	F	G	H
Base: All respondents	2007	451	704	852	258	1749	1263	579	165
Weighted	2007	539	668	800	385	1622	1327	555	125
Very important	750 37%	224 41%	248 37%	278 35%	145 38%	606 37%	487 37%	216 39%	47 38%
Somewhat important	1034 52%	259 48%	342 51%	434 54%	197 51%	838 52%	698 53%	272 49%	64 51%
Not very important	166 8%	42 8%	60 9%	64 8%	29 7%	137 8%	111 8%	42 8%	12 10%
Not at all important	57 3%	14 3%	19 3%	24 3%	15 4%	42 3%	30 2%	24 4%	2 2%
<b>Summary</b>									
Top2Box (Important)	1785 89%	483 90%	590 88%	712 89%	341 89%	1443 89%	1186 89%	488 88%	111 89%
Low2Box (Not Important)	222 11%	56 10%	78 12%	88 11%	44 11%	179 11%	142 11%	67 12%	14 11%

Proportions/Means: Columns Tested (5% risk level) - A/B/C - D/E - F/G/H Overlap formulae used.

3. Please rate how important the following features are to you when purchasing prescription eyeglasses or contact lenses? (Knowledge and professionalism of the service provider)

		HOUSEHOLD INCOME			HOUSEHOLD COMPOSITION		YELLOW PAGE LISTING			
			\$30K -			No				
		Total	<\$30K	<\$60K	\$60K+	Kids	Kids	Optometrist	Optician	Ophthalmologist
		A	B	C	D	E	F	G	H	
Base: All respondents	2007	451	704	852	258	1749	1263	579	165	
Weighted	2007	539	668	800	385	1622	1327	555	125	
Very important	1565 78%	408 76%	530 79%	626 78%	274 71%	1291 80% D	1076 81% G	384 69%	105 84% G	
Somewhat important	375 19%	117 22%	117 18%	141 18%	87 22%	289 18%	213 16%	144 26% FH	19 15%	
Not very important	31 2%	7 1%	7 1%	17 2%	11 3%	19 1%	17 1%	13 2%	1 1%	
Not at all important	36 2%	8 1%	14 2%	15 2%	13 3%	23 1%	22 2%	14 2%	1 0%	
<b>Summary</b>										
Top2Box (Important)	1940 97%	524 97%	648 97%	768 96%	361 94%	1579 97% D	1288 97%	528 95%	123 99%	
Low2Box (Not Important)	67 3%	15 3%	20 3%	32 4%	24 6% E	43 3%	39 3%	27 5%	2 1%	

Proportions/Mean: Columns Tested (5% risk level) - A/B/C - D/E - F/G/H Overlap formulae used.



4. Where would you prefer to purchase your prescription eyeglasses or contact lenses? (First Choice)

	Total	<\$30K	\$30K - <\$60K	\$60K+	Optometrist	Optician	Ophthalmologist
		A	B	C	F	G	H
Base: All respondents	2007	451	704	852	1263	579	165
Weighted	2007	539	668	800	1327	555	125
An independent eyewear shop	877 44%	224 42%	282 42%	370 46%	498 38%	324 58% FH	54 43%
An eye doctor's office	771 38%	243 45% C	260 39%	269 34%	598 45% G	128 23%	45 36% G
A chain store such as Costco or The Bay	255 13%	58 11%	66 10%	131 16% AB	167 13%	67 12%	21 17%
The internet	40 2%	3 1%	17 3% A	19 2% A	23 2%	16 3%	1 1%
Don't know	6+4 3%	11 2%	42 6% AC	11 1%	41 3%	19 3%	4 3%

Proportions/Mean: Columns Tested (5% risk level) - A/B/C - D/E - F/G/H Overlap formulae used.

5. Where would you prefer to purchase your prescription eyeglasses or contact lenses? (Total choices)

	Total	HOUSEHOLD INCOME			YELLOW PAGE LISTING		
		<\$30K	\$30K - <\$60K	\$60K+	Optometrist	Optician	Ophthalmologist
		A	B	C	F	G	H
Base: All respondents	2007	451	704	852	1263	579	165
Weighted	2007	539	668	800	1327	555	125
An independent eyewear shop	1526 76%	403 75%	494 74%	629 79%	974 73%	461 83% FH	92 73%
An eye doctor's office	1364 68%	400 74% C	457 68%	508 63%	949 71% GH	338 61%	77 61%
A chain store such as Costco or The Bay	1040 52%	279 52%	336 50%	426 53%	687 52%	289 52%	65 52%
The internet	614 31%	188 35% C	223 33% C	203 25%	419 32%	164 30%	31 25%
Don't know	51 3%	6 1%	34 5% AC	10 1%	36 3%	11 2%	4 3%

Proportions/Mean: Columns Tested (5% risk level) - A/B/C - D/E - F/G/H Overlap formulae used.

## 6. Why do you choose to purchase through...?

	Total	HOUSEHOLD INCOME			YELLOW PAGE LISTING		
		<\$30K	\$30K - <\$60K	\$60K+	Optometrist	Optician	Ophthalmologist
		A	B	C	F	G	H
Base: Have preference for prescription purposes	1966	444	682	840	1233	571	162
Weighted	1956	533	634	790	1292	544	121
Better price/ cost/ cheaper	505 26%	126 24%	147 23%	232 29% B	318 25%	155 28%	33 27%
More/ better selection	330 17%	58 11%	123 19% A	149 19% A	199 15%	111 20% F	19 16%
Knowledgeable/ know what their doing	206 11%	58 11%	69 11%	79 10%	139 11%	55 10%	12 10%
Good/ better service	182 9%	31 6%	65 10% A	86 11% A	116 9%	59 11%	7 6%
Convenient (unspecified)	182 9%	55 10%	60 10%	66 8%	135 10%	38 7%	9 7%
Trustworthy/ trust them more	131 7%	28 5%	47 7%	56 7%	109 8% G	18 3%	4 3%
More accurate prescription/ glasses	102 5%	27 5%	36 6%	40 5%	74 6%	22 4%	7 6%
Better warranty/ after sale service	97 5%	19 3%	34 5%	44 6%	57 4%	35 6%	6 5%
Personalized service	95 5%	23 4%	32 5%	40 5%	56 4%	30 6%	9 7%
Professional/ professionalism	80 4%	28 5%	23 4%	29 4%	56 4%	15 3%	9 7% G
Have always gone there/ have been going there for a long time	75 4%	22 4%	32 5% C	20 3%	50 4%	21 4%	4 4%
Specialized/ only deal with glasses	65 3%	14 3%	27 4%	23 3%	31 2%	30 5% F	4 3%
Like to support local businesses	58 3%	12 2%	20 3%	26 3%	37 3%	18 3%	3 2%
Good/ better quality	52 3%	10 2%	19 3%	24 3%	39 3%	11 2%	2 2%
One stop shopping/ already	52	16	14	21	41	9	2

there for other shopping	3%	3%	2%	3%	3%	2%	1%
Independent/ unbiased/ not pushy	40 2%	10 2%	8 1%	23 3%	26 2%	11 2%	2 2%
Can have exam and purchase glasses at same place	36 2%	13 2%	14 2%	9 1%	27 2%	7 1%	3 2%
More qualified/ better trained	30 2%	16 3% B	4 1%	10 1%	16 1%	11 2%	3 2%
Faster service/ delivery	23 1%	5 1%	10 2%	8 1%	15 1%	5 1%	2 2%
Convenient location	21 1%	3 1%	8 1%	11 1%	9 1%	10 2%	2 1%
Only choice	13 1%	9 2% B	0 -	5 1%	12 1%	2 0%	0 -
Other	290 15%	99 19%	87 14%	104 13%	192 15%	75 14%	23 19%
No reason	21 1%	7 1%	7 1%	8 1%	15 1%	4 1%	1 1%
Don't know	60 3%	23 4% C	29 5% C	8 1%	26 2%	32 6% F	3 2%

Proportions/Mean: Columns Tested (5% risk level) - A/B/C - D/E - F/G/H Overlap formulae used.

7. Please rate how important the following services are to you for your optician to provide? (Properly fitting your new eyeglasses and contact lenses)

	HOUSEHOLD INCOME			YELLOW PAGE LISTING			
	Total	<\$30K	\$30K - <\$60K	\$60K+	Optometrist	Optician	Ophthalmologist
	A	B	C	F	G	H	
Base: All respondents	2007	451	704	852	1263	579	165
Weighted	2007	539	668	800	1327	555	125
Very important	1702 85%	466 86%	570 85%	667 83%	1110 84%	484 87%	108 86%
Somewhat important	229 11%	62 12%	63 9%	104 13%	167 13%	51 9%	12 9%
Not very important	25 1%	4 1%	12 2%	9 1%	19 1%	4 1%	3 3%
Not at all important	50 3%	7 1%	23 4%	20 3%	32 2%	16 3%	3 2%
<b>Summary</b>							
Top2Box (Important)	1931 96%	528 98% B	632 95%	771 96%	1277 96%	535 96%	119 95%
Low2Box (Not Important)	76 4%	11 2%	36 5% A	29 4%	50 4%	20 4%	6 5%

Proportions/Mean: Columns Tested (5% risk level) - A/B/C - D/E - F/G/H Overlap formulae used.

8. Please rate how important the following services are to you for your optician to provide? (Testing your eyesight)

	HOUSEHOLD INCOME			YELLOW PAGE LISTING			
	Total	<\$30K	\$30K - <\$60K	\$60K+	Optometrist	Optician	Ophthalmologist
	A	B	C	F	G	H	
Base: All respondents	2007	451	704	852	1263	579	165
Weighted	2007	539	668	800	1327	555	125
Very important	1304 65%	394 73% BC	438 66% C	472 59%	949 72% G	268 48%	87 69% G
Somewhat important	354 18%	83 15%	119 18%	152 19%	202 15%	131 24% F	21 17%
Not very important	196 10%	34 6%	62 9%	99 12% A	108 8%	83 15% FH	5 4%
Not at all important	154 8%	28 5%	48 7%	77 10% A	68 5%	73 13% F	13 10% F
<b>Summary</b>							
Top2Box (Important)	1658 83%	477 88% C	557 83% C	624 78%	1151 87% G	399 72%	107 86% G
Low2Box (Not Important)	349 17%	62 12%	111 17%	176 22% AB	176 13%	156 28% FH	18 14%

Proportions/Mean: Columns Tested (5% risk level) - A/B/C - D/E - F/G/H Overlap formulae used.

9. How obligated do you feel to purchase eyewear from the person who tests your eyesight?

	HOUSEHOLD INCOME			YELLOW PAGE LISTING			
	Total	<\$30K	\$30K - <\$60K	\$60K+	Optometrist	Optician	Ophthalmologist
	A	B	C	F	G	H	
Base: All respondents	2007	451	704	852	1263	579	165
Weighted	2007	539	668	800	1327	555	125
Very obligated	120 6%	34 6%	39 6%	47 6%	90 7%	23 4%	7 6%
Somewhat obligated	638 32%	189 35%	212 32%	237 30%	460 35% G	142 26%	35 28%
Not very obligated	718 36%	181 34%	237 36%	299 37%	479 36%	203 37%	36 29%
Not at all obligated	531 26%	134 25%	181 27%	217 27%	299 23%	187 34% F	46 37% F
<b>Summary</b>							
Top2Box (Obligated)	757 38%	224 41%	250 37%	284 35%	550 41% G	165 30%	42 34%
Low2Box (Not Obligated)	1250 62%	315 59%	418 63%	516 65%	777 59%	390 70% F	83 66%

Proportions/Mean: Columns Tested (5% risk level) - A/B/C - D/E - F/G/H Overlap formulae used.

10. When buying prescription eyeglasses or contact lenses, how much of a convenience is it to be able to purchase at the same location where you have your eyesight tested?

	HOUSEHOLD INCOME			YELLOW PAGE LISTING			
	Total	<\$30K	\$30K - <\$60K	\$60K+	Optometrist	Optician	Ophthalmologist
		A	B	C	F	G	H
Base: All respondents	2007	451	704	852	1263	579	165
Weighted	2007	539	668	800	1327	555	125
A great convenience	790 39%	246 46% C	270 40%	274 34%	586 44% GH	168 30%	37 29%
A moderate convenience	672 33%	175 33%	208 31%	289 36%	426 32%	215 39% FH	31 25%
A minor convenience	360 18%	82 15%	127 19%	151 19%	227 17%	105 19%	27 22%
Not a convenience	185 9%	36 7%	63 9%	86 11%	88 7%	67 12% F	30 24% FG
<b>Summary</b>							
Top2Box (Convenient)	1462 73%	421 78% C	478 72%	563 70%	1012 76% GH	382 69% H	68 54%
Low2Box (Not Convenient)	545 27%	118 22%	190 28%	237 30% A	316 24%	172 31% F	57 46% FG

Proportions/Mean: Columns Tested (5% risk level) - A/B/C - D/E - F/G/H Overlap formulae used.



### 11. How much value do you place on the services provided by an optician?

	HOUSEHOLD INCOME				YELLOW PAGE LISTING		
	Total	<\$30K	\$30K - <\$60K	\$60K+	Optometrist	Optician	Ophthalmologist
		A	B	C	F	G	H
Base: All respondents	2007	451	704	852	1263	579	165
Weighted	2007	539	668	800	1327	555	125
A great deal of value	621 31%	208 39% C	209 31%	204 26%	411 31%	181 33%	29 23%
A moderate amount of value	1079 54%	263 49%	375 56%	442 55%	703 53%	315 57%	61 49%
A minor amount of value	261 13%	55 10%	64 10%	141 18% AB	187 14% G	45 8%	30 24% FG
No value at all	46 2%	13 2%	20 3%	13 2%	26 2%	14 2%	6 5% F
<b>Summary</b>							
Top2Box (Great/ Moderate Value)	1700 85%	470 87% C	583 87% C	646 81%	1114 84% H	496 89% FH	89 71%
Low2Box (Minor/ No Value)	307 15%	69 13%	85 13%	154 19% AB	213 16% G	59 11%	36 29% FG

Proportions/Mean: Columns Tested (5% risk level) - A/B/C - D/E - F/G/H Overlap formulae used

## REFERENCE LIST

- Amit, R., & Zott, C. (2001). Value Creation in E-Business. *Strategic Management Journal*, 22(6/7), 493. doi:10.1002/smj.187.
- Alberta Opticians Association. (2009). COA/AOA Standards of Practice. Edmonton, AB: Author, Retrieved from <http://opticians.ab.ca>
- British Columbia Ministry of Health Services. (2010, March 19). *News Release*. Victoria, BC: Author, Retrieved from [http://www2.news.gov.bc.ca/news\\_releases\\_2009-2013/2010HSERV0015-000286.htm](http://www2.news.gov.bc.ca/news_releases_2009-2013/2010HSERV0015-000286.htm)
- Chakravorti, B. (2004). The New Rules for Bringing Innovations to Market. *Harvard Business Review*, 82(3), 58-67. Retrieved from Business Source Complete database.
- Ladurantaye, S. (2009, April 28). An eye on expansion. *Globe and Mail*. Retrieved from <http://v1.theglobeandmail.com/servlet/story/RTGAM.20090424.caseIndex28/BNStory/breakthrough>
- Metcalf, R. (2007, May 7). It's All In Your Head. *Forbes*. Retrieved from <http://forbes.com>
- Nichols, J. (2009, January). Contact Lenses 2008. *Contact Lens Spectrum*. Retrieved from <http://clspectrum.com>
- Pearlstein, J. (2009, February 18). Anatomy of an Auction. *Wired*. Retrieved from <http://www.wired.com>
- Rogers, E. M. (1962). *Diffusion of Innovations*. Glencoe, IL: Free Press.
- Van Siyke, C., Ilie, V., Hao, L., & Stafford, T. (2007). Perceived critical mass and the adoption of a communication technology. *European Journal of Information Systems*, 16(3), 270-283. doi:10.1057/palgrave.ejis.3000680.
- Web Analytics Association. (2010). About Us. Retrieved from <http://www.webanalyticsassociation.org/>