

Red River Optical: Affordable reading glasses for Vietnam¹

[Amounts in Australian dollars AUD and Vietnamese Dong VND]

[All appendices and linked spreadsheet are on the website. Highlighted values are linked to the spreadsheet.]

Executive summary

Problem

Today in Vietnam, about one-quarter of a population of 87.0m, or 20.9m people, needs reading glasses. They need them to work: to read a ledger, to thread a needle, to mend a shoe, or to fix a radio. They need them to live: to separate stones from the rice for the evening meal, to read a religious text, or to enjoy the newspaper. In short, they need reading glasses to lead full and productive lives.

Yet last year only Vietnamese purchased reading glasses. *That is only 0.4% of the eligible, addressable population.* Lack of access to glasses and issues of cost are the underlying reasons for this disparity that damage the country's prosperity and the individual's livelihood.

Red River of Vietnam Ltd's business strategy

With an initial capital investment \$289,175 **Red River of Vietnam Ltd** will sell approximately 257,460 low-cost ready-made reading glasses in Vietnam in the first three years of operation. Over 18.9m potential customers in this country currently have no access to this simple product. The core of **RROV Ltd's** strategy is to improve the technological capacity of a local manufacturer to produce high-quality, affordable ready-made reading glasses and to use innovative distribution strategies to bring the point of sale to consumers in their daily lives-- pharmacies, general stores, factories and villages.

Red River of Vietnam Ltd's business model is: **scaleable**, enabling eyeglasses distribution to millions of people; **sustainable**, targeting net revenue producing urban markets in order to support distribution to low-income rural market; and **replicable**, fostering expansion throughout Vietnam and beyond.

Table BP.X Major Financial and Social Objectives by end 2006



Financial	Social
\$820,988 Annual sales	257,460 Vietnamese whose productivity and functionality will be improved by obtaining reading glasses
\$109,961 Annual net income	356 Employment opportunities created, of which 387 will be for very low-income individuals
27.2%% Ending return on equity	\$656/year Average to Vision Angels who are involved in the distribution process
\$265,777 Capital for equipment replacement and investment in business expansion	\$525/year Average supplemental income to optipreneurs selling glasses in rural communities

Manufacturing and product

Red River of Vietnam Ltd will transfer modern spectacle frame- and lens-making technology that will enable our manufacturing partner to produce higher quality ready-made glasses than are currently produced in Vietnam. **RROV Ltd** is in advanced negotiations with VisioPlus of India to take on the role of manufacturer. VisioPlus of India is a non-profit manufacturing facility that produces certified, high-quality surgical and optical devices that are exported around the world. **RROV Ltd** will produce glasses designed according to local tastes to appeal to fashion-conscious Vietnamese consumers and be affordable to low-income purchasers. Glasses will be priced to end-users from \$2.50 in rural areas to \$5-\$6 in urban areas.

Distribution

Currently the distribution of reading glasses is controlled by eye care professionals who lack the financial motivation to distribute ready-made reading glasses. **Red River of Vietnam Ltd** aims to replicate the channel shift that took place in the West over a decade ago during which ready-made readers became available without prescription in mass-market retail outlets, creating a \$1 billion industry.

In urban areas, **Red River of Vietnam Ltd** will use teams of sales agents to sell ready-made glasses to non-optical retail stores such as pharmacies, general stores, and bookstores. **RROV Ltd** will use mobile units, vans stocked with glasses and sales agents, to bring reading glasses to the gates of local factories. Profits generated from urban sales will subsidise distribution in rural areas where access is non-existent and social impact from reading glasses is greatest. **RROV Ltd** will sell reading glasses to hospital partners and NGOs working in micro-lending. These customers will channel the glasses into their existing network of community-based vision health workers, whom we call 'optipreneurs', enabling **RROV Ltd** to penetrate the rural market. **RROV Ltd** will also sell reading glasses to the Government for re-sale to their employees

Table BP.X Sales Targets through end 2006

Distribution Channel	Pairs Sold
Retail Stores	43,560
Mobile Units	157,500

Rural Entrepreneurs (Vision Angels and Optipreneurs)	42,900
Government	13,500

Possible Risk

Vietnamese consumers may at first be adverse to purchasing ready-made glasses through non-optical channels because they are not aware that 90% of *presbyopes* do not need a doctor's prescription. Presbyopia is the condition where, as the person ages, the eye's crystalline lens loses elasticity, which limits their ability to change focus. **RROV Ltd** will address this concern initially by allying itself with public health professionals to lend credibility to our product. **RROV Ltd** will sell glasses through pharmacies, as well as through Vision Angels who will be trained by, and affiliated with, Ho Chi Minh City Eye Institute's leading ophthalmologist and the head of the government's vision program. Marketing professionals will create an extensive educational marketing campaign that will raise awareness among consumers about the benefits of near-vision glasses and about the ease of purchase without a prescription.

Red River of Vietnam Ltd's team

A team of skilled and experienced individuals in Vietnam will run **Red River of Vietnam Ltd**, with technical support and oversight from **Red River Optical Charitable Trust of Australia**. Charitable Trust Directors Dr. Elizabeth Coleman and Mr. Alvaro Reid operate a \$2 million ready-made reading glass business in Australia and have more than 30 years of experience in entrepreneurship and international eye care. **RROV Ltd** has identified a pool of highly qualified candidates in Vietnam for the position of CEO and other positions to launch and lead this venture. **RROV Ltd's** board members will provide expertise in executing a sustainable social enterprise and the delivery of low-cost health products to people in the developing world. Board Member Dr. Nguyen Thi Thu Ha, director of the renowned Ho Chi Minh City Eye Institute ("**HCMC Eye Institute**"), will help **RROV Ltd** access key government markets and develop a strong platform for its rural distribution plans.

Conclusion

With the population of Vietnam soon approaching 100 million people, with the life expectancy of Vietnamese increasing, and with the literacy rate exploding, a rapidly growing market for high-quality, accessible, and affordable reading glasses is inevitable. **Red River of Vietnam Ltd** will position itself as the leader in this market. With talented and entrepreneurial leadership we will use manufacturing, distribution, and marketing expertise to reach more than 257,460 price- and quality-sensitive customers in our first three years. **RROV Ltd** has the partnerships, the experience, and the drive to establish this socially-motivated, environmentally sensitive distribution model and ensure that low-income individuals in Vietnam have access to reading glasses they can afford in order to increase their quality of life and economic security.

Business description

Red River of Vietnam Ltd will sell 257,460 low-cost ready-made reading glasses in Vietnam in the first three years of operation. Over 18 million potential customers currently have no access to this simple product. **RROV Ltd's** focused business model is:

- Scalable, enabling eyeglasses distribution to millions of people;
- Sustainable, targeting net revenue-producing urban markets in order to support distribution to low-income rural market;
- Social just and effective in increasing Vietnam's economic development; and
- Replicable, fostering expansion throughout Vietnam and beyond.

Background and history

Red River Optical Vision of Australia Pty, launched in 1979 by Dr. Elizabeth Coleman and Mr. Alvaro Reid, is a \$2 million ready-made reading glass business with headquarters in Melbourne. Coleman and Reid together have more than 60 years of experience in entrepreneurship and international eye care.

The present **Red River of Vietnam Ltd** (“**RROV Ltd**”) is an outgrowth of Dr. Coleman's mission experience treating causes of blindness in the Red River Delta area of Vietnam and in other countries around the world. Coleman recognised that she was constantly turning away the largest number of people who requested eye care services: those who suffer from presbyopia (blurry up-close vision) and who required simple reading glasses. Dr. Coleman's eye health missions were designed to assist people with the most debilitating conditions, including cataracts (clouding of the eye's lens), river blindness (transmitted through the bite of a black fly), and trachoma (world's leading cause of infectious blindness). Her medical teams had not imagined that thousands of people would seek out treatment for a condition that, in the developed world, is treated easily and affordably at the local pharmacy. Dr. Coleman and her colleagues were simply not equipped to address the needs of thousands of patients, and she quickly saw the magnitude of this global market failure. Universally, 80.0% of all people above the ages of 35-40 suffer from presbyopia. In Vietnam alone, we estimate that there are 20.9m people who could benefit from access to simple reading glasses.

The impact of a pair of reading glasses is remarkable. An individual's working life can be considerably lengthened since near-vision glasses make it possible to continue with vocations that require up-close vision, such as weaving, cutting hair, tailoring, bookkeeping, or doing mechanical repairs. Quality of life improves as he or she can once again read newspapers, religious texts, and literature.

Access to simple magnifying eyeglasses (also known as 'readers') is limited in developing countries because Ministries of Health concentrate their scarce resources on more fundamental medicine. The private-sector ophthalmic industry, when it exists at all, is primarily interested in making money from high-priced frames and lenses. There is no distribution mechanism to get glasses to the millions in need.

Determined to find a way to make affordable reading glasses available in developing countries, the founders started **Red River Optical Charitable Trust of Australia** (“The Trust”). This incorporated Australian association began activities in 2001 to broaden the access of affordable reading glasses to people around the world. The Trust is a 'not-for-profit' charitable and educational 'incorporated association' under

Australian law with its seat in Melbourne. Its purpose is not to make a profit, but it is permitted to do so if the profit is left within the trust. It can receive donations and can re-invest earned income.

With seed funding from grant-making institutions, The Trust started two successful pilot projects in the Red River Delta region of Vietnam and the Rio Rojo river of Ecuador (hence the company names “Red River”). In partnership with local micro-credit and health programs targeting the rural poor, the Trust developed an innovative distribution model that engages low-income local women in the screening and eyeglass distribution process. They are called ‘optipreneurs’, or optical micro-entrepreneurs, who micro-credit loans to purchase inventory, learn how to test for near-vision problems, and then sell non-prescription glasses in their communities as a supplement to their existing income.

The Trust’s programs demonstrated a market demand for affordable reading glasses in rural areas. Artisans such as weavers and tailors showed improvements in health and productivity after purchasing the readers. The program also gave women entrepreneurs the opportunity to earn significant additional income. The Trust devised innovative loan structures to help women supplement their income by selling only 1-2 pairs of reading glasses per week. Our optipreneurs are using this additional income to feed, educate, house, and provide medical care for their children. Both the optipreneurs and the purchasers of glasses experienced increased economic security.

To realise these dreams, Coleman and Reid founded **Red River International** as a non-profit charity on the 26th of July 2004 under the Enterprise Law of the Government of Vietnam. However, with the objective of building a sustainable business, the charity was reorganised in 2005 into **Red River Optical of Vietnam Limited “RROV Ltd”** and acquired the legal status of a limited liability company (guided by the first draft of Decree 28/CP of the Government Vietnam dated the 9th of March 2005). The new **RROV Limited** retains its non-profit mission after transforming to a limited liability company

Red River of Vietnam Ltd’s strategy is to create a self-sustaining business model in Vietnam that supports large numbers of sales in both urban and rural markets. Structured as a limited liability company--a separate Vietnamese legal entity that can generate revenue--our venture will sell affordable glasses through urban and rural distribution channels. Revenue from our sales in Vietnam will remain in Vietnam, enabling **RROV Ltd** to continue offering high-quality glasses to the rural poor at or below cost. Our strategy will also enable **RROV Ltd** to continue to operate and expand our micro-entrepreneur distribution model, giving working poor and low-income individuals the opportunity to start their own businesses and earn significant income.

Red River’s mission

Our mission is to create a sustainable eyeglass manufacturing and distribution operation that makes affordable, quality ready-made reading glasses readily available to all low to moderate income individuals in Vietnam.

Red River’s company vision

Red River of Vietnam Ltd’s company vision is to:

- **Enable** presbyopic Vietnamese to retain or regain their economic productivity and livelihood by providing them with the means to see up-close.
- **Enhance** the quality of life for presbyopic Vietnamese by providing them with the means to perform daily tasks such as reading and household duties with ease.
- **Empower** Vietnamese consumers by introducing the concept of self-prescribed reading glasses. This will eliminate the costly and time-consuming necessity of obtaining custom made glasses with an eye doctor's prescription when simple non-prescription pre-made readers will suffice.
- **Provide** economic opportunities to supplement income for low-income people by engaging them in the distribution system and other related activities.
- **Accomplish** our goals in a socially just and environmentally sensitive manner.

Business summary

Red River Charitable Trust ('Trust') of Australia will expand into Vietnam by establishing a separate legal entity in accordance with Vietnamese law, named **Red River of Vietnam Ltd** ('Company'), which will sell quality near-vision glasses through various channels at prices set according to the paying capacity of our target markets. **RROV Ltd** will also enhance the manufacturing capacity of a local eyeglass manufacture in order to secure a source of low-cost, high quality product that is not subject to the import duties that are levied on similar products from China. **RROV Ltd's** business involves three strategies:

- **Manufacturing:** Red River Charitable Trust will transfer spectacle frame moulding technology to Vietnam for a local manufacturing partner to produce higher quality, ready-made reading glasses than are currently made in Vietnam. The cost and quality of these glasses will be competitive with Chinese and Thai imports. **RROV Ltd** is in negotiations with VisioPlus of India to take on the role of our local manufacturing partner. VisioPlus of India is the manufacturing division of Arvind Eye Hospital and currently manufactures spectacle lenses, intraocular lenses, and analogue hearing aids. VisioPlus of India has a stated mission of supplying high quality ophthalmic consumables at prices affordable to the poor in developing countries.
- **Urban Distribution:** **RROV Ltd** will tap into existing retail networks to distribute ready-made reading glasses in urban and peri-urban (between the suburbs and the countryside) markets of Vietnam. Reading glasses are currently available in a very limited number of urban optical shops. **RROV Ltd** will train sales associates to insert this product into non-optical channels such as general stores and pharmacies. In addition, **RROV Ltd's** mobile units will directly serve large numbers of customers in specifically targeted factories and industrial areas. The average retail price of the glasses in urban areas will be \$5-6. Revenue from **RROV Ltd's** sales to under-served low and moderate-income customers in our urban distribution channels will subsidise the cost of distribution in rural areas where a majority of the population is poor.
- **Rural Distribution:** In rural areas, where the people are poorer and populations sparser, **RROV Ltd** will subsidise the high cost of distribution in order to lower the price of the glasses to a price people can afford. **RROV Ltd** will offer them to the consumer at around \$2.50 per pair through channels including

eye health facilities and local optipreneurs. **RROV Ltd** will leverage our contacts with Hanoi-based Ho Chi Minh City Eye Institute, one of the top eye hospitals in Asia, and with the government of Vietnam to distribute glasses.

By bolstering local manufacturing capacity and implementing a multi-tiered pricing system, **RROV Ltd** will be able to provide people of low-to-moderate income levels an affordable, premium quality product. The Red River venture will achieve financial sustainability by earning a profit in the urban markets. Net revenue will be used to subsidise rural distribution where purchasing power is low, in addition to providing investment fund to replicate **RROV Ltd's** model in other Southeast Asian countries.

For the first three years of operation, we will bring affordable glasses to approximately of the estimated 20.9m presbyopic people in Vietnam who have no current access to affordable reading glasses.

Business model rationale

Red River of Vietnam Ltd will advance the fundamental market shift that took place a decade ago in Australia, the United States and Western Europe when ready-made reading glasses became available in mass-market retail locations such as supermarkets and drug stores. This shift benefited consumers by breaking the monopoly that eye care professionals previously had on the near-vision spectacle market. Today, the once small and fragmented industry generates over \$1 billion in sales and is dominated by companies such as Goodlookers and Foster & Grant. This market shift has yet to take place in Vietnam.

Product offering

Red River of Vietnam Ltd will distribute high quality and affordable ready-made reading glasses superior to current competitive offerings in Vietnam or imported from China. The glasses will be manufactured by **RROV Ltd's** local manufacturing partner and will have the following properties:

- Glasses will be available in plastic frames and metal frames and will have pre-made acrylic lenses in the most common strengths: +1.00, +1.50, +2.00, +2.50 and +3.00.
- Glasses will be styled according to the taste of the local Vietnamese population. Our research indicates that most Vietnamese prefer medium and large-sized gold, silver, or black/tortoise frames.
- To simplify the manufacturing process, the identical pair of glasses will be sold through our urban, rural and government distribution channels.
- Urban users, in exchange for the higher price they are paying, will receive bonus optical case with their glasses.

Our market data suggests that end-users will demonstrate a demand for our products at the retail price of approximately 65,000-75,000 Vietnamese Dong (VND) -350 (\$5-6) in urban and peri-urban areas and VND 32,000 (\$2.5) in rural areas.

Objectives

Red River of Vietnam Ltd will achieve the following objectives toward accomplishing our mission in the first three years:

Table BP.X Financial objectives

257,460	Minimum number of eyeglasses distributed to Vietnamese customers in urban, peri-urban, and rural markets in Vietnam
\$756,593	Extrapolated annual sales generated in year 3
\$105,434	Extrapolated annual net income generated in year 3
27.2%	Ending return on equity
\$265,777	Ending cash balance for equipment replacement and investment in expanding the business model to other regions of Vietnam
One	Financially sustainable model that provides access to all underserved populations and is ready to be replicated in other countries

Table BP.X Social objectives

257,460	Vietnamese who obtain reading glasses and whose productivity and functionality will improve
356	Employment opportunities created, of which 180 will be for very low-income individuals
180	Very low-income individuals provided with job training and transferable job skills
\$656/year	Average supplemental income to Vision Angels who are involved in the distribution process (to increase current annual income by 50% and enable economic security)
\$525/year	Average supplemental income to optipreneurs who are involved in the distribution process (to increase current annual income by more than 100% and enable economic security)
25%	Increase in referrals to Ho Chi Minh City Eye Institute's urban and rural eye care centres, leading to improved eye health of the general population.
One	Socially just business that helps increase economic development and quality of life.

Expertise

Red River of Vietnam Ltd is uniquely placed to execute our business plan and achieve the financial and social objectives stated above. **RROV Ltd's** advantages are:

Existing experience and partnerships in Vietnam

Red River of Vietnam Ltd has been selling ready-made reading glasses in Vietnam since mid-2001, and director Elizabeth Coleman has long-term partnerships in the country extending over 30 years since she was an optical nurse for Australian and US troops during the Vietnam War. **RROV Ltd's** selling activities,

using micro-entrepreneurs known as optipreneurs in rural areas, have generated significant marketing data about the buying tastes, habits, and disposable incomes of Vietnam's rural population. **RROV Ltd** has also built relationships with HCMC Eye Institute Hospital and micro-credit NGO organisations such as Tau Yeu Mai Microcredit that will give us direct access to two of our major customers. Our partnership with HCMC Eye Institute Hospital will also give us valuable credibility with a population that still considers reading glasses to be a medical device and a luxury.

Dr. Coleman and Board member Paul Woodfield have close personal and professional relationships with Dr. Rifai Rifai, the director of VisioPlus, **RROV Ltd's** probable manufacturing partner. VisioPlus of India is the manufacturing division of India's world-renowned Arvind Eye Hospital (see description of VisioPlus of India on p. 28). Mr. White helped found VisioPlus of India and has seen it grow into one of the largest manufacturers of intra-ocular lenses in the world that exports its FDA-quality products to dozens of countries around the globe.

Management expertise

Dr Elizabeth Coleman is President of **RROV Ltd** and co-owner/founder of Red River Optical Vision Pty of Australia of Melbourne, Australia. She was named Entrepreneur of the Year by Ernst & Young in 2007 in the Australian State of Victoria.

Alvaro Reid is Director of **RROV Ltd** and co-owner with Dr Coleman of Red River Optical Vision Pty of Australia of Melbourne, Australia. He is a seasoned entrepreneur who has earned millions of dollars in the eye care industry producing implantable lenses for cataract patients, a diet supplement designed to prevent degenerative eye disorders and stick-on reading lenses for sunglasses. A high school dropout from Ballarat, Australia, Reid left home at the age of 16 and began a career in optical manufacturing at Bell & Howell four years later. Reid then formed his own company, EyeLab, which by the early 1990s controlled nearly half of Australia's market for implantable lenses for cataract patients. Being a serial entrepreneur, he formed Reid Laboratories, which made the dietary supplements, which he sold to Dannon. In 2000 he formed another firm, EyeClipz, which makes removable reading lenses for sunglasses.

Reid and Coleman already operate a ready-made reading glass business in Australia with projected sales for 2009 of \$2 million. Reid and Coleman are jointly Directors of Red River Optical Charitable Trust of Australia, which will provide oversight to **RROV Ltd's** venture in Vietnam. The management team has more than 30 years of experience in entrepreneurship and international eye care, including manufacturing and marketing expertise, and established relationships with equipment suppliers. Management also has significant experience managing staff abroad and dealing with the complexities of the international reading glass market.

RROV Ltd's other Board members, Hein Erasmus and Paul Woodfield, also have expertise that is directly relevant to the business venture. Mr. Erasmus is a journalist and author of a book about the micro-credit movement. He has also written a book on global social entrepreneurship and worked closely with the Schwinn Foundation for Social Entrepreneurship. His many years of work in these two fields have given him unique insight into the keys to running a successful social enterprise.

Mr. Woodfield has fully delivered low-cost health products such as cataract implant (intra-ocular) lenses, surgical sutures, and hearing aids to millions of people in the developing world. Mr. Woodfield has received numerous awards for his pioneering work in the field of sustainable, affordable health care in the developing world. (For more information see appendix C.1). Both Board members will be actively involved in guiding **RROV Ltd's** activities in Vietnam.

Optipreneurs distribution model

Micropreneurs are entrepreneurs at the community level who take a micro-loan and accept the risk of starting and managing a business that balances, indeed sustains, various parts of their lives. Some micropreneurs are necessity entrepreneurs, who are compelled to start a business due to difficult economic situation, while others are opportunity entrepreneurs, who spot an opportunity and wish to supplement other income. These will largely be one-person businesses from their homes. Using our empowerment model and by combining our vision campaign with micro-credit and entrepreneurship, we have created a corps of optipreneurs ('optical entrepreneurs').

RROV Ltd has successfully launched two low-cost eyeglass optipreneurs distribution programs in different parts of the world: Vietnam and Ecuador. These programs have been implemented in partnership with local micro-credit organisations. Micro-credit is a development tool by which programs extend small loans, and other financial services such as savings, to very poor individuals. These loans are for self-employment projects that generate income, allowing clients to care for themselves and their families. Developed by Nobel Prize winner Dr. Muhammad Yunus of the Grameen Bank in 1976, micro-credit is spearheaded by the Micro-credit Summit Campaign, a global campaign of NGOs. The Campaign's goal is to assist 100 million of the world's poorest families, especially the women of those families, with credit for self-employment and other financial and business services. **RROV Ltd** has successfully demonstrated that optipreneurs can accurately dispense reading glasses to low-income individuals, and that these customers are willing and able to pay for these glasses.

RROV Ltd has developed training manuals and marketing materials for its programs to train optipreneurs in developing countries. We have also developed a micro-credit loan structure that provides real and significant profits to optipreneurs who sell the glasses. We have successfully responded to customer needs, style preferences, and pricing in these developing markets. **RROV Ltd** has not relied on traditional advertising, but rather on educational and social marketing techniques more suitable for this target market.

Sustainability philosophy

RROV Ltd is guided by three sustainability principles:

- **Environmental consciousness:** Our commitment to sustainability extends to our eye glasses in a variety of ways. Our company has launched a Life Cycle Analysis (LCA) to measure what material has the lowest cradle-to-cradle environmental impact. By nature, the process of manufacturing eyeglasses takes a lot of water and energy. We strive to use environmentally friendly materials and processes in the production of eyewear. We are increasing our use of local biomass in our heating, eco friendly paints, and reclaimed waters. Currently about thirty per cent of our frame production uses recycled materials.

One popular frame uses native eco-sustainable wood veneer. Another uses genuine water buffalo horn. Normally water buffalo is Water Buffalo have lived very long lives working on farms. The animal is not hurt in the horn removal, and the horns do regrow. Buffalo Horn is hardly a waste product and has been used in medical practices for generations. But there is an over-supply for medicinal purposes and it is considered an ideal material because it does not chemically react with other materials, and is also sterile and strong. We strive to limit the 'product miles' that our glasses must travel by locating our manufacturing plant in Vietnam. We have established a recycling programme where we re-fit and re-sell unused eyeglasses. Merchandising pieces are printed with eco ink and recycled paper and we supply reusable bags. Our cases are also made from recycle materials

- **Social justice:** We strive to support low-income persons to discover and claim personal power through their entrepreneurial activities. We see our 'micro-entrepreneurial' activities as empowering people out of poverty. We seek to complement the micro-lending industry that already exists in Vietnam by providing gainful income-earning activity to individuals who would otherwise not be able to benefit from those programmes for lack of an entrepreneurial idea. We are particularly interested in empowering women, who suffer from dependency on men, who are time-constrained with children and household activities, and who nonetheless embody the family's calculating risk-taking capability.
- **Economic multiplier:** We see our business as a way to make every-day tasks easier and more productive. We provide economic opportunities to supplement income for low-income people by engaging them in the distribution system and other related activities. This particularly relates to professions such a seamstress, cook, book-keeping, auto repair, hair-dressing, secretarial work and so forth. Our products have a positive economic impact on the Vietnamese economy by considerably lengthening worklife, improving health, and multiplying a person's productivity. The programme also helps overcome the income disparity between genders since it gives women entrepreneurs the opportunity to earn significant additional income in a flexible way in between daily obligations. Participants in our programme are able to provide better nutrition, education, housing and medical care for their children. The programme has a double multiplier effect in that it provides increased economic security both for the optipreneurs themselves as well as for the customers.

Market analysis

RROV Ltd estimates that 18.9m Vietnamese who do not currently have access to affordable near-vision eyeglasses could benefit from ready-made readers. **RROV Ltd's** potential customer base will include any Vietnamese over the age of 35 with symptoms of presbyopia. This base incorporates certain individuals who also exhibit other refractive errors such as mild astigmatism (poor focus), myopia (near-sightedness), or hyperopia (far-sightedness), since ready-made reading glasses will improve their ability to see up close.

The following initial calculations size the target customers and existing market in Vietnam and Vietnam specifically:²

Table BP.X Potential Market Size (thousands)³

Total population		87.0m
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Population over age of 35 years	30.0% ⁴	26.1m
Potential presbyopic customers over age of 35 years	80.0%	20.9m
Total potential customers (addressable market)	90.4% ⁵	18.9m
Percentage Rural Customers	72.0%	13.6m

Why Vietnam?

RROV Ltd has selected to base our venture in Vietnam primarily for the following reasons:

Experience: Dr Elizabeth Coleman served in the Royal Australian Army Medical Corps during and after the Vietnam War and thus came to know the language, the culture and people particularly of the Red River Delta area.

Growing and aging population. The number of people in Vietnam over the age of 35 currently stands at 26.1m people and is growing at about 1 million people per year. Vietnam is expected to have 100,985,441 people by 2025.⁶ Vietnam is expected to have 13.2 per cent of its population aged 60 and over by 2025.⁷ That is an addressable market of 13,330,078 people. As more people move into their 'presbyopic years', the need for reading glasses will increase significantly.

Increasing literacy rate. In the decade 1991-2001, the literacy rate for the total population grew by approximately 20%, and is continuing to rise. By 2007, the adult literacy rate stood at 90 per cent.⁸ As Vietnam's large, literate population ages, the need and demand for reading glasses will also increase.

Low penetration of reading glasses. Approximately only reading glasses are sold per year, which **RROV Ltd** estimates to be a mere 359,000 of the potential customer base.

Ho Chi Minh City Eye Institute. One of Asia's leading eye hospitals is located in Vietnam. **RROV Ltd's** partnership with Dr. Nguyen Thi Thu Ha at **HCMC Eye Institute** was a primary driver for locating our micro-credit eyeglass distribution project in this region.

Extensive Network of Partners. **RROV Ltd** has established an extensive network of partners and contacts in and around this region and as a result it makes the most sense for **RROV Ltd** to begin operations in a region where it can leverage our existing connections.

'**Flying Eye Institute**', a mobile clinic programme, has been developed to control the problem of blindness. This program has been developed in coordination with the **HCMC Eye Institute**. The Government of Vietnam has sanctioned the use of VDN 200b (\$16 million) over five years starting in 2007/08.

Nationwide eye care screening program. HCMC Eye Institute is embarking on an ambitious program to screen eye patients throughout the country and funnel those in need of eye-health into the correct area for treatment. Partnering with the Institute, **RROV Ltd** has the opportunity to make reading glasses available to a large portion of the presbyopic population of the country.

Business, technology, and manufacturing hub. Ho Chi Minh City is the fastest-growing business, technology, and manufacturing hub in Vietnam.⁹ By headquartering our operations there and in Hanoi, **RROV Ltd** can attract highly qualified and educated staff, target middle-income educated customers to support our

pricing model, target the thousands factories located in the area, and attract some of the business development resources that exist to attract business to the area.

Industry analysis

RROV Ltd conducted primary industry and market research in Vietnam, as well as extensive secondary research from Australia and the United States. In the summer of 2002 the Kauffman Foundation (US) identified and hired a project consultant to travel to Vietnam on **RROV Ltd's** behalf to conduct surveys and market studies to assess the feasibility of an entrepreneurial venture. As part of his two-month investigation, the consultant Mr. Vijeth Shetty (see resume in appendix C1), an Indian national, visited a number of frame manufacturers, wholesalers and optical stores and surveyed potential customers throughout Vietnam. The observations and figures below are drawn from his research. (For reports, please see appendices B3, 5, 8, & 9).

Vietnam's eyeglasses industry

RROV Ltd's business will be part of the ready-made reading spectacle market, currently a small niche portion of the entire Vietnamese eyeglasses industry. A detailed report on consumer goods (prepared for the Italian economic development agency in 2007) characterised the Vietnam eyeglasses industry as follows:

Vietnam has had a steadily growing market for eyeglasses, but met essentially from low-end domestic products and Chinese imports. The total market is estimated at around 7m pairs [per year], with no clear pointers to market value, and is growing at 10%. Vision-correcting or prescription glasses account for 15%, while sunglasses hold the remaining 85% of the market. Besides frames, there is a similar market for glass and plastic lenses, including contact lenses. However, dusty climatic conditions make contact lenses a very small segment of the Vietnamese market.¹⁰

Based on visits to a number of eyeglasses manufacturers throughout Vietnam by **RROV Ltd's** consultant, less than 5% of the entire eyeglass market consists of ready-made reading spectacles.¹¹ Using the metrics above, this suggests annual sales of approximately 350,000 (7 million x 5.0%) reading glasses per year in Vietnam.

RROV Ltd will operate and compete across two distinct industries within the ready-made reading spectacle market--manufacturing and retailing.

Ready-made reading spectacle manufacturing industry

The reading glasses manufacturing industry in Vietnam consists of many small players, with no single dominant firm. The majority of Vietnamese frame makers are located in Hanoi and Ho Chi Minh City, but a small number are also located regionally. Ready-made reading glass frames are a small percentage of those frames produced by manufacturers for prescription glasses and sunglasses. The consultant's interviews with frame makers suggest that the Vietnamese frame-making business is a declining industry due to intensive competition from the Chinese. The root of this disparity appears to be that the Vietnamese manufacturing industry lacks the technology and expertise to produce high-quality plastic and metal frames that can compete effectively with Chinese imports.¹² These observations are supported by the Italian report:

The frames market is largely unorganised, with only 5% share of the organised segment. Spectacle frames were reserved for manufacture in small-scale units, which could only turn out basic, low-end products, devoid of modern production methods and technology.¹³

Despite the liberalisation of the import of spectacle frames in 2004, the Vietnamese government still maintains import duties on spectacle frames and parts averaging 40% of the retail price in order to protect small-scale industry workers. Importers either buy premium-priced foreign branded spectacles or buy the lowest quality spectacles from China to minimise duties.

RROV Ltd will become a market leader in the Vietnamese ready-made spectacle market by transferring existing modern non-prescription spectacle technology to Vietnam and manufacturing locally. **RROV Ltd** will position itself between the premium-priced products and the low-end, poor quality local (and imported) products. By pursuing an integrated approach of manufacturing and distribution, **RROV Ltd** will help drive Vietnam's ready-made reading glass market transition.

Reading spectacle retail industry

Optical stores, opticians and ophthalmologists are the current primary retail distributors of reading glasses. These outlets are supplied by a number of independently owned spectacle wholesalers, based primarily in Hanoi and Ho Chi Minh City. The majority of revenues for these outlets come from eye exams and selling prescriptive lenses and frames. Most Vietnamese optical stores, in an effort to earn higher margins from the custom-fitted glasses, either do not carry ready-made reading glasses, or sell them only after a customer has paid between Vietnamese Dong 10,000 (\$0.80) to VND 150,000 (\$12) for a prescription.¹⁴

Retail prices for ready-made spectacles ranged from VND 12,700-18,000 (\$1.00-1.40) for the lowest quality generic 'use-and-throw' plastic lens glasses made in Thailand and domestically to VND 19,000-25,000 (\$1.50-2.00) for poor quality, basic style acrylic and TR-90 spectacles made domestically and in China. None of these items were high quality or designed to Vietnamese tastes.¹⁵ At the top-end, customers can buy gold-plated Vietnamese glasses for VND 2.2m (\$180) and branded Italian imports for upwards of that amount.

Research identified more than a dozen different generic brands of reading glasses. Vietnamese consumers are brand- and style-conscious, and therefore the lack of an established local brand presents a significant opportunity for **RROV Ltd**. We will leverage our experience in Australia in design, product development, and branding of non-prescription glasses as we launch our activities in Vietnam.

Competition

RROV Ltd's business model is unique. It fundamentally changes the existing reading glass distribution model in Vietnam to target nascent demand from presbyopic consumers. **RROV Ltd** faces four types of existing competition: existing manufacturers & importers; optical retailers; the potential of new entrants; and the status quo--those barriers which have, until now, kept the general public from purchasing ready-made reading glasses.

Existing manufacturers & importers

Red River of Vietnam Ltd does not view the existing Vietnamese eyeglass manufacturing or import industries as a significant competitive threat for the following reasons:

- 1 **Fragmentation.** The industry is fragmented with no dominant firms. No one firm has captured enough of the market share to invest the level of capital that would be needed to compete with **RROV Ltd**.
- 2 **Elite focus.** 85-95% of existing manufacturers' business is focused on the sunglasses or prescriptive glasses business. **RROV Ltd's** decision to focus on the ready-made reading glasses market should therefore have a minimal impact on existing manufacturers, thereby allowing **RROV Ltd** time to establish strong distribution networks that might impede the ability of manufacturers to enter the market at a later date.
- 3 **Poor technology.** Vietnamese spectacle manufacturing firms lack adequate technology and therefore the quality of their products is far lower than **RROV Ltd's** proposed standards. **RROV Ltd** will transfer modern frame- and lens-making technology to our Vietnamese manufacturing partner and also bring design qualities to its products that are suited to Vietnamese tastes and currently lacking from existing eyeglasses in the below-premium price range.
- 4 **Cheap imports.** Imports from China are handicapped by existing government tariff barriers. **RROV Ltd** will produce better quality glasses locally for less than the low-cost Chinese imports. Should the Vietnamese government erase all import duties on spectacles **RROV Ltd** would counter competition from Chinese imports by having already established a local, Vietnamese-brand spectacle which will be more highly favoured than Chinese branded spectacles (see next), as well as an established distribution network.
- 5 **Inferior quality.** Vietnamese consumers perceive Chinese products as being inferior in quality, therefore **RROV Ltd's** local brand should enjoy a comparative advantage in the eyes of the consumer to Chinese imports.

Optical retailers

Presently, ophthalmologists, optometrists, and opticians control what little there is of the reading spectacle market in Vietnam.¹⁶ **Red River of Vietnam Ltd** will compete with optical retailers by creating entirely new distribution channels for ready-made reading glasses in urban and rural areas. As a result, **RROV Ltd** will provide presbyopic consumers with increased access to affordable ready-made spectacles and free consumers from the misunderstanding that they need a costly prescription for near-vision glasses. Here are the factors that give **RROV Ltd** a competitive advantage:

- 1 **Lack of availability.** Optical retailers are not readily accessible to the majority of the population. In Vietnam, there is an average of one eye care professional per 30,200 people.¹⁷ In urban areas, there is approximately one optician per 6,000 people, but there are generally no resident opticians in peri-urban and rural areas with populations under 20,000 people.¹⁸ In the capital city of Vietnam, Hanoi, there are approximately 400 opticians, one per 12,000 people.¹⁹ As a result, the majority of rural Vietnamese have extremely limited access to professional eye care and those living in urban areas face limited choices. By distributing ready-made reading glasses through non-optical outlets such as general stores and pharmacies, as well as at the gates of factories and through a network of community-based

distributors in rural areas, **RROV Ltd** will ensure that ready-made reading glasses are much more widely accessible to consumers than they are today.

- 2 High cost.** Glasses of decent quality sold at optical retailers are not affordable to the majority of the population. The screening and purchase process of an optical visit is also expensive for most Vietnamese, 40% of whom earn less than VND 13,000 (\$1.00) per day.²⁰ Based on **RROV Ltd's** research, the cost of a full eye exam is between VND 10,000-150,000 (\$.80-12.00).²¹ The price range of ready-made reading spectacles at the opticians visited by the consultant was from VND 18,000 (\$1.40) for the lowest quality 'use-and-throw away' spectacles, to above VND 140,000 (\$11.00).²² Additionally, there is an estimated VND 35,000-100,000 opportunity cost for workers who must travel during working hours to the opticians and undergo the screening and purchasing process while losing valuable time away from their jobs.²³ **RROV Ltd** will give presbyopes the opportunity to eliminate the costly and time-consuming eye exam, thereby making quality, stylish ready-made reading glass affordable to a greater number of Vietnamese consumers. **RROV Ltd's** transfer of high-quality spectacle manufacturing technology to Vietnam will also reduce the cost of good quality ready-made glasses by up to \$8.50.
- 3 Unmotivated retailers.** Optical retailers are not motivated to sell ready-made reading glasses because of low margins compared to made-to-order prescription lenses and frames. The margin for ready-made glasses that are currently on the market range from only 20-30% compared to a margin of over 50% for most spectacle frames. In addition, optical professionals fear losing their ability to provide higher margin patient eye care services and the recurring revenue stream of multiple check-up visits. Optical retailers that do carry such products tend to store them behind counters and pull them out reluctantly when pressured by their patients for cheaper alternatives to custom-made products. **RROV Ltd's** distributors will be financially motivated to generate sales providing far greater exposure of the product to potential customers. Sellers of consumer goods, such as the general stores and pharmacies that will carry **RROV Ltd** reading glasses, typically anticipate margins of around 8% on foreign-branded goods. In comparison with these narrow margins, the projected margin of 40%-60% that retailers will receive on **RROV Ltd** glasses will be large, motivating them to sell the product.

New entrants

Red River of Vietnam Ltd believes that our business will successfully compete with new firms attempting to replicate our manufacturing and distribution model due to the following:

- 1 First mover advantage.** **RROV Ltd** will have the competitive advantage of being the first mover in this huge market. As the first business in Vietnam to sell low-priced, over-the-counter, non-prescription reading glasses in non-optical outlets, **RROV Ltd** will be in a position to establish relationships--which may later become exclusive partnerships--with key distribution channels. With **RROV Ltd** as the first mover, the **RROV Ltd** brand will become synonymous with good-quality, self-prescribed reading glasses.
- 2 Quality and relevance of product.** As Vietnam's consumer market is decentralised and regional, so are Vietnamese taste in style and features distinct across regions. **RROV Ltd** will leverage its expertise and experience in manufacturing, product design, sales and marketing to provide a variety of good

quality glasses in styles and fashions to suit Vietnam's diversity in taste, all the while taking into account increasing awareness of the environmental impact of consumer goods.

- 3 Manufacturing and distribution partnerships.** By forging relationships and partnerships with the national government, Ho Chi Minh City Eye Institute, NGOs such as Tau Yeu Mai Microcredit institution, large factories and key retail customers, **RROV Ltd** can build barriers to entry that will hinder emerging competition. **RROV Ltd's** strong partnership with VisioPlus of India gives **RROV Ltd** an advantage over any new entrants to the market wishing to manufacture locally.
- 4 Experience.** **RROV Ltd's** successes with its existing micro-credit distribution programs in Vietnam have yielded concrete tools that **we** can bring to our rural distribution partners. These tools include: a training manual for a one-day instruction of optipreneurs in eye testing and glasses dispensing techniques; guidelines for suitable and profitable micro-loan structures; advertising and marketing techniques; and simple, relevant data collection tools and manuals in Vietnamese, English, and French. Companies who try to replicate our rural distribution mechanisms will not have access to these critical tools.
- 5 Competition signals success.** We invite competition and measure our success by the number of Vietnamese who have access to affordable high-quality readers.

Status quo

Red River of Vietnam Ltd's business will address the following barriers currently restraining Vietnamese presbyopes from widespread adoption of reading glasses and turn them into competitive strengths:

- 1 Lack of a Market Driver.** In order to drive the consumer adoption of ready-made, non-prescription reading glasses, the various manufacturing, distribution, and marketing barriers must be overcome to reach price- and quality-sensitive customers. No company has yet attempted an integrated strategy. **RROV Ltd** will create widespread demand through a multi-faceted marketing and distribution strategy, and meet that demand with a quality product created locally. As the first mover in this market, **RROV Ltd** will ensure that its socially-motivated approach is the leading model of ready-made eyeglass distribution and that low-income individuals with purchasing power are not denied the benefits of reading glasses.
- 2 Unrecognised Need.** Many Vietnamese presbyopes have low awareness concerning the benefits of near-vision glasses in terms of health and productivity. **RROV Ltd** will undertake extensive educational and social marketing of our product that emphasises the benefits of near-vision glasses. Our campaign will include demonstrations of the every-day tasks that are made easier with glasses and which Vietnamese can relate to, such as threading a needle, reading a newspaper, and separating stones from rice.
- 3 Misperceptions about the product.** Many Vietnamese think of reading glasses as a medical device and there is low awareness that 90% of presbyopes do not need a doctor's prescription. **RROV Ltd** will address this concern initially by allying itself with public health professionals and including them in the distribution chain. **RROV Ltd** will sell glasses through pharmacies, as well as through Vision Angels who will be trained by, and affiliated with, Ho Chi Minh City Eye Institute. **RROV Ltd's** resident

optometrist, as well as our close partnership with Dr. Nguyen Thi Thu Ha (Vietnam's leading ophthalmologist and head of the government's Vision program) will also lend credibility to our product in all distribution channels, with **RROV Ltd**'s optometrist accompanying the Flying Eye Hospital as well as the mobile units on their initial factory visits. **RROV Ltd** will undertake an extensive educational marketing campaign to raise awareness among consumers about the benefits of near-vision glasses and educate them about the ease with which they can be purchased without a prescription.

- 4 Cultural Barriers.** In some instances, particularly in rural communities, cultural barriers also prevent some women from purchasing and wearing spectacles. In rural areas, female entrepreneurs selling **RROV Ltd** glasses will help to educate rural women about the benefits of near-vision spectacles. **RROV Ltd**'s experience selling through women entrepreneurs has suggested that perceptions of glasses use by females can change.

Target Markets

Primary target markets

RROV Ltd's three target markets are segmented both geographically and demographically by income and age. All end-users are presbyopic individuals in need of quality, affordable reading glasses. Current barriers are cost, accessibility, lack of awareness, and quality of existing offerings. The three markets are urban, rural and government:

- **Primary. Urban and peri-urban presbyopes.** **RROV Ltd** estimates that there are approximately 4.5 million consumers in the urban and peri-urban areas of Vietnam who could benefit from improved access to good quality, low-cost, stylish ready-made reading glasses. **RROV Ltd** aims to penetrate approximately 4.8% of this market within three years.
- **Secondary. Rural presbyopes.** **RROV Ltd** estimates that there are approximately 12 million presbyopes living in rural areas who could benefit from **RROV Ltd**'s glasses. Given the complexities of distribution in rural areas, **RROV Ltd**'s model uses relationships with eye clinics and NGOs to create community-based distribution mechanisms such as Vision Angels and optipreneurs. As a result, market penetration will be slow, with 0.4% of the rural market within the first three years.
- **Tertiary. Government Employees for the Red River Delta region.** **RROV Ltd** will sell reading glasses to the Government of Vietnam, who will then re-sell to government employees who may be suffering from presbyopia. **RROV Ltd** estimates that it can penetrate 6.3% of this addressable market of 213,000 within three years.

Target customer segments and end-users

RROV Ltd's ready-made near-vision glasses are aimed at all Vietnamese suffering from presbyopia.²⁴ As a result of our distribution model, **RROV Ltd**'s customer is sometimes different than the End-User of the product. Our customer segments and corresponding end-users consist of:

1 Non-optical retailers selling to urban presbyopes

In urban and peri-urban areas, **RROV Ltd**'s sales agents will target more than 4,000 non-optical retail outlets such as general stores and pharmacies, which are frequented by a majority of potential end-users.

Table BP.X Non-optical retailer

Market Information		Customer Segment: Non-optical retailer (e.g. general store, pharmacy, bookstores, department stores etc.)
Market size	4,000+	2,000 general stores and 800+ pharmacies Hanoi and Ho Chi Minh City. 1,000+ additional stores in Vietnam's next five largest urban centres combined. ²⁵
Market share	11%	Estimated store coverage by the end of the 3 rd year of approximately 414 stores
Growth potential	75%	Penetration based on Goodlookers' and Foster & Grant's success in Australia. As product demand builds the number of sales agents can grow rapidly and they can target end-users directly in local markets or even door-to-door.
Sales Agent		RROV Ltd will hire and train teams of young college-educated sales representatives whose job will be to target and then service these retail outlets
Marketing strategy		RROV Ltd will begin by targeting established store owners who have some status in their local communities so that others will follow their lead

Table BP.X Benefits to retailers and to Red River Optical Ltd

Benefits to Retailer	Benefits to RROV Ltd
New product with significant margin potential (40%-60%) with low risk (i.e. retailer can purchase 10-15 glasses initially to test out product)	Reach wide customer base of potential end-users to educate on the benefits of near-vision spectacles and encourage self-prescription and empowerment
New product that does not consume a lot of floor space, further maximizing sales per square foot in store	Create an innovative and proprietary sales force to bypass the complicated consumer-goods supply chain in Vietnam
Increase foot traffic in store from new product	Through the creation of this sales force, preserve operating margins while keeping wholesale cost low for retailers.
Raise image as a market leader who sells reliable, innovative products	Create stable base of operating profits to cover fixed costs and subsidise rural distribution model
	Presence in a pharmacy also adds credibility to the ready-made eyeglass concept as pharmacies tend to be a trusted source of medical advice for Vietnamese

Table BP.X End-user urban and peri-urban presbyopes

End-User	Urban and Peri-Urban Presbyopes
Economic Level	Lower- and middle-income brackets

Profession	Shoemakers, market-stall owners, mechanics, tailors (lower-income), teachers, bank clerks, and office workers (middle-income)
Frequency of contact with retailer	Most Vietnamese visit their local general store several times per week for basic food and consumer items. Estimates suggest that 65% of all Vietnamese visit a local pharmacy at least once per year. ²⁶
Current Options (lower-income users)	Our product may represent their first purchase ever of a pair of near-vision glasses. These consumers will previously have had limited access to an optical professional, and virtually no access to good quality, affordable near-vision glasses
Current Options (middle-income users)	Our reading glasses will represent a good quality product that can be purchased at convenient locations without the need for a time-consuming, costly visit to an optician or eye doctor

Customer Profile

Hong Cao is 49 years old. He lives in the Trung Quan district of Hanoi with his wife Anh and their four children. Cao earns VND 75,000/year (\$6,000) as a data engineer at Dot Net Technologies. Eight years ago he began to notice difficulty seeing the small letters on his computer screen and in the newspaper. For a year Cao did nothing about his problem because of his busy work schedule. Finally, after his vision problem began to affect his work, he took a leave day off work to visit an optometrist. The optometrist checked his eyes and prescribed a pair of +1.50 reading glasses. Cao had to return to the optometrist a week later (and another half day away from work) to collect his finished glasses for which he paid VND 900,000 (\$75, an affordable yet steep price). Although Cao's vision has deteriorated since his visit to the optometrist 7 years ago, Cao never returned for a new prescription because of the inconvenience.

Cao passes four pharmacies on his way home from work every day and stops at least once a week to buy household items such as hair oil or items for the baby. If **RROV Ltd** reading glasses were displayed in one of these pharmacies, Cao could try on a stronger prescription of +2.50 of a similar quality and purchase them on the spot for \$6. In two years' time he can return and purchase some +3.00's, passing on his hand-me-downs to his wife and potentially saving hundreds of dollars.

2 Mobile units selling to factory workers

RROV Ltd will lease and operate mobile spectacle units to target factory and office workers at the workplace.

Table BP.X Factory Workers

Market Information		Customer Segment: Factory Workers
Market size	18,500 2.80m 3,700 219	Total factories Total number of factory workers employed (150 people/factory). ²⁷ Large factories employing over 2.2m (600 people/factory). Number of workers in each large factory that represent the addressable market based on our presbyopia statistics.
Market share	2,100 77 157,500	Large factory visits (many visited several times) w/i the first 36 mo. Glasses sold per factory Glasses sold in the first three-year period, penetrating 19% of the addressable presbyopic factory worker market.

Growth potential		Mobile units can be used to target other large businesses, small businesses, sporting events, local market days etc. in order to reach a wider number of end-users.
Sales Agent		Each mobile unit will consist of a van stocked with near-vision glasses, and three sales representatives/assistants. Agents will refer customers with refractive errors or more serious eye-health problems to a network of local ophthalmologists and eye care facilities
Marketing strategy		Mobile units will sell ready-made reading glasses during tea breaks, lunch breaks, and at the beginning or end of the day
End-User		Factory Workers
Economic Level		Lower-income
Current Options		Our product may represent their first purchase ever of a pair of near-vision glasses. These consumers will previously have had limited access to an optical professional, and virtually no access to good quality, affordable near-vision glasses

Table BP.X Benefits to factory workers and Red River

<i>Benefits to Factory Workers</i>	<i>Benefits to RROV Ltd</i>
Increased worker productivity and decreased worker fatigue and stress headaches caused by presbyopia	Reach wide customer base of potential end-users to educate on the benefits of near-vision spectacles and encourage self-prescription
Workers educated on benefits of near-vision glasses and empowered to self-prescribe	Create an innovative and proprietary distribution channel with mobile units to bypass the complicated consumer-goods supply chain in Vietnam
Reduced cost and time away from work to obtain ready-made near-vision glasses	Establish itself as the trusted ready-made near-vision spectacle brand in the eyes of the factory worker population
Benefit of rapid preliminary screening and a referral to an eye care professional if necessary	Decrease potential opposition of ophthalmic professionals to our business by referring patients to them, thereby demonstrating that we are creating business for them, rather than taking it away

3 Vision Angels selling to rural presbyopes

RROV Ltd will sell glasses to customers in rural areas through Ho Chi Minh City Eye Institute's growing country-wide network of Vision Angels. These are local men and women selected and trained by HCMC Eye Institute and **RROV Ltd** to test the eyesight of individuals suffering from presbyopia and to sell them low-cost reading glasses. Based at the village level, and each with a target population of 5,000 people, Vision Angels are trained in basic eye health and are responsible for monitoring eye-health in villages and referring patients

into Ho Chi Minh City Eye Institute's nationwide system of local eye clinics and hospitals.²⁸ This system of eye care is set to grow over the next 15 years to serve every citizen of Vietnam.²⁹

RROV Ltd will sell wholesale quantities of ready-made reading glasses to Ho Chi Minh Eye Institute, who will consign the glasses to Vision Angels. Since Vision Angels will be employed by Ho Chi Minh Eye Institute, they will either be given glasses to sell on a consignment basis or be required to buy inventory at cost by the eye hospital. They will retain all profits for themselves. Effectively the Vision Angels will become an active selling force for **RROV Ltd** glasses in rural areas but be managed by the existing infrastructure of HCMC Eye Institute and its rural satellite network of community health centres.

Table BP.X Vision angels

Market Information		<u>Customer Segment:</u> Vision Angels, a division of Ho Chi Minh Eye Institute
Market size	13.6m 5,000	Potential presbyopic customers in rural areas in Vietnam. People covered by each Vision Angel, of whom we estimate 1,085 (21.7%%) are presbyopic.
Market share	23,400 15 180 130,200 18%	Glasses sold in three years. Vision Angels trained every three months Total Vision Angels trained after 3 years Total presbyopes under VA in rural areas (120 x 1,085) Market penetration of VA coverage areas after 3 years
Growth potential	11,000	Vision Angels trained as part of the Vietnam Flying Eye Institute program by the year 2020
Growth potential		RROV Ltd plans to supply the reading glasses for the entire program.
Sales Agent		Vision Angels

Table BP.X Benefits to Vision Angels and RROV Ltd

<i>Benefits to Vision Angels</i>	<i>Benefits to RROV Ltd</i>
Dependable local source of high-quality, low-cost near-vision spectacles with which to supplement its rural community eye-health programs	Fulfils social mission of project by providing rural residents low cost ready-made reading glasses and earning opportunities
Strengthens recruitment, commitment and retention of Vision Angels by enabling them to profit from sale of glasses	Brings credibility to RROV Ltd and its mission to educate and empower end-users
Increase in referrals from rural areas to vision centres Frees up staff at vision centres to focus on more complicated procedures	Supplies to a program model that can be replicated in LVP's vision centres nationwide & reach millions of end-users in rural areas

Table BP.X Rural presbyopes

End-User	Rural Presbyopes
Economic Level	Low- to very low-income earning GNI of \$1098 or less
Profession	Rural artisans; self-employed workers involved in up-close tasks such as tailors, weavers, and mechanics; housewives who rely on clear up-close vision for performing important everyday household tasks such as sewing or separating stones from rice ³⁰
Frequency of contact with retailer	Vision Angels will live in the communities in which they sell, so frequency of contact will be high
Current Options	limited or non-existent

Customer Profile

Quynh-Anh Lam is a 53-year old seamstress in rural village outside Da Nang. Six years ago, her shirt-making business was her primary source of income. She would sew about 10 shirts a week, bringing in an income of VND 100,000 (\$8). Then presbyopia set in, and it became all but impossible for Lam to thread a needle and do the necessary detailed work that her profession demanded. She began to rely on her granddaughter for help, but was left virtually helpless during the daylight hours when her granddaughter was at school. As her output diminished, the stores where Lam sold her shirts began to source them elsewhere. She did not know of any place to get glasses locally, and could not afford to take the day-long trip to Da Nang to seek help. In October 2006, Lam found out that a woman in her village was selling eyeglasses through **RROV Ltd's** rural distribution initiative. She sought her out to have her eyes checked and bought a pair of gold-rimmed +3 reading glasses. Since then Quynh-Anh Lam has begun sewing again. She finds the glasses comfortable to wear and also uses them to perform household tasks such as separating stones from rice without help from her family. **RROV Ltd's** distribution through Ho Chi Minh City Eye Institute's Vision Angels will work in the same type of rural regions and in the same way as **RROV Ltd's** ongoing rural distribution initiative.

4 Optipreneurs selling to rural presbyopes

RROV Ltd will further penetrate rural markets by supplying low-cost near-vision glasses to existing micro-credit programs and other non-governmental organisations (NGOs) in the region. **RROV Ltd's** Program Director will work with staff in Vietnam to provide training materials and technical assistance to these organisations, and will educate them on how to incorporate a reading glass distribution component into their existing program portfolio. By giving optipreneurs a product such as reading glasses to sell, we will increase their monthly income and help them provide tangible health and economic benefits to end-users.

Based on the results of **RROV Ltd's** model program, it is clear that rural women with no previous optical experience can be trained in less than two days to responsibly screen customers and sell near-vision eyeglasses. During the project, 16 optipreneurs were trained and each sold an average of 7 pairs of glasses per month at a price of VND 53,000. After repayment of the micro-loans, these metrics would yield a potential annual profit of approximately \$100 per year, a highly significant supplemental income for these rural women and their families.

Table BP.X optipreneurs

Market Information		<u>Customer Segment:</u> Optipreneurs and NGOs through micro-credit organisations
Market size	300,000+ 7+	Number of small loan borrowers in Vietnam. ³¹ Number of major micro-credit organisations Vietnam including Tau

		Yeu Mai Microcredit (RROV Ltd's current partner) ³²
Market share	180	Number of optipreneurs trained after 3 years. This is a conservative estimate.
Growth potential		The number of optipreneurs can increase rapidly given proper organisational support from the NGOs.
Sales Agent		Optipreneurs; very low-income individuals, mainly women

Table BP.X Benefits to NGOs and RROV Ltd

<i>Benefits to NGOs</i>	<i>Benefits to RROV Ltd</i>
Dependable source of high-quality, low-cost near-vision spectacles with which to fulfil micro-credit demands	Fulfils social mission of project by providing rural residents low cost ready-made reading glasses and income earning opportunities
Source of eyeglasses and training & technical support	Leverages existing NGO networks of entrepreneurial and motivated individuals to distribute to a large base of end-users in an efficient manner
Develop programs that can be sustainable and create distribution systems for important health products	Brings credibility to RROV Ltd and its mission to educate and empower end-users

End-User characteristics are the same as those identified previously for the end-users of Vision Angels distribution (see above).

5 Government of Vietnam selling to Government Employees

RROV Ltd has identified a potential opportunity, through Dr. Nguyen Thi Thu Ha, the Chairperson of 'Flying Eye Institute' in Vietnam, to provide ready-made reading glasses to a portion of the government employees in the Red River Delta region. Dr. Nguyen's private conversations with Health Minister Nguyen Quoc Trieu about the relatively low cost at which government employees can be provided with glasses concluded with the Minister indicating his desire to provide ready-made glasses where possible. Nguyen's public record of providing cost-effective social programs, and his recent commitment of \$16 million to support Flying Eye Institute, suggest that his commitment to providing eyeglasses is likely to move forward.

Table BP.X Government of Vietnam and public sector

Market Information		Customer Segment: Government of Vietnam, public sector, local bodies, universities
Market size	1,286,200	Employees ³³
Market share	6.3% 519	Penetration of this market over 3 years Spectacles ordered by government per month
Growth		Growth potential with this customer is from increased penetration of the addressable market, the general acceptance of self-prescribed

potential		spectacles, and repeat customers for replacement glasses due to loss or damage.
Sales Agent		RROV Ltd's own Government & Rural distribution manager

Table BP.X Benefits to Government of Vietnam and RROV Ltd

<i>Benefits to Government of Vietnam</i>	<i>Benefits to RROV Ltd</i>
Good quality, affordable ready-made glasses provided to government employees without the need for unnecessary and expensive visits to opticians and ophthalmologists	Strengthens the legitimacy of our product as a high quality, low-cost item in the eyes of other customers, end-users and potential employees
Government given opportunity to generate attractive margins on the sale of the spectacles to their employees	Potential development of similar contracts between RROV Ltd and other Vietnamese provincial governments as we expand

Table BP.X End-user government employee

End-User	Employee of Government of Vietnam
Economic Level	Low to mid income
Profession	Various

Marketing

Red River of Vietnam Ltd's marketing generates awareness within the general population about the function and benefits of ready-made reading glasses. Because **RROV Ltd's** product is a new product, we will focus on product demonstrations at the outset. We will leverage our relationship with Ho Chi Minh City Eye Institute, and our on-staff optometrist, to attain credibility in the eyes of our customers. We will also conduct educational marketing describing the symptoms of presbyopia and how to use ready-made reading glasses. Product introduction will target specific populations with follow-up campaigns in urban and rural areas. Marketing objectives, pricing, distribution, sales, communications and milestones will be different for each target customer (see below).

Product

Initially, **Red River of Vietnam Ltd's** product will be the same across all target markets. Based on our existing experience in selling reading glasses in Vietnam and on a recent assessment of Vietnamese consumer value drivers for reading spectacles, our ready-made eyeglasses will encompass the following features:³⁴

- Wooden veneer, metal or mould-injected plastic frame in Gold, Silver or Black³⁵
- Slim, recyclable carrying case to fit in shirt pocket (for glasses sold in urban channels)
- Spring-action hinge on glasses
- Scratch-resistant acrylic lens

- **RROV Ltd** label (to provide credibility versus Chinese imports)
- Packaging and documentation materials using environmentally friend ink and materials.
- End-User/retail price between VND 32,000 (\$2.50) and VND 64,000-77,000 (\$5-6). Glasses will come in five dioptr strengths: +1.0, +1.50, +2.0, +2.50 and +3.0. Price and dioptr will be printed on packaging.

Pricing

Table BP.X Price (in Vietnamese Dong)

Target Customer	Price to Customer	Price to End-User (MSRP)	Margins on re-sale
1. Non-optical Retailers	54,000	89,000-125,000	40% to 60%
<p>RROV Ltd could reduce its price to non-optical retailers to 36,000 and still be net income positive, maintain positive cash balance for the 3 year period</p>			
2. Factory Workers	-	90,000	70%
<p>Price for factory workers will be same as the suggested retail price of glasses available at the non-optical stores to ensure that end consumers attribute the same value to our glasses.</p> <p>Price enables RROV Ltd to generate additional margin in order to cover the higher costs of investing in and operating the mobile units</p>			
3. Vision Angels	26,400	45,000	41%
<p>Margins will give Vision Angels a significant incentive to make sales.</p> <p>If each VA sells 15 glasses per month he/she can earn \$180 per year, a material amount of supplemental income for individuals who work as VA's only on a part-time basis.</p> <p>RROV Ltd's experience with its micro-entrepreneur program suggests that rural consumers are willing to purchase glasses at a price of 53,000 (\$3.00), therefore by pricing RROV Ltd spectacles at 45,000 (\$2.50) the product will remain attractive to the consumers that VA's are targeting.</p>			
4. Optipreneurs & NGOs	26,400	45,000	41%
<p>Pricing designed to ensure a large enough margin for optipreneurs to generate a significant profit on each pair of glasses sold. Will use profit to repay micro-loans, invest in new inventory and earn supplemental income to support themselves and their families</p>			
5. Government and public sector	30,160 (cost plus 30%)	54,000	44%
<p>Pricing designed to give government a high quality product at a competitive price so that government can earn attractive 44% margins when it resells the glasses to its employees.</p>			

Distribution

Table BP.X Place (Distribution)

	<i>Distribution Agent</i>	<i>Frequency of Distribution</i>	<i>Place of sale to End-User</i>
1.Non-opticals	RROV Ltd Sales Agent	Monthly, or as-needed	Non-optical shop
2. Factory Workers	RROV Ltd Mobile Sales Agent	Several visits per factory; One factory visit minimum/day	Factory
3.Vision Angels	Government and Rural Distribution Manager	Monthly	Village
4.NGOs	Government and Rural Distribution Manager	As needed	Village
5.Government	RROV Ltd Staff	3-4 times/year	Govt. offices, factories, etc.

Promotion Strategy

Red River of Vietnam Ltd's promotional strategy is to create an awareness of the health and economic benefits of ready-made reading glasses. Educational material will include pictures of Vietnamese engaged in everyday close-up tasks such as sewing, reading, factory work, and separating stones from rice; eye doctor endorsements; explanations of how near-vision testing is conducted; and product trials so that people can try on the glasses themselves. Experience shows that individuals who experience the instant benefits of clearer vision become the most powerful marketers.

Overall positioning

For urban customers, we will position **RROV Ltd** as a provider of convenient, quality eyeglass alternatives to more costly prescribed reading glasses. We will position the glasses as a stylish and beneficial accessory that is popular in Australia and the U.S. For rural customers, we will position ourselves as a provider of accessible, low-cost yet doctor-designed eyeglass alternatives to optical shop glasses, which can improve comfort and productivity in the home and at work. In addition, **our** spectacles will be seen as empowering tool to encourage self-prescription and self-help.

Table BP.X Promotion by distribution channel

<i>Promotional Vehicle</i>	<i>Strategic Rationale</i>
1. Non-optical retailers	
Local Newspaper Ads	Urban dwellers have a high literacy rate and many are likely to read one of Vietnam's daily newspapers

Point of Purchase Display	Eye-catching displays with RROV Ltd reading glasses in all powers and descriptions of how they work will be strategically placed in stores by RROV Ltd sales agents. ³⁶ Customers going to the store for other purchases will see RROV Ltd glasses on display and will be encouraged to try them.
2. Factory workers	
Billboards	Billboards in front of factories will educate workers about benefits of glasses and pique interest so that they will attend mobile van screenings.
Radio Ads	Workers listening to radio at work will hear of benefits of glasses
Painted Mobile Units	Will serve as a travelling billboard to advertise reading glasses
In-factory posters	Will be placed in factories before mobile unit visits, advertising the benefits of glasses and the date of mobile unit visit
Personal Sales by Sales Agents	Personal sales by our sales agents will give customers opportunity to try product and have their questions answered
3. Vision Angels / HCMC Eye Institute	
Posters in public places	Will be placed in strategic public places such as village squares, market places, town halls to advertise glasses and give name and home address of local Vision Angel
T-shirts and Bags	Vision Angels will be given promotional T-shirts to wear and bags to carry which identify them as Ho Chi Minh Eye Institute-trained. This gives them credibility and increases their visibility in the community
Village Meetings	Vision Angels will organise village meetings, arranged through the local village chief, at which to demonstrate the reading glasses to large groups of villagers
Radio Ads	We have a budget for radio ads in rural areas where literacy is low and many people listen to local radio stations
4. Existing networks of optipreneurs	
Posters, T-shirts, Bags & Village meetings	Rationale same as for Vision Angels above.
Village Bank Group Meetings	optipreneurs will use meetings of their micro-credit village banks to demonstrate product to other women and generate word-of-mouth publicity
5. Government of Vietnam	
Posters in workplace	Will be placed in government work places to advertise product

Performance milestones

The following performance milestones will be achieved by **Red River of Vietnam Ltd** each year as follows:

Table BP.X Performance milestones

<i>Glasses Sold (cumulative) End of Year</i>	<i>Retail Glasses Sold</i>	<i>Mobile Unit Glasses Sold</i>	<i>Vision Angel Glasses Sold</i>	<i>Optipreneur Glasses Sold</i>	<i>Government Glasses Sold</i>	<i>Cumulative</i>
Year 1	240	18,000	0	90	1,500	19,830
Year 2	9,960	85,500	4,650	6,480	7,500	114,090
Year 3	43,560	157,500	14,100	28,800	13,500	257,460

Table BP.X Employees

<i># Employed (cumulative) End of Year</i>	<i>Sales Agents Hired</i>	<i>Vision Angel</i>	<i>Micro- Entrepreneurs</i>
Year 1	9	60	30
Year 2	18	120	120
Year 3	27	180	180

Operations

Red River of Vietnam Ltd's operations strategy is to undertake all distribution activities and to contract a local glasses manufacturer to produce quality ready-made reading glasses using superior technology. This strategy allows us to focus on building distribution channels, managing our relationships with NGOs, the government, and our target customers, and conducting marketing activities. The ongoing operations and production costs will remain the responsibility of our manufacturing partner, which already has the labour pool, management, and systems in place to begin production.

Decision to manufacture vs. import

The Vietnamese government maintains import duties on spectacle frames of 40% or more of the retail price. Research indicates Vietnamese spectacle frame manufacturers lack the most recent frame-making technology and consequently are producing very poor quality spectacles locally. **RROV Ltd** believes that by transferring specific frame-making technology to Vietnam and manufacturing ready-made glasses with a local partner, we can take advantage of the government import duties and compete with low-cost Chinese imports.

RROV Ltd will import advanced TR-90 plastic spectacle frame moulding machines at a cost of \$4,800 per machine, and metal frame shaping machines for \$27,000 per machine.³⁷ These machines will give our manufacturing partner the ability to make a variety of plastic and metal frame glasses to meet different consumer tastes. An analysis of the costs of manufacturing vs. importing shows that over a 36-month period,

RROV Ltd saves over \$55,131 or 20.7 cents per pair sold if it transfers 1 TR-90 machine and 1 metal machine to Vietnam.³⁸ This enables us to price its glasses competitively with imports while delivering a higher quality of spectacle than is currently produced in Vietnam.

Manufacturing partnership

Red River of Vietnam Ltd will enter into a manufacturing partnership with the local spectacle manufacturer using this manufacturer's facilities and labour pool. We will agree to provide the imported frame-making technology in return for financial guarantees that our production requirements will always be met first. The benefits of the partnership to the manufacturer and to us are:

Table BP.X Benefits to manufacturer and Red River

<i>Benefits to Manufacturer</i>	<i>Benefits to RROV Ltd</i>
Will make approximately \$44,175 net profit over three years	Produce higher quality products at prices competitive with Chinese imports
Access to most advanced frame-making equipment that can be used to improve quality of existing frames business, the majority of which is for orders for prescription glasses and sunglasses (not competition for us)	Low up-front capital expense of investing in manufacturing plant while giving us the ability to control quality of its products through close supervision
Access to large-scale customer (RROV Ltd) for traditionally small manufacturing business together with extremely attractive 18% profit margins on every pair of spectacles	Improves inventory management by eliminating large lag times between order placement and fulfilment on imports
Training and skills development for employees that will benefit production	Minimises working capital needs by paying partner on a cost plus basis and altering production to meet estimated demand (based on frequent sales reports from sales agents and mobile units)

Manufacturing partner

Red River of Vietnam Ltd is in advanced negotiations with **VisioPlus of India**, a spin-off of Arvind Eye Hospital, to take on the role of **RROV Ltd**'s manufacturing partner. VisioPlus of India is ideally suited to assume the position of manufacturer. In 1992, **RROV Ltd**'s Board member Paul Woodfield directed the establishment of VisioPlus of India, the first non-profit manufacturing facility in a developing country to produce affordable intraocular lenses (IOLs), suture, pharmaceuticals and eye glasses. VisioPlus of India has CE Mark Certification for suture and intra-ocular lenses (IOLs), fulfilling the same regulatory requirements medical companies must fulfil for selling products in Europe. The suture has US FDA approval. VisioPlus of India is now one of the largest manufacturers of IOLs in the world, with sales of 700,000+ units per year (10% of the world market share) to 86 countries and has fulfilled its promise to make affordable IOLs available to programs serving the poor. Production commenced in February 2005 on a digitally programmable analogue hearing aid, which will be distributed in developing nations at a selling price commensurate with each client's ability to pay, with free being the lowest price. (For more on VisioPlus of India see appendix B. 18a).

VisioPlus’s proven record at producing certified, high-quality surgical and optical devices makes it an attractive partner to **RROV Ltd**. In addition, VisioPlus of India has a social mission in line with ours and more than a decade of experience producing health aides that are sold at selling prices commensurate with people’s ability to pay. VisioPlus of India already manufactures eyeglasses and is willing and enthusiastic about integrating more advanced eyeglass making technology into their factory. Management’s long relationship improves the partnership’s prospects for success.

Operations

Operations are divided between Manufacturing and Distribution. **RROV Ltd**'s production partner will be responsible for the entire manufacturing process but subject to supervision from **RROV Ltd**'s Operations manager.

Manufacturing operations

1 Manufacturing process and costs

The manufacturing of reading spectacles involves several steps:³⁹

- Machines are used to mould frames from plastic or metal
- Frames are polished
- Frames are coloured and dried
- Temples are manufactured and screwed in
- Labels are painted
- Lens is inserted
- Finishing labels applied

Table BP.X Manufacturing and labour cost⁴⁰

Manufacturing cost VND		Cost of labour in VND (at capacity)		
Frame parts	4,989	No. Frames	1,500	per day
Lenses	6,058	No. Frames	20	per labourer
Labour	1,780	No. Labourers required	75	
Packaging	1,781	No. Hours per day	9	per day
Red River Optical Labels, Strength Stickers	1,781	Total Person Hours required	675	per day
Total Manufacturing Cost	16,389	Cost of Labour	1,780	Per Spectacle
18% Profit Margin for Manufacturing Partner	2950.2	Total Cost of labour / day	2,670,000	

		Wage	35,600	Per labourer / day
Total Cost of manufacturing for Red River Optical	19,340	Wage	3,956	Per labourer / hr
Inventory and Transportation	3,564			
Total Cost Per Item for Red River Optical	22,903			

2 Productivity and Capacity

Each machine has a productive capacity of 1,500 frames per day, or 30,000 per month (utilised 20 days per month). Under our model assumptions, **RROV Ltd** buys one TR-90 machine and one metal machine giving us back-up capability should maintenance be necessary and a maximum capacity utilisation during the first 36 months of 25.8%, leaving excess capacity if demand should exceed expectations or for manufacturing partner's other manufacturing requirements. Asset life is modelled for accounting purposes at 36 months. Each labourer can produce on average 20 spectacles per day. Each labourer earns VND 3,956.

3 Raw materials and supplies

Raw materials for frames consist of wood, buffalo horn, plastic or metal (titanium, nickel, aluminium) and can be sourced from a variety of local suppliers. Glass and plastic lens materials can also be sourced locally within Vietnam from a variety of suppliers. We will identify sources and our manufacturing partner will be responsible for ordering all raw materials.

Distribution operations

Specific distribution activities include:

1 Inventory management (Operations Manager)

RROV Ltd will store inventory at the factory facility and in our offices (see below). Since sales agents and mobile units sell directly to customers on a daily basis and since Government, HCMC Eye Institute and NGO demand can be anticipated, we anticipate having detailed information with which to make demand forecasts and production decisions that minimise working capital requirements.

2 Office Facility (CEO)

Initially, **RROV Ltd** will enter into a short-term lease for its office requirements in a Business Center in the Central Business District in Ho Chi Minh City. This office will have all the necessary amenities for running operations so that the CEO and his staff can start working effectively from day one.

3 Management Information Systems

We will install an MIS program to coordinate information on manufacturing, sales and distribution. We will leverage the experience of Red River Optical Vision Pty of Australia to determine the appropriate software for our needs in Vietnam. An MIS program will allow us to set weekly/monthly production plans based on expected demand and inventory. This will enable more efficient operations, shorter cycle times and lower inventory levels, thereby leading lowering costs and working capital requirements.

4 Distribution to Non-Optical Retailers (Sales Agents)

Adapting the model used by Red River Optical Vision Pty of Australia, **RROV Ltd** will hire young, university-educated sales agents, train them and then allocate a number of retail outlets for each agent to target. For every store he or she is assigned, each agent will receive a well-designed **RROV Ltd** eyeglass stand that serves to hold examples of our spectacles (in different colours and prescription strengths) and also enables customers to self-select a prescription based on their ability to distinguish letters and symbols on a simple eye chart.⁴¹ The agents will be responsible for ensuring that these display cases are located at prominent locations in stores.

Once assigned to a store, it will be the agent's responsibility to introduce the our near-vision spectacles to the store owners, demonstrate the ease with which end customers can self-select a strength, and explain the benefits that such glasses can hold for those suffering from presbyopia. The agents will also offer to make themselves available at the store itself several times per week in order to help screen potential customers and convince them of the benefits of purchasing near-vision spectacles, thereby helping to train the store owners in the art of selling these glasses and demonstrating our desire for the stores to maximise their unit sales.

Agents will arrive for work at **RROV Ltd's** office each morning, sign in, receive a case of inventory, travel to their designated stores, deliver the product, collect payments, take new orders and return back to the office at the end of the day.

This system distributes **RROV Ltd's** glasses efficiently by cutting out the complex margin-eroding supply-chain that characterises most consumer goods distribution systems in Vietnam. This enables us to sell our spectacles in urban areas at a price that generates profits for the company, generous commissions for its agents and significant margins for its customers the storeowners. The final retail price to the end consumer is still low enough to ensure that our attractive value as compared to the quality and price of competing offerings.

Red River of Vietnam Ltd intends to pay sales agents a monthly salary of VND 637,795 (\$50) which compares favourably to the national average monthly wage of approximately VND 484,725 (\$38). In order to align the incentives of the sales agents and the storeowners, **RROV Ltd** will pay its agents a commission of VND 5,300 per pair of spectacles bought by each store. If each agent grows his/her store customer base from an initial 4 to a maximum of 30 and each store buys an average of 10 spectacles per month, we estimate that **RROV Ltd** agents could be making up to VND 1,148,032 (\$90) per month in commissions. In our base case model, we employ 27 sales agents who cover approximately 414 accounts after three years. In addition, this network of agents and the commission structure will enable us to keep a tight reign on the collection of accounts receivable because agents will not receive credit for unit sales until they have collected the payment from the store owners and delivered it to our office.

5 Distribution to Factory workers

Mobile units will be loaded with inventory each day at our factory and distribute spectacles directly to end customers. The mobile units will create event-based distribution opportunities. The act of setting up outside a factory, screening workers and selling glasses will create interest on the factory floor. We will approach factory owners and describe the benefits to productivity that will be possible if workers suffering from presbyopia are able to purchase ready-made spectacles (better up-close vision, increased performance, fewer headaches etc.). Factory owners should then be willing to advertise mobile unit visits to their workers and in many cases encourage their workers to purchase spectacles.

6 Distribution to Vision Angel Program

Red River of Vietnam Ltd will distribute spectacles to the Ho Chi Minh City Eye Institute's main facility in Ho Chi Minh City and its satellite rural centres on a monthly basis. HCMC Eye Institute will be responsible for distributing the spectacles to their network of rural eye care centres. It provides ample and frequent transportation between its main hospital in Ho Chi Minh City and its satellite centres. Vision Angels will travel to their local vision centres to collect their inventory monthly and return to their villages where the sales will be made to end consumers.

7 Distribution to existing networks of optipreneurs

Red River of Vietnam Ltd will distribute spectacles to HCMC Eye Institute or the participating NGO on a monthly basis. The optipreneurs will receive a small loan from the partner micro-credit organisation and will then purchase inventory on a monthly basis from HCMC Eye Institute or the NGO. They will then return to their villages and sell the glasses to end consumers.⁴²

8 Distribution to Government of Vietnam

Red River of Vietnam Ltd believes that the Government would order significant bulk quantities of spectacles several times per year. Distribution of the orders would take place at similar intervals through transportation arranged by **RROV Ltd**. Transportation costs are included in our cost figures.

Initially, the negotiation of the government contract and service of the government account will be handled by the CEO, working closely with Dr. Coleman and **RROV Ltd** Board Member Dr. Nguyen Thi Thu Ha. Ongoing customer service and fulfilment will be done by an executive level manager who will oversee **RROV Ltd**'s government, HCMC Eye Institute and NGO customers. This manager will also be responsible for basic training and support of the program, including administering high profile education and empowerment events for government employees to have eyes screened and to encourage purchase.

Time line for operations

For a graphic timeline of the first 12 months see appendix B20. The timeline for operations reflects our target markets and attaining our financial objectives.

Our timeline begins with the hiring of **RROV Ltd**'s CEO and other key management staff in month zero. We are securing a contract with our manufacturing partner and sourcing machinery, which will allow for

purchase and delivery of manufacturing equipment by month three of operations. **RROV Ltd** will then have two months to test and refine the manufacturing process before the first sale of glasses in month six.

Distribution operations begin with the launch of a mobile sales unit in month six, followed by a second in month nine. Mobile sales are the propeller of our business model in Vietnam because they are an innovative and effective way to achieve rapid market penetration by selling en-masse to groups of working income-earners. Our strategy is to start distribution of glasses through this channel in order to prove the viability of this critical sales engine and jump-start revenues in our first year of operations. We will follow the launch of mobile units with the hiring of six sales agents in month eight. These sales agents ramp up their sales to non-optical retailers over a four month period, with new sales agents being trained every four months. We have allowed for a slow build-up of sales agents in order to give managers ample time to train and guide new employees. We will focus on generating income and attaining financial sustainability first in order to be able to subsidise rural distribution operations and achieve the full impact of our social goals. In order to concentrate on our primary markets initially, government sales do not begin until month 10 while rural distribution channels are not serviced until the twelfth and thirteenth months of operations.

Sustainable Development Measures

Social Impact

As part of their reporting, Red River of Vietnam Ltd can quantify and in effect monetize the social impact of our product or service. Our Social Return on Investment (SROI) should be viewed not as a discrete metric to be compared like financial returns, but as part of a larger picture of the social value we create. Here we examine any non-financial benefits that Red River of Vietnam Ltd will create for Vietnamese society. This is an ongoing process for us, but we can estimate certain parameters of the wider social value created.

266,760	Vietnamese will have improved visual health, productivity, and comfort due to purchase of reading glasses from RROV Ltd distributors
27	Sales Agents will be employed
\$3,224	Will be the income of Sales Agents annually (vs. GNI/capita of \$1098)
180	Rural individuals will be employed as Vision Angels
\$656	Will be the supplemental annual income of Vision Angels
180	Low-income optipreneurs, the majority of which will be women, will be employed
\$525	Will be the supplemental annual income of these optipreneurs, which will increase their average annual income by 100%

Management

Management Expertise

A team of skilled, experienced, and entrepreneurial individuals in Vietnam will operate **Red River of Vietnam Ltd** with technical and management support and oversight Vietnam from our team in Australia.

Our Directors, Dr. Coleman and Mr. Reid, bring a wealth of experience to the process of launching **RROV Ltd.**⁴³ As the founders of **Red River Optical Vision of Australia Pty** in Melbourne, Australia, the two have succeeded in taking an entrepreneurial idea and building it into a profitable business in Australia. Leveraging their networks and connections within the eye glass industry, the ophthalmic community and the NGO/development arena, Dr. Coleman and Mr. Reid will serve as key assets in the growth of **RROV Ltd's** business in Vietnam. Through their manufacturing relationships in China, **RROV Ltd** will have direct access to manufacturing technology for producing quality ready-made spectacles at low-cost. Red River Optical Vision Pty of Australia in Melbourne will also assist **RROV Ltd** with product design and development expertise and innovative marketing capabilities.

Dr. Coleman and Mr. Reid are directly responsible for selecting and hiring a talented Vietnamese CEO for **RROV Ltd**. Both have significant experience hiring and managing employees, especially those with expertise in specific areas of business, production, and health care. In the Australian operations, Mr. Reid has hired more than a dozen employees and consultants in the fields of eyeglass product design, graphic design, product management, and sales. Previously, as the President of Ross Infant Care, he managed the strategic direction, budgets, and national sales force of a \$10 million operation. He also oversaw the manufacturing and distribution of goods being produced in East Asia. Dr. Coleman--in her role as the Director of the Onchocerciasis (River Blindness) Division at the WHO Ophthalmic Unit for Research on Onchocerciasis, The Wilmer Institute, The Johns Hopkins University, in Baltimore, Maryland USA--was responsible for the hiring and management of more than 50 employees, 90% of whom were based in 19 countries throughout Africa. Dr Coleman originally served in the Royal Australian Army Medical Corps during and after the Vietnam War and thus came to know the language, the culture and people particularly of the Red River Delta area. She has worked intermittently in Vietnam for more than 30 years.

Mr. Reid and Dr. Coleman will also be responsible for helping the CEO of **RROV Ltd** to build strong contacts with potential manufacturing technology providers in China and local eye hospital and Government contacts in Vietnam. Dr. Coleman's long experience and rich contact base in the international eye care community gives her powerful access to leaders in this community.

Chief Executive Officer

Red River of Vietnam Ltd is in the process of hiring a CEO to oversee the development of the business and the company's expected growth. The process began with a pool of outstanding candidates within Vietnam and Australia and hiring will be completed as soon as funding is in place. Our leading candidates have extensive operational experience in marketing and distribution arenas and the requisite financial skills for running an established enterprise. (Please see appendix C1 for several candidate resumes). Our chosen candidate will be in charge of leading all marketing activities and will also demonstrate a genuine commitment to our social mission.

The CEO will report to the Board of Directors of **RROV Ltd** and will be compensated equitably in line with existing Vietnamese small enterprise business managers (approximately \$33,008/yr). We recognise that the hiring of this individual is integral to the success of the venture and that any external funding would be conditional upon the commitment of an outstanding candidate to this CEO role.

Commitment from and coordination with Red River Charitable Trust of Australia

Red River Charitable Trust of Australia is committed to the development of our profit-generating venture as a natural extension of our activities in Vietnam. The Trust will be involved in all aspects of **RROV Ltd's** activities, including: recruiting an experienced Vietnamese management team; identifying and securing investors; technical assistance in sales, marketing, and product design; partnership-building with Vietnamese NGOs and government; ongoing monitoring and evaluation of operations via monthly progress reports submitted by management of **RROV Ltd**; annual site visits to Vietnam by **RROV Ltd** directors; and strict financial monitoring via internal and external audits.

The Directors of Red River Charitable Trust of Australia will have an ongoing role in the development and growth of **RROV Ltd**. Elizabeth Coleman will be directly responsible for steering the venture and communicating with the CEO in Vietnam. Dr. Coleman will commit a minimum of 20% of her time to the oversight of **RROV Ltd's** operations.

Red River Charitable Trust of Australia Programme Director, Bernadette Soares, has spent the last year and a half establishing and evaluating rural micro-credit based eyeglass distribution programs in Vietnam, India and El Salvador.⁴⁴ She will travel to Vietnam during the initial phases of **RROV Ltd's** roll-out to share her expertise and network of NGO contacts in the area of rural eyeglass distribution. Ms. Soares will also be responsible for monitoring **RROV Ltd's** progress in achieving rural distribution targets and evaluating the social impact of **RROV Ltd's** business for possible export of best practices to other countries in which **RROV Ltd** is working.

Red River Charitable Trust of Australia is fully committed to securing resources for **RROV Ltd** and to governing it by dedicating staff time and expertise to its growth. Red River Optical Vision Pty of Australia's Board of Directors fully supports the development of **RROV Ltd**.⁴⁵ As **RROV Ltd's** Board expands, the Charitable Trust will continue to seek out individuals with an interest and expertise in our non-profit venture.

Staffing Plan

RROV Ltd will be run from within Vietnam and staffed by local managers in order to ensure its success. We have already identified potential candidates for three key positions within the new organisation.⁴⁶

Operations manager

Mr. Dao Gia Tuan, the Operations Manager, will be responsible for managing our partnership with VisioPlus of India and managing the central inventory process. Mr. Dao has experience as the managing director of an electronic hardware manufacturing company, for which he oversaw more than 200 workers in two manufacturing facilities. An entrepreneur through and through, he is a graduate of National University of Singapore and has worked in distribution for such multi-national companies as Wipro, General Electric and Samsung.

Mobile unit distribution manager

Mr. Phuong An Nguyen will be responsible for the mobile unit distribution strategy. He will create mobile unit teams, monitor inventory requirements and identify key factories for targeted visits, working with the resident Optometrist to develop relationships with factory owners that demonstrate the benefits our bring to factory workers. He will work closely with the Urban Retail distribution managers to identify sales patterns, develop marketing strategies and incentive programs, and consolidate customer information and feedback. With more than 10 years of experience in the business of bulk transportation of American and European products, Mr. Phuong has an intimate knowledge of national distribution mechanisms throughout Vietnam. Mr. Lamba graduated from Institute of Technology, Bandung, Indonesia.

Government and rural distribution manager

Mr. Ly Qui Trung will be responsible for building and maintaining relationships with our partners and customers in Government, at HCMC Eye Institute and with NGOs purchasing our glasses for use in micro-credit distribution programs. He will also be tasked with devising and coordinating marketing campaigns, as well as developing training and education materials that can be used to train sales agents and customers about the benefits of our ready-made spectacles. Mr. Ly is a management graduate with a major in marketing who has had over 10 years of experience launching new products in Southern Vietnam.

Additional Senior Management

Additional Senior Management roles for which we are currently identifying suitable candidates include:

- *Urban Retail Distribution Manager*- this individual will be responsible for the recruitment, training and management of individual sales agents. Ideally he or she will come with sales experience and strong local contacts in the non-optical retail industry but must have an entrepreneurial outlook and be excited to build a strong direct sales force.
- *Resident Optometrist*--We will hire an experienced Optometrist to provide technical assistance during the production process and sales and marketing expertise to the distribution managers. The presence of this individual will ensure the optical integrity of our product and serve to enhance **RROV Ltd's** credibility with our key customers and end consumers.

Rural distribution partner

Our partner in developing rural distribution mechanisms is Dr. Nguyen Thi Thu Ha, the Founder and Director of HCMC Eye Institute and a **RROV Ltd** Board Member. As Director of one of the largest and most modern eye hospitals in Southeast Asia, Dr. Nguyen leads all research, training, rehabilitation, and product development activities at the Institute. Educated in both Vietnam and the United States, Dr. Nguyen has also received numerous awards for his pioneering development of high quality, affordable eye care models for underserved areas. He is currently overseeing the implementation of a country-wide plan for community eye care delivery, the 'Flying Eye Institute' Program, a core component of which is the Vision Angel program which will serve as one of our key channels for the distribution of reading glasses in rural areas.

Financial plan

Red River of Vietnam Ltd has developed a detailed and conservative ‘base case’ financial model for the first 36 months of the venture that can be found in Appendix A, the key points of which are highlighted below. Inputs to the model are based on the detailed knowledge available to us from our existing pilot project in Vietnam, the work our consultant undertook in Vietnam, the collective industry expertise of our staff and Board of Directors, and months of additional research by a number of MBA students from Australia’s Deakin University (Melbourne). As a result of this work, this base case model is our best current projection of the operational and financial path of **RROV Ltd** for the next 36 months.

The key benefit of the financial model lies in its flexibility. The model was developed using a ‘bottoms-up’ approach meaning that for each distribution channel a number of separate assumptions were made concerning roll-out dates, costs, margins, personnel hiring, sales targets, growth metrics etc. As a result of this flexibility, **RROV Ltd** has the ability to forecast numerous operational scenarios and to respond quickly to issues affecting specific distribution channels.

Notes detailing key assumptions and calculations can be found in Appendix A.

Table BP.X Key Financial goals for the ‘base case’ model by end of 2006⁴⁷

257,460	Minimum number of eyeglasses distributed to Vietnamese customers in urban, peri-urban, and rural markets in Vietnam
\$756,593	Extrapolated annual total revenues generated
\$105,434	Extrapolated annual net income generated
27.2%	Ending return on equity
\$265,777	Ending cash balance for equipment replacement and investment
EBITDA Positive	Month 9
Net Income Positive	Month 9

Table BP.X Key figures for 36-month model--Base Case (in AUD)

=Summary Financials!E77 to =Summary Financials!O97

Equity return summary			Working capital summary			Contribution margin summary		
Initial equity investment	289,175		End cash balance	265,777		Rev / glasses sold		5.76
End book value of equity	403,662		Min cash balance	169,315		VC / glasses sold		2.73
Annualize net income	109,961		A/R Days on hand	41		CM / glasses sold		3.03
ROE	27.2%		Inv Days on hand	30				
Operational summary			Margin summary			Monthly fixed cost		
Annualized revenue	820,988		EBITDA margin	22.0%		Monthly fixed cost		23,363
Annualized EBITDA	180,487		EBIT margin	20.6%		Breakeven sales (#s)		7,698
Annualized EBIT	169,170		Net income margin	13.4%		Actual sales (#s)		15,500
Annualized net income	109,961		COGS % of sales	43.1%				
Capital expenditure	33,949		Fixed costs % of sales	31.7%				
			SG&A % of sales	16.6%				
Glasses sold (by distribution channel)			Glasses sold (by market)			Channel margin summary (EBITDA)		
Retail	43,560	16.9%	Urban	201,060	78.1%	Mobile units		64.4%
Mobile units Lease	157,500	61.2%	Rural	42,900	16.7%	Retail (sales agents)		-22744.2%
Government	13,500	5.2%	Govt	13,500	5.2%			
Vision Angels	14,100	5.5%	Total	257,460		Exchange rate (Rs/\$)		12,324
Microcredit	28,800	11.2%						
Total	257,460							

Annual financial statements (Monthly financial statements and charts attached in Appendix A)

= 'Annual Income Statement'!B3 to = 'Annual Income Statement'!L50

INCOME STATEMENT	exch rate:	12,324.30	<<--Change this	INCOME STATEMENT			
(figures in VND)	1	2	3	(figures in AUD)	1	2	3
Revenues:				Revenues:			
Retail	12,960	524,880	1,814,400	Retail	1,052	42,589	147,221
Mobile units	1,620,000	6,075,000	6,480,000	Mobile units	131,448	492,929	525,791
Government	44,661	178,644	178,644	Government	3,624	14,495	14,495
Village guardians	0	124,620	253,260	Village guardians	0	10,112	20,550
Microcredit	2,412	171,252	598,176	Microcredit	196	13,895	48,536
Total revenues	1,680,033	7,074,396	9,324,480	Total revenues	136,319	574,020	756,593
# of glasses sold	19,830	94,260	143,370	# of glasses sold	19,830	94,260	143,370
cumulative	19,830	114,090	257,460	cumulative	19,830	114,090	257,460
COGS	-454,167	-2,158,839	-3,283,606	COGS	-36,851	-175,169	-266,433
Cases Urban Market	-65,117	-275,675	-376,992	Cases Urban Market	-5,284	-22,368	-30,589
Gross profit	1,160,749	4,639,881	5,663,882	Gross profit	94,184	376,482	459,570
Initial Recruitment - SA	-4,770	-4,770	-4,770	Initial Recruitment - SA	-387	-387	-387
Display boards - SA	-2,160	-87,480	-302,400	Display boards - SA	-175	-7,098	-24,537
Transportation - SA	-9,240	-42,840	-73,080	Transportation - SA	-750	-3,476	-5,930
Material maint - SA	-1,155	-5,355	-9,135	Material maint - SA	-94	-435	-741
Salary - SA	-29,700	-137,700	-234,900	Salary - SA	-2,410	-11,173	-19,060
Commission - SA	0	-36,960	-157,080	Commission - SA	0	-2,999	-12,746
Salary costs - MU	-131,124	-491,715	-524,496	Salary costs - MU	-10,639	-39,898	-42,558
Mat maint - OE	0	0	0	Mat maint - OE	0	0	0
Marketing costs	-84,002	-353,720	-466,224	Marketing costs	-6,816	-28,701	-37,830
Office space + utilities	-321,600	-321,600	-321,600	Office space + utilities	-26,095	-26,095	-26,095
Startup costs	-212,430	0	0	Startup costs	-17,237	0	0
Retail manager	-12,840	-12,840	-12,840	Retail manager	-1,042	-1,042	-1,042
Retail manager commission	-264	-10,692	-36,960	Retail manager commission	-21	-868	-2,999
Mobile Unit lease	-42,840	-160,650	-171,360	Mobile Unit lease	-3,476	-13,035	-13,904
Mobile Unit manager	-12,840	-12,840	-12,840	Mobile Unit manager	-1,042	-1,042	-1,042
Mobile Unit manager commiss	-19,800	-74,250	-79,200	Mobile Unit manager commiss	-1,607	-6,025	-6,426
Other managers salary	-385,200	-385,200	-385,200	Other managers salary	-31,255	-31,255	-31,255
CEO & Administrative staff	-531,480	-531,480	-531,480	CEO & Administrative staff	-43,125	-43,125	-43,125
Contingency	-162,330	-186,327	-201,770	Contingency	-13,172	-15,119	-16,372
Total costs	-1,963,774	-2,856,419	-3,525,335	Total costs	-159,342	-231,771	-286,048
EBITDA	-803,025	1,783,463	2,138,546	EBITDA	-65,158	144,711	173,523
Depreciation	-116,222	-139,467	-139,467	Depreciation	-9,430	-11,316	-11,316
Amortization	0	0	0	Amortization	0	0	0
EBIT	-919,247	1,643,996	1,999,080	EBIT	-74,588	133,395	162,206
Interest expense	0	0	0	Interest expense	0	0	0
EBT	-919,247	1,643,996	1,999,080	EBT	-74,588	133,395	162,206
Taxes	-37,780	-575,399	-699,678	Taxes	-3,066	-46,688	-56,772
Net income	-957,028	1,068,597	1,299,402	Net income	-77,654	86,707	105,434

= 'Annual Cash Flow Statements'!B3 to = 'Annual Cash Flow Statements'!L40

CASH STATEMENT	exch rate:	12324.3			CASH STATEMENT			
<i>(figures in VND 000s)</i>	1	2	3		<i>(figures in AUD)</i>	1	2	3
Net income	-957,028	1,068,597	1,299,402		Net income	-77,654	86,707	105,434
plus: depreciation	116,222	139,467	139,467		plus: depreciation	9,430	11,316	11,316
plus: amortization	0	0	0		plus: amortization	0	0	0
change in A/R	-45,146	-381,492	-894,456		change in A/R	-3,663	-30,954	-72,577
change in Inventory	-119,325	-99,628	-136,044		change in Inventory	-9,682	-8,084	-11,039
Cash flow operations	-1,005,276	726,944	408,368		Cash flow operations	-81,569	58,985	33,135
Mobile unit investment	0	0	0		Mobile unit investment	0	0	0
Equipment investment	-418,400	0	0		Equipment investment	-33,949	0	0
Cash flow investing	-418,400	0	0		Cash flow investing	-33,949	0	0
Equity investment	3,563,877	0	0		Equity investment	289,175	0	0
Cash flow financing	3,563,877	0	0		Cash flow financing	289,175	0	0
Beg cash	0	2,140,201	2,867,145		Beg cash	0	173,657	232,642
Change in cash flow	2,140,201	726,944	408,368		Change in cash flow	173,657	58,985	33,135
End cash	2,140,201	2,867,145	3,275,513		End cash	173,657	232,642	265,777
Sources:					Sources:			
Equity investment	3,563,877	0	0		Equity investment	289,175	0	0
Revenues less A/R	1,634,887	6,692,904	8,430,024		Revenues less A/R	132,656	543,066	684,016
Total sources	5,198,764	6,692,904	8,430,024		Total sources	421,830	543,066	684,016
Uses					Uses			
COGS & cases	519,284	2,434,514	3,660,598		COGS & cases	42,135	197,538	297,023
Operating costs	1,963,774	2,856,419	3,525,335		Operating costs	159,342	231,771	286,048
Taxes	37,780	575,399	699,678		Taxes	3,066	46,688	56,772
Inventory additions	119,325	99,628	136,044		Inventory additions	9,682	8,084	11,039
MU investments	0	0	0		MU investments	0	0	0
Equip investments	418,400	0	0		Equip investments	33,949	0	0
Total uses	3,058,563	5,965,960	8,021,655		Total uses	248,173	484,081	650,881
Beg cash balance	0	2,140,201	2,867,145		Beg cash balance	0	173,657	232,642
Additional cash	2,140,201	726,944	408,368		Additional cash	173,657	58,985	33,135
End cash balance	2,140,201	2,867,145	3,275,513		End cash balance	173,657	232,642	265,777

= 'Annual Balance Sheet'!B3 to = 'Annual Balance Sheet'!L21

BALANCE SHEET	exch rate:	12324.3			BALANCE SHEET			
<i>(figures in VND 000s)</i>	1	2	3		<i>(figures in AUD)</i>	1	2	3
Assets					Assets			
Cash	2,140,201	2,867,145	3,275,513		Cash	173,657	232,642	265,777
Accounts receivable	45,146	426,638	1,321,094		Accounts receivable	3,663	34,618	107,194
Inventory	119,325	218,953	354,997		Inventory	9,682	17,766	28,805
Total current assets	2,304,672	3,512,736	4,951,604		Total current assets	187,002	285,025	401,776
Mobile units	0	0	0		Mobile units	0	0	0
Equipment	302,178	162,711	23,244		Equipment	24,519	13,202	1,886
Total assets	2,606,849	3,675,447	4,974,848		Total assets	211,521	298,228	403,662
Liabilities & Equity					Liabilities & Equity			
Accounts payable	0	0	0		Accounts payable	0	0	0
Total current liabilities	0	0	0		Total current liabilities	0	0	0
Equity investment	3,563,877	3,563,877	3,563,877		Equity investment	289,175	289,175	289,175
Retained earnings	-957,028	111,570	1,410,971		Retained earnings	-77,654	9,053	114,487
Total liab & equity	2,606,849	3,675,447	4,974,848		Total liab & equity	211,521	298,228	403,662

Sensitivity Analysis

We have conducted sensitivity analyses in two major ways in an effort to test the limitations and boundaries of our base case model and demonstrate the risks to our financial plan.

1) Effects of changes in unit price and unit cost on the base case model

The tables below show the sensitivity of certain key outputs to decreases in selling prices in all distribution channels (except the government) combined with an increase in core manufacturing costs. The

value indicated in the '0%, 0%' box indicates our base case figures. Only in certain extreme combinations do changes in these variables cause insolvency (e.g. when sales prices are 25% below expectations and manufacturing costs are 10%+ above expectations). If the market began to demonstrate these characteristics, we would proactively manage our distribution strategy to maintain solvency and build toward a self-sustaining model--e.g. pare down operating expenses, manage working capital more stringently, and defer capital expenditures.

= 'Summary Financials'!D99 to = 'Summary Financials'!P121

<u>Compound annual</u>		<u>Increase in manufacturing costs</u>				<u>Ending cash balance</u>		<u>Increase in manufacturing costs</u>			
<u>growth rate</u>		0%	10%	20%	30%		0%	10%	20%	30%	
<u>Decrease in</u>	0%	12%	12%	12%	12%	<u>Decrease in</u>	0%	265,777	265,777	265,777	265,777
<u>selling</u>	-5%	12%	12%	12%	12%	<u>selling</u>	-5%	265,777	265,777	265,777	265,777
<u>prices</u>	-15%	12%	12%	12%	12%	<u>prices</u>	-15%	265,777	265,777	265,777	265,777
	-25%	12%	12%	12%	12%		-25%	265,777	265,777	265,777	265,777
<u>Return on equity</u>						<u>Lowest cash balance</u>					
		0%	10%	20%	30%			0%	10%	20%	30%
<u>Decrease in</u>	0%	27%	27%	27%	27%	<u>Decrease in</u>	0%	169,315	169,315	169,315	169,315
<u>selling</u>	-5%	27%	27%	27%	27%	<u>selling</u>	-5%	169,315	169,315	169,315	169,315
<u>prices</u>	-15%	27%	27%	27%	27%	<u>prices</u>	-15%	169,315	169,315	169,315	169,315
	-25%	27%	27%	27%	27%		-25%	169,315	169,315	169,315	169,315
<u>Annualized NI</u>						<u>Increase in manufacturing costs</u>					
		0%	10%	20%	30%			0%	10%	20%	30%
<u>Decrease in</u>	0%	109,961	109,961	109,961	109,961	<u>Decrease in</u>	0%	109,961	109,961	109,961	109,961
<u>selling</u>	-5%	109,961	109,961	109,961	109,961	<u>selling</u>	-5%	109,961	109,961	109,961	109,961
<u>prices</u>	-15%	109,961	109,961	109,961	109,961	<u>prices</u>	-15%	109,961	109,961	109,961	109,961
	-25%	109,961	109,961	109,961	109,961		-25%	109,961	109,961	109,961	109,961

2) Development of a downside case scenario.

Our downside case scenario envisages three major changes to the base case model:

- The sales agents only sell 5 glasses per non-optical retail account, a 50% decrease from the conservative base case assumption of 10 glasses per account.
- The mobile units only sell 50 pairs of glasses per factory visit, a 33% decrease from the base case assumption of 75 sales per visit, leading to a penetration of only 13% of the addressable market vs. 19% in the base case.
- The expected contract with the government of Vietnam fails to materialise resulting in no government sales.

In this scenario, assuming we made no changes to our operational plan in the interim, the company will remain solvent for the 36 month period with its cash balances dwindling to \$93,706. EBITDA and Net Income would turn slightly positive in month 16 but would fail to demonstrate much growth. At the end of 36 months the monthly cash burn would be \$4,800 giving approximately 19 more months of funding assuming no additional capital expenditures or Selling, General and Administrative costs (SG&A). Given this set of circumstances, even in the downside scenario **RROV Ltd** would have the time to undertake operational changes, to actively manage fixed costs and to change working capital requirements in order to ensure the financial viability of the project.

Financing Plans

To fulfil initial capital expenditure and working capital needs, **RROV Ltd** will require an equity investment of VND 3,688 million (\$289,175). The majority of this cash will be used within the first 12 months to purchase frame manufacturing equipment, hire and train staff, lease Mobile Units and fund start-up operating costs. Once the cash flow from operations begins to go positive after month 12, cash levels begin to build again enabling us to plan for expansion of the business after 36 months within Vietnam.

As discussed above in both the base case and the downside case, **RROV Ltd** has ample working capital needs and cash reserves to fund operations. The monthly cash flow statement can be found in Appendix A.

Based on current financial projections, **RROV Ltd** does not anticipate any near-term need to take on financial debt. However, we will actively develop relationships with local Vietnamese banks in order to be in a position to set up credit facilities to meet future working capital or investment needs as appropriate. Local Vietnamese banks are sophisticated institutions and we do not anticipate any difficulties in securing borrowing once our business is operational.

Fundraising Strategy

Red River of Vietnam Ltd will create a pool of social venture investors, targeted individuals, and Charitable Trusts to raise the funds necessary to launch **RROV Ltd**. George Soros' Open Society Institute's Economic and Business Development Department, which has supported us in Vietnam since our inception, has expressed its interest in making a sizeable investment in **RROV Ltd's** venture. **RROV Ltd's** Directors have also had initial discussions with the Executive Director of the Insight Fund and determined that we fit within Insight's 'Health Technologies Changing Lives' portfolio. **RROV Ltd** will be pursuing this funding channel in the coming months. Several social investors in Australia have also approached us with an interest in making investments. Red River Optical Vision Pty of Australia will continue its commitment to donate 5% of pre-tax profits annually to **RROV Ltd's** activities.

Critical risks

The sensitivity analysis is in the previous section 'The Financial Plan'.

Organisational Risks

- **Management:** **RROV Ltd** may not be able to find managers with the discipline to execute on the business plan and the flexibility to deal with expected setbacks within the first 36 months of operation. Mitigating factors are 1) the presence of several Vietnamese management institutes that produce extremely high quality managers and 2) direct oversight by our employees and Board Members who will ensure that operational targets are being met and that reporting structures are in place to provide early warning of potential management problems.

External Environment Risks

- **Political Instability:** Vietnam's government has been strained due to the fact that no clear majority has come into power in the last several elections; this has led to fragile coalition governments, which have not lasted full terms. Mitigating factors are 1) it does not seem that Vietnam will back away from its economic liberalisation plan that has sparked substantial economic growth and 2) **RROV Ltd** projects that initial investment will be small and will not require substantial foreign investment after the 36 month period.
- **Currency Risk:** In a repatriation scenario, Australian dollar investors might see the value of their investment decrease as a result of continued Vietnamese Dong devaluation. **RROV Ltd** does not consider this scenario a risk because we have no plans to repatriate our revenue to Australia. However, in the event that we needed to repatriate, mitigating factors include 1) the ability to swap in the forward market for our Australian investors and 2) the technology transfer will guarantee that our revenues and costs will be in the same currency, therefore eliminating currency risk.

Enterprise Risks

- **Concept:** **RROV Ltd** might encounter difficulty in finding Vietnamese consumers willing to purchase spectacles from sources other than ophthalmologists or optician due to credibility issues. Mitigating factors are 1) positive evidence in our pilot program, 2) employment of a Resident Optometrist to maintain the optical integrity of our product and 3) leveraging our existing relationships with the government of Vietnam and HCMC Eye Institute to build credibility, knowledge and awareness.
- **Market Risk:** **RROV Ltd** is introducing a new product into the Vietnamese market that will require a change in purchasing habits. Consequently, it is difficult to be certain of the size of this market (although we have made market estimates above). Mitigating factors are 1) positive evidence in our pilot program and 2) phases in production schedule and distribution channel development in order to match cost structure to expected revenue growth.
- **Pricing Strategy:** **RROV Ltd** may have overestimated target customer's disposable incomes or willingness to pay for ready-made reading glasses. Mitigating factors are 1) conservative sales scenarios in our base case; 2) according to sensitivity analysis, if we reduce the price by 15%, we maintain solvency with ROE reducing from 27% to 12%, and 3) we anticipate reducing our manufacturing costs after the initial investment period, a move which would make it possible to reduce the retail price in year 2.
- **Distribution Risk:** **RROV Ltd** will be creating its own distribution channels through the hiring and training of our sales representatives, as well as the owning and operating of our mobile units. From what we have observed, these distribution channels are innovative and are materially different from sprawling, legacy distribution networks. We cannot be sure that this selling method will be the most effective. Mitigating factors are 1) Red River Optical Vision Pty of Australia has built a similar, proprietary distribution network that has been highly successful, 2) we have envisioned a system to motivate sales people through commission structures to maximise revenue growth, and 3) that this distribution channel strategy is staged and therefore flexible.

- **Competition:** Given a successful launch, **RROV Ltd** expects competition in this field. Mitigating factors are quality, cost advantage, distribution, branding, and our ultimate exit strategy.
- **Quality.** Through transfer of moulding technologies to our manufacturing facilities we will be able to produce a much better product than what is currently available in the market. The technology, as well as prior experience with quality glasses Australia, should allow us to produce a level of quality that will be hard to replicate in the Vietnamese market.
- **Cost advantage.** Through the transfer of technology, our costs will be lower than imported reading glasses that are charged up to a 40% import duty. If in the future tariffs are abolished and **RROV Ltd** determines that the highest quality, cheapest ready-made glasses are those available outside of Vietnam then we can adapt its model. Since we are primarily a marketing and distribution business, we could choose to end local manufacturing and take advantage of the cost competitiveness of imports.
- **Distribution.** Through our proprietary, innovative distribution system, we intend to sell our product to both rural and urban locations in the most efficient manner. Recreating such a chain will prove to be a barrier to entry for competition.
- **Branding.** **RROV Ltd** intends to spend resources on developing our brand in all entered markets and then associate with our high quality products with that brand. Furthermore, this branding will emphasise our Australia-inspired style and quality. This will help provide some insulation from current and future competitors.

Harvest strategy

Ultimately, should serious competition emerge in Vietnam, **RROV Ltd** believes we will have succeeded in achieving our ultimate goal: catalysing a market shift in Vietnam towards better-quality, self-prescribed reading glasses that are affordable to the majority of the Vietnamese population. In this instance, if **RROV Ltd** were no longer a market leader, we might choose to exit the Vietnamese market and transfer our resources and experience from Vietnam to other parts of the world where the market shift has yet to occur.

As we have a social mission, our harvest strategy is to create added value for Vietnam's economy and its citizens.

Milestones

Appendices

Contents

¹ This is a fictional company based upon a similar company in another part of the world. The authors wish to thank Sutia Kim Alter, Managing Director of Virtue Ventures, for bring this case to our attention and for her willingness to share her expertise. Alter is author of several works on social entrepreneurship including, *Managing the Double Bottom Line: A Business Planning Guide for Social Enterprises* (Pact 2000), the first book of its kind on social enterprise business plans. As well, she conceived and wrote the seminal *Social Enterprise Typology* (IADB 2003), and online version (Virtue Ventures 2004). She is contributing author of *Generating and Sustaining Nonprofit Earned Income* (Jossey-Bass 2004) and contributing author of *Social Entrepreneurship: New Models of Sustainable Social Innovation*, (Oxford University Press, 2006) and *Social Enterprise: Applications in International Economic Development* (SEEP 2008). Forthcoming publications include: *Social Enterprise Legal Structures: Lessons from the Field*, (Skoll Centre for Social Entrepreneurship, Oxford University, 2009) and *Social Enterprise Performance Framework: A New Paradigm for Building High Performance Organizations* (Skoll Foundation, 2009). For a complete biography, see <http://www.virtueventures.com/about/team/kim-alter>

² In order to anonymise the original case, unfortunately some of the citations in the following endnotes section had to be fabricated. This business plan is fictional and, while as many citations as possible are accurate, the authors disclaim any incorrect or misrepresented citations.

³ *CIA Factbook*, 2009 <https://www.cia.gov/library/publications/the-world-factbook/print/vm.html>

⁴ Data from U. S. Census Bureau (see appendix B7)

⁵ This number includes the 52% of the presbyopic population aged 35+ with no refractive errors and the 38.4% of the presbyopic population with mild refractive errors (myopia, hyperopia,) who would benefit from reading glasses in Andhra Pradesh, India. Rakhi Dandona, Lalit Dandona, Thomas J. Naduvilath, Marmamula Srinivas, Catherine A. McCarty, and Gullapalli N. Rao 'Refractive Errors in an Urban Population in Southern India: The Andhra Pradesh Eye Disease Study', *Investigative Ophthalmology & Visual Science* November 40, no. 12 (1999): 2810-2818.

⁶ 'People Facts', <http://os-connect.com/pop/pop1.asp?CID=232>

⁷ Kevin Kinsella, 'Demographic Dimensions of Ageing in East and Southeast Asia', in David R. Phillips, ed. *Ageing in the Asia-Pacific Region* (Routledge, 2000), p. 36.

⁸ Unicef, 'At a glance: Viet Nam', http://www.unicef.org/infobycountry/vietnam_statistics.html

⁹ Library of Congress, Federal Research Division, 'Country Profile: Vietnam', December 2005. <http://lcweb2.loc.gov/frd/cs/profiles/Vietnam.pdf>

¹⁰ 'Overview of Vietnam's Consumer Goods Sector: Market Potential and Prospects for Italian Goods', pp. 58-60. Report prepared for the Commercial and Economic Section, Embassy of Italy in Vietnam by Global Private Ltd, March 2007.

¹¹ Please see appendix B3.

¹² TR-90 refers to a specific method of plastic injection molding for spectacle frames.

¹³ 'Overview of Vietnam's Consumer Goods Sector....' *op. cit.* p.58.

¹⁴ In addition to information gathered by the consultant, Red River Charitable Trust has a corpus of data regarding pricing from its program in Haiphong, Vietnam that supports the data presented in this business plan. One such example, attached as appendix B4, is a survey ('Chittock Survey') conducted by Mr. Chittock, Head of Ho Chi Minh City Eye Hospital's *Village Vision Program* for rural areas of Vietnam that provides answers to a number of questions concerning the local accessibility and costs of prescriptions and reading glasses.

¹⁵ See appendix B4a for examples of existing reading glasses offerings.

¹⁶ As evidence see Chittock survey Qu. 20 (appendix B4).

¹⁷ Vietnamese Optometric Association estimates 20,000 Ophthalmologists, 6,000 Optometrists, and 8,000 Opticians in Vietnam.

¹⁸ *Ibid.* Approximately 60% of Vietnamese live in areas with populations below 20,000.

¹⁹ Based on consultant's discussions with opticians. Population of Ho Chi Minh City is 4.8 million.

²⁰ In 1997, 47% of the population lived on less than \$1 per day and 87.5% lived on less than \$2 per day – Grameen Foundation. www.gfusa.org/newsletter/fall00

²¹ See also Chittock Survey Qu. 2 (appendix B4)

²² See appendix B5. In addition the price range in Chittock Survey was Rs.55,000-92,000 (see appendix B4, Qu. 21)

²³ See appendix B6 for calculations of opportunity costs.

²⁴ See appendix B7a for examples of Vietnamese presbyopes.

²⁵ See appendix B9.

²⁶ Rationalizing drug distribution in Vietnam, January 7, 2000.

²⁷ Based on latest Government figures from 2007

²⁸ See appendix B10 for structure of the Vision Angel program.

²⁹ White Paper on Vision 2020 Program: www.vnonline.gov.vn

³⁰ Unicef, 'At a glance: Viet Nam', http://www.unicef.org/infobycountry/vietnam_statistics.html. See appendices B8, B8a and B8b for additional information on Vietnam demographics and wages.

³¹ Data from www.vietnamngos.com

³² Microfinance in the country managed to reach 4 million people in 2004. The World Bank agreed to finance 240 mobile banking cars to bring banking services in remote parts of Vietnam. Source: Banking With The Poor Network, http://www.bwtp.org/arcm/vietnam/IV_News_and_Events/News_and_events.html

³³ Based on applying presbyopic statistics on an estimated 1,286 million national, state and local government employees.

³⁴ See appendix B11 for results of Vietnamese customer priorities survey and appendix B11a for consumer taste results of Red River Charitable Trust's pilot project in Vietnam.

³⁵ See appendix B12 for a sample photograph of RROV's glasses and case.

³⁶ See Appendix B13 for an example of an RROV display case.

³⁷ Includes import duties of 40%.

³⁸ See appendices B17 & B18.

³⁹ See appendix B19 for photographs of spectacle manufacturing process.

⁴⁰ Costs based on extensive visits to Vietnamese spectacle manufacturing businesses by RROV's Consultant.

⁴¹ See appendix B13 for example of eyeglass stand.

⁴² See appendix B15 for Four Eyes's overall distribution model.

⁴³ Resumes in appendix C1.

⁴⁴ Resume in appendix C1.

⁴⁵ Please see attached letters of support from Board Members, appendix C2.

⁴⁶ See appendix B16 for Organisation Chart.

⁴⁷ Assuming RROV Vietnam operations begin in January 2007.