Limited Radius Manufacturing

Business Plan

CONFIDENTIAL

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1 Executive Summary

Limited Radius Manufacturing (LRM) will use infomercial marketing to sell innovative, well-designed and high-quality, short market-window consumer electronics products.

LRM will outsource manufacturing, infomercial production, broadcasting, in-bound telemarketing, and order fulfillment. It will retain in-house product design, marketing, coordination, and management.

Infomercials are currently used primarily to market high-margin, mass-appeal products, usually household appliances, personal improvement products of dubious merit, and various other products and schemes. Infomercials can be made and broadcast on almost any budget, with corresponding returns. Slick, well-produced infomercials selling appropriate products have generated large returns for their investors, and infomercials are starting to be used for more upscale products and by larger companies such as Sony and Nissan.

Consumer electronics have thus far not been frequently marketed using the infomercial channel. LRM sees an opportunity to fill this channel with products designed or acquired by LRM, and to develop LRM's brand as a trusted provider of quality electronics products in the infomercial channel.

As a vehicle for entering this market and for building up required expertise, LRM will design and market a child-safety device. LRM will execute this initial project on a shoestring budget, with leadership working essentially for free, and main electronics engineering and product design performed for a percentage of the profits. Only after the product is deemed commercially viable and a prototype produced will additional debt financing be sought for infomercial production and for initial manufacturing. Since some infomercial agencies are quite flexible regarding new product introductions, LRM will, as much as possible, share the risks and rewards of the initial product with its outsourcing partners.

The major determinant of infomercial success, once market viability is established and the product designed, is whether the infomercial has sufficient and appropriate impact on the audience. Of the factors that affect the costs of this initial product venture, the effectiveness of the infomercial has the most impact on the bottom line—several times the effect of product development costs or overall level of sales. If everything goes according to plan, the product and infomercial would together cost $400,000[1], and selling just half the desired 260,000 units at $90 revenue per unit will produce $1.1 million after tax. It is, of course, nice to know there's an extensive upside. However, much of the effort of starting and operating LRM will go toward mitigating the risks associated with the equally extensive downside.

To maximize its expected returns, LRM must manage the risks inherent to introducing new products, and to starting a new venture in an area in which none of its managers has previous experience. LRM will immediately establish preliminary relationships with outsourcers, seek their input and advice, and start developing a well-defined product introduction process. LRM will concurrently conduct market analysis and product design in a low-cost, "stealth" mode that seeks to rapidly establish the viability of the

[1] All amounts in U.S. dollars

initial product. If infomercials remain a viable channel for consumer electronics, but the initial product is not commercially viable, another product will be chosen.

Over the next several years, LRM will develop its expertise to the point where it is marketing a steady stream of products. At that point, LRM will have developed

- an established, repeatable process for selecting, developing, and selling products;
- well established relationships with manufacturers, infomercial agents, telemarketing operations, and order fulfillment firms; and
- a brand that is recognized and respected.

Once LRM has built up this value, its investors can consider selling the company.

2 Company Overview

Limited Radius Manufacturing will use infomercial marketing to sell innovative, well-designed and high-quality, short market-window electronics products. It will outsource manufacturing and infomercial production and execution, and retain in-house product design, marketing, and coordination and management.

LRM has tentatively selected an initial product to design and manufacture. Once successful with this initial product, LRM will use its experience and profits to take more consumer electronics concepts from idea to market. LRM will develop and acquire basic technologies that can be built into multiple products.

2.1 Mission

LRM will develop competitive advantage in understanding how to design and manufacture high quality electronics products that can be marketed using infomercial television.

LRM will develop a brand that connotes high-quality and trustworthy products, presented honestly.

LRM will take ownership of the infomercial consumer electronics channel.

2.2 Goals and Objectives

To carry out this mission, Limited Radius Manufacturing will pursue the following goals:

- Rapidly determine in detail the viability of this venture, the operating parameters between LRM and its outsourcing partners, and the parameters surrounding the selection of appropriate products.
- Rapidly and inexpensively establish the viability of the initial product, in terms of marketing, manufacturing, and selling. If necessary, select alternate product.
- Develop initial outsourcing relationships.
- After determining a viable initial product, build a prototype, and establish manufacturing costs. If the product continues to be viable, prepare for manufacturing and start the infomercial production process.

Specific objectives in support of these goals include:

- Before the 4th month into the venture, using one person:
  - Establish preliminary relationships with outsourcing partners; determine expectations, costs, timeframes, etc.
    - electronics engineer and industrial designer, probably on individual contracts rather than contracting a company;
    - investigate financing options and parameters

    - contract manufacturers, preferably using a firm that specializes in manufacture in China or Taiwan;
    - infomercial agents, specializing in infomercial marketing and production; and
    - telemarketing and fulfillment firms.
  - Determine viability of initial product
    - Purchase and perform market research and infomercial research, investigating both the infomercial arena as a whole, and the initial product in particular.
    - Establish technological viability
      - Manufacturing costs and timeframes
      - Design trade-offs and constraints
      - Industrial design considerations

- If viable at month 4, before month 7, using 3 persons
  - Construct prototype
  - Establish funding agreement
  - Start infomercial ball rolling

- If viable at month 7, before month 12:
  - Prepare for volume manufacturing
  - Produce infomercial
  - Prepare infomercial telemarketing back-room activities

- If **NOT VIABLE** at months 4 or 7:
  - Attempt to sell device to
    - child-safety company
    - retail chain
    - other party
  - Retain basic technology, if possible
  - **Start development of alternate product.**

- In month 12
  - Start infomercial testing, and proceed with campaign

These goals are strongly tied to the execution plan described later in this document, and to the schedule in appendix Schedules & Project Plans on page 25 that details these activities and milestones.

2.3 Corporate Values

Limited Radius Manufacturing exists to sell products and make money for its owners. It will, however, both to avoid legal repercussions and to develop respectable public awareness and brand,

- portray its products honestly and accurately,
- produce high-quality products that rarely fail, and
- deal fairly and honestly with its customers.

2.4 Corporate Vision

The mission of LRM is to use its first product to gain expertise in the low-cost consumer electronics supply chain, from initial concept and evaluation, through design, manufacturing, marketing, infomercial production, and executing direct response television (DRTV) campaigns. This knowledge and expertise can then be sold and applied to future products.

LRM will use the momentum and cash generated by successful infomercial campaigns to fuel product upgrades and modifications that position their products for introduction to retail and to other direct marketing channels. When possible, adaptable basic technologies will be applied to multiple products, increasing the leverage on basic technologies.

LRM's competitive advantage will come from its overall ability to make products happen, rather than from specialized expertise in any particular area. To execute on these ambitious plans, LRM will focus on developing the skills at which it wishes to excel: product concept and evaluation; product design, both technical and aesthetic; marketing analysis; and coordination and management. LRM will make optimal use of outside experts for such operations as: manufacturing; film production; DRTV media purchasing; fulfillment and credit, etc.

LRM will remain a small company with a large network of outsource partners. LRM will start very small and lean, and grow organically. It will retain ownership of products, but share risks and rewards appropriately with larger, more experienced outsourcing firms, in mutually beneficial relationships.

3 Business Environment

LRM's environment consists primarily of the infomercial industry and its competitors within that industry, and the contract electronics manufacturing industry.

3.1 Infomercial Industry

Infomercials are half-hour advertising television programs, shown primarily in non-peak times. It costs approximately $300 to reach 1000 households for one-half hour. The largest cost in an infomercial campaign is for media (broadcast and cable air time), and the main measure of performance is the number of revenue dollars generated by each dollar of media purchased—the media effectiveness ratio, or MER. MERs are typically between 2.0 and 2.5. Our target market for the initial product is 22% of households, and therefore we expect to pay $1360 to reach 1000 target households.

Telemarketing firms do more than simply take orders: once an order is taken, they can be expected to generate approximately 20% additional revenue via 'upsells'. Upsells are additional products sold by telemarketing personnel to customers who have just purchased the advertised product. Telemarketing firms can also call back inquirers later to see whether they have changed their minds.

A substantial support infrastructure has evolved around the infomercial industry. For a price—or a percentage—almost every aspect of planning, producing, and executing an infomercial campaign can be outsourced.

Infomercial spots can be easily bought and sold, allowing rapid ramp up and down of the number of spots shown on a station or in a region. This allows the infomercial to be tested at various prices and formats simultaneously in several cities before being rolling out nationally. It also allows an unproductive station or region to be quickly dropped from the schedule.

The majority of responses to a broadcast are received within a couple of hours of airing. Numbers are usually received from the telemarketing company within a few hours, so decisions can be made quickly about how to proceed.

The ability to announce that delivery will take place a certain number of weeks following receipt of payment provides a buffer that reduces inventory risk, as long as the manufacturer can deliver within the promised period.

Infomercials are typically used to sell high margin, mass appeal products appropriate to the broad reach of infomercials. Prices usually are in the $30 to $100 range, with some products up to $300, and a few (such as Soloflex exercise machines) selling for much more.

In spite of their low-brow image, infomercials are starting to appeal to large companies that want larger blocks of time to announce or describe new products. Nissan used infomercials to introduce the Altima; Braun has used infomercials to promote new kitchen appliances. Infomercials are especially appropriate for products that benefit from in depth demonstrations.

The large portion of an infomercial campaign that goes to media costs makes the whole endeavour very sensitive to the amount of revenue generated by each showing of an infomercial. This implies that, within reason, money is well-spent on high production quality and better script writing. (There is more detail on cost sensitivity in the finance section starting on page 15 later in this document.)

Although in the early days of infomercials some products were introduced in Canada using infomercials, the largest market is in the USA, and Canada has since become primarily a re-player of American infomercial campaigns. For this reason, Limited Radius will operate within the USA.

There is more detailed information on infomercials in the Infomercials appendix on page 26.

3.2 Infomercial Marketing Competitors

A number of companies already operate in infomercial channels parallel to that which LRM wants to inhabit. For example, companies such as American Harvest specialize in a particular line of product such as kitchen appliances that they market using infomercials. Such companies have made a lot of money and established their brands using infomercials.

There do not appear to be any companies specializing in selling consumer electronics using infomercials, and there are few electronics products listed on internet infomercial sites. It is possible that electronics simply do not sell using infomercials, and companies have abandoned the market. It is more likely that electronics is a departure from the type of product historically sold using infomercials, and LRM sees an opportunity to claim this channel.

Although there are currently few companies selling electronics using infomercials, there are a large number of electronics companies that would be able to move their products into infomercials if they see LRM being successful, and similarly a number of infomercial marketing companies that could rapidly seek to acquire electronics products. Since the ideal movement is from infomercial to retail, it is likely that manufacturers with established retail channels would not move to infomercials.

LRM will be able to withstand the attack of competing infomercial firms. These firms will need to adapt to the smaller margins and increased technical complexity of electronics products. LRM will be built from the ground up around these constraints.

3.3 Contract Electronics Manufacturing

Like the infomercial industry, the electronics industry has its own established infrastructure, and most operations can be outsourced. And, as with infomercials, the portion of the product that is taken by a single outsourcer can vary depending on the requirements and experience of the product developer.

There are a number of industrial design firms in Ottawa that have experience with manufacturing electronics in China and the East. In addition, thanks to the internet there are many firms available elsewhere with the same capabilities.

Unlike infomercial product companies, contract electronics firms are not typically interested in sharing risks and reward with product developers; they want to be directly paid for their output. For this reason, to start, LRM will use individual designers who are willing to work for a percentage of the profits. Later, when there is money in the bank, LRM will use various consulting houses.

Initially, LRM will establish a relationship with a firm that can oversee all the activities involved in manufacturing its products. This involves coordinating initial physical design, adapting to the capabilities and advantages of manufacture in China and the East, acquiring inexpensive components, initial production runs, ensuring quality, etc.

As LRM builds experience, it will take on more of the coordination, and move a layer down in the outsourcer network.

4 The Opportunity

LRM will attempt to fill the consumer electronics portion of the infomercial channel, and to establish itself as the legitimate owner of the channel. LRM will establish its brand as the trusted brand that infomercial consumers associate with quality consumer electronics products. This perception of quality and functionality is especially important when using a selling medium that does not allow customers to try products before they buy them.

LRM sees an opportunity to acquire or develop innovative, but relatively technologically unsophisticated, consumer electronics devices, and market them using the infomercial medium. LRM will seek products that

- sell between $50 to $100;
- cost between $10 and $20;

- fit the infomercial criteria of
  - having little or no retail exposure,
  - being demonstrable,
  - having as broad an appeal as possible

LRM would prepare integrated marketing plans that included appropriate telemarketing upsell products, and eventual migration to retail, either for the original products or, when appropriate, enhanced or modified versions of the products.

4.1 Threats

LRM faces a number of threats in this endeavour.

LRM might underestimate the nature and intensity of its competition. Other DRTV companies in neighbouring spaces can move in fast, since they have already set up the relationships with design and manufacturing firms, and within the infomercial industry. They also have experience with the whole life-cycle of a product marketing campaign. LRM may be overestimating the difficulty these companies would have in moving into the electronics area.

But LRM will have partnered with an infomercial producer with sufficient resources to resist, and perhaps dissuade, a direct attack.

LRM may have badly estimated the buying habits of infomercial consumers. LRM may have overestimated the public's willingness to buy electronics presented in infomercials. It is possible that knowledgeable marketers have already tried and failed to market consumer electronics using infomercials. It is expected that this can be ascertained once LRM invests in preliminary infomercial market research.

MERs—the revenue generated by each dollar of media purchased—make or break an infomercial. If product marketers with higher margins are willing to bid up the price of the most effective spots, then it becomes increasingly difficult for LRM to sustain profitability. *Information on media effectiveness can be purchased from infomercial monitoring services, and from infomercial media purchasers.*

LRM may be unlucky. If a similar product to LRM's initial product gets into retail immediately prior to or during the infomercial campaign, LRM is going to lose most of its sales, because retail sells more volume than infomercials, and in cases like this, the infomercials tend to generate retail rather than DRTV sales. This is bad when the DRTV marketer does not also have the retail market. The power of retail to sell is exacerbated by the try-it-before-you-buy-it nature of electronics devices.

LRM will mitigate such risks by operating within short market windows, thereby limiting the chances that other products will overlap LRM's campaigns. LRM will use its developing brand to sustain a level of recognition and reputation that can help it regain ground lost to competing products.

5 Initial LRM Product

In order to bootstrap itself, LRM is designing and tentatively planning to bring to market a child safety device. It has already been determined that the basic technology

concepts are feasible; it remains to be determined whether a corresponding product, with design and cost constraints, is also feasible.

More complete product description can be found in the Product Description appendix on page 27.

5.1 Product Opportunity

Each year in the U.S. 4600 children are abducted by strangers. A child taken by a stranger is in great peril. Over 2100 children *per day* are abducted by parents; most of these are returned to their legal guardians. About one thousand children per year are taken out of the country. Countless children are temporarily lost in parks, malls, etc. Incidents of lost children are covered by the press, and the threat, although real, is perceived by the public to be greater than it actually is.

Limited Radius Manufacturing is designing, and will bring to market, a child-safety device that warns a guardian whenever a child in their care has wandered away more than a specified distance. The device will be compact and relatively inexpensive, and will be on sale within 12 months from start of operations, assuming that the product remains viable, and will be sold within an 18-month window.

Although sold initially as a child-safety device, the basic technology can be applied to other devices, such as security for laptop computers, briefcases, and handbags, pet security, etc.

5.2 Basic Technology

The base technology for the initial product consists of two units:

1. A control unit, e.g. as carried by the guardian, consisting of
   - On/off switch
   - Button to trigger/test alarm unit
   - Green operating light/Red low-battery light

   The control unit should be no larger than a pack of playing cards.

2. A portable alarm unit, e.g. as worn by the child, consisting of
   - On/off switch (hidden on the child alarm unit)
   - An alarm triggered by
     - Exceeding specified (variable) distance from control unit
     - Loss of signal from control unit
     - Button on control unit
     - Button on alarm unit
   - Low-battery warning alarm
   - Green operating light/Red low-battery light
   - *Low cost,* to increase the margin on upsells of additional alarm units.
   - The alarm unit should be as small as possible.
   - Multiple alarm units must be able to work with a single control unit.

5.3 Initial Product

The child alarm product packages the base technology:

1. The control unit
   - Can be worn on a belt or carried in a purse

2. The alarm unit
   - Can be worn by a small child
   - Cannot be easily switched off
   - Triggers when taken off before switching control unit off

The alarm unit is designed to be as inexpensive as possible to product, so that additional units can be sold as part of the telemarketing upsell.

5.4 Market & Customers

61.4 million families in the U.S. have household incomes greater than $24,000. Of these, 22%, or 13.4 million, have one or more children six or less years of age. There are 19 million children in the U.S. under the age of four. These children are spread across the country in proportion to general population.

The number of children under six per family shrinks slightly as family income rises above $70K. This is expected, as age and income are positively correlated. We expect the proportion of grandparents to rise with income; although we do not explicitly account for grandparents, some of them are expected to purchase the product.

LRM's target customers are everyone concerned about the safety of a particular child:

- Mothers & fathers
- Grandparents and other concerned relatives and friends
- Care-givers, day-care, babysitters

We expect most of this target market to be between 25 and 45 years of age, consisting of 44% of householders over the age of 15.

In addition, a certain portion of the 28% of householders over the age of 55 are assumed to be grandparents, and likely to purchase the product.

Because the product serves a visceral, heartfelt need, we expect less price sensitivity than other products marketing using DRTV.

More detailed information can be purchased from the US census bureau, and from demographics and marketing research companies.

5.5 Competing Products

There are several products performing, or planned to perform, similar functions to the one planned by LRM. Most are sophisticated, GPS-based systems that involve ongoing service charges, and are not yet on the market.

Digital Angel from Applied Digital Solutions (ADSX) has received much press attention over the last year or so. This product, initially designed as an implant for tracking felons, has been toned down to being oriented to keeping track of wandering seniors, children, and pets. It uses the global positioning system (GPS) to track anywhere in the world, and it can send various telemetry, such as body temperature and heartbeat, via

satellite to a base station. The product, currently being beta tested, costs $299 for the monitor and receiver, and from $20 to $50 per month for various levels of the monitoring and alert service, centralized at a single location.

Leonie, a mobile phone product from Siemens, is part of Siemens' answer to the "OnStar" system, intermittently sends location information to a base station. It cost about $100 for the phone and $30 per month for the service, and is due to arrive in North America in 2002.

At the other extreme is the *Child Guardian*, which consists of an alarm worn by the child that can be triggered by either the child or guardian pressing a button. The product has a range of 200 feet, but does not trigger when out of range. The product sells for $23 via the web.

There appears to be no products matching LRM's middle level of technological complexity.

5.6 Follow-on Products

The technologies developed or acquired by LRM will, whenever possible, be applicable to multiple products. The technology developed for the initial product can potentially be applied to a number of other products, such as

- Laptop, luggage, and handbag security;
- Pet security.

It is possible that possible follow-on products are not appropriate for marketing via infomercials. In such cases other marketing avenues and partners will be sought.

6 The Company

6.1 Leadership Team

Although the founders of LRM are embarking in a new direction, they will be weighing the advice of their outsourcing partners, most of whom have some stake in the outcome.

LRM will also find a senior business advisor for general strategic and tactical advice.

6.2 Organization

6.2.1 Strengths & Weaknesses

LRMs main organizational strength is its ability to work in 'guerrilla' mode at very low cost while getting the company started. LRM's founders are also willing to share the returns with its partners, in order to share risks and rewards, and to encourage productive involvement with the project.

Ottawa, the current centre of operations, is a focal point within Canada for sophisticated electronics product development. The skills required for the types of products envisioned by LRM are in abundance.

Ottawa has skills in product design, with several firms providing industrial design and manufacturing services. At least two of these firms have experience with RF-based consumer products such as LRM's initial product. In addition, Ottawa's Carleton University has a respected Industrial Design school, which will be the source for design on the initial product.

LRM is aware that it has little experience in the infomercial arena, and to compensate for this will partner with an infomercial agency that has a good history of sharing risks and rewards with partners, and of introducing new types of products.

As mentioned elsewhere in this plan, quickly establishing mutually beneficial relationships is essential to LRM's future success.

Also key to success is the ability to effectively select new products. LRM will quickly set up a product selection and gating process that minimizes the risk of wasting significant effort on products that are eventually abandoned. Studies of new product introduction have determined that the ability to effectively select products, and to rapidly abandon products, significantly reduces the cost of developing a portfolio of products.

6.2.2 Available & Required Resources

LRM currently has sufficient financial resources to pursue the initial four-month phase of the project. This will allow it to determine the overall viability of the venture, and to make initial contact with outsourcers, and establish expected costs, timeframes, etc. It will also allow for the purchase of market research data.

During the initial phase, LRM will also make contact with a free-lance electronics engineer and a free-lance industrial designer. These contractors must be willing to work for a percentage of the profit. (For subsequent products, LRM will engage firms in addition to individual contractors.)

LRM will find an experienced business advisor, also willing to work for a percentage.

6.3 Strategy

LRM will start with an extremely lean-and-mean initial product introduction. It will design and produce its initial product using a low cost approach that, while possibly slower to execute, requires little outside funding until the product is already demonstrable.

Once funding is acquired, LRM will proceed with manufacturing and infomercial production.

The returns from the initial product will be immediately used to

- Further the marketing of the initial product
- Accelerate the initial product onto retailer shelves
- Acquire or develop new products, and evolve current products into new markets or channels

- Start absorbing some of the risks (and therefore the returns) being taken by outsource partners.

LRM's main focus will be on building the processes and skills necessary to coordinate the tasks required to develop products and bring them to market. This requires

- Building and maintaining well-oiled and mutually-beneficial relationships with outsourcing partners
- Developing a deep understanding of the capabilities and trade-offs involved in manufacturing in China and Taiwan
- Developing a deep understanding of the infomercial industry and the markets it sells to
- Developing the ability to efficiently keep four or five product ideas in the works at any given time.

Key partnerships provide extensive experience and capabilities in specific areas, and allow LRM's activities to scale without LRM growing too large.

- Contract Electronics Manufacturer.
  - Able to deliver quickly with quality – ideally less than 4 weeks
  - China's manual manufacturing would allow testing of every unit (this would be REQUIRED, and be made a selling point of the infomercial)
  - Capable of rapid delivery of prototypes, manufacturing advice, etc.
- Infomercial Producer/Agent.
  - Able to provide feedback on marketing approach
  - Able to script and produce effective infomercial
  - Able to coordinate media purchasing, dubbing, etc.
- Telemarketer/Fulfillment Firm.
  - As point of personal contact with customers, the quality of the telemarketing is paramount, both in terms of phone contact and management of deliveries, etc.

Once the initial product is selling, it is important to get the next product out as soon as possible, so that some brand momentum can be built-up.

7 Financial Review

This section provides financial information for the period of the initial product's one-year product development phase and its 18-month market life. Since this is a risky venture, financial numbers have been made as conservative as possible. There is no planned income from telemarketing upsell sales (which typically adds 15-25% to revenues), or from any possible move into retail. Although there are no planned revenues from further products, there is accounting for the costs of developing the next products (currently assumed to be the same as the cost of developing the initial product and starting yearly after the start of the development of the initial product).

The following subsections contain:

- A sensitivity analysis covering various factors
- Sales forecasts, showing an anticipated ramp-up and -down.
- Cash flow and profit forecasts, including cash flows, and income statement and balance sheets for the first two and one-half years.
- An overview of investments and returns for the initial product

- Summary of possible sources of funding.

The numbers in this section start year 1 in the first month of the first year of product development, and continue from there. Product development will be started so that the infomercial campaign starts in August, in the autumn when people start to watch TV and the MERs start to rise.

Finances are projected only 30 months into the future, and consider only the initial product. These numbers will be revised after LRM's initial product has reached market, in order to better plan follow-on products.

7.1 Sensitivity Analysis

Before showing estimated financial numbers for the initial product, it is necessary to describe how variances in these estimates alter LRM's chances of success in marketing the product.

We break even if any one of the following variances occurs.

- Sales are **18%** of planned (the numbers presented in the statements below are based on selling 85% of planned)
- Product development and infomercial production costs are **five times** planned amounts. (Optimistic numbers in the model assume that product development, etc. will cost 1.5 times more than planned.)
- Customer response rate is **75%** of planned, or 3% of viewers, for a MER of 1.7. (Optimistic numbers in the model assume that 4% of target viewers will purchase.)

Profitability is relatively less sensitive to lower than expected sales (assuming that media costs are correspondingly lowered) and to higher than expected product development costs.

However, profitability is extremely sensitive to changes in the rate at which target customers encounter and purchase the product. The typical infomercial has a MER of between 2 and 2.5; a target viewer response rate of 4% is a MER of 2.6. A MER of 1.7 results in breakeven; a lower MER and the initial product loses money.

Note that the most sensitive variable, viewer response rate, is determined partially by the quality and effectiveness of the infomercial production, choice of air time, etc. This indicates the importance of producing a quality product and presenting it using an effective (possible more expensive, but certainly better planned and conceived) infomercial production.

The model used assumes that at any of these breakeven points, the development of the next product has been cancelled, and salary costs are greatly reduced. In reality, costs would be trimmed back rather than cancelled, as in the absence of total failure there would be an attempt to use whatever funds were available to pursue the next product.

Interested readers can manipulate the spreadsheet that comes with this package, and which is described in the Financial Details appendix on page 24.

7.2 Sales Forecasts

The following chart illustrates the assumed sales volumes per month of the initial product, starting with the initial month of infomercial broadcasts, which start at month 12 after product development starts.

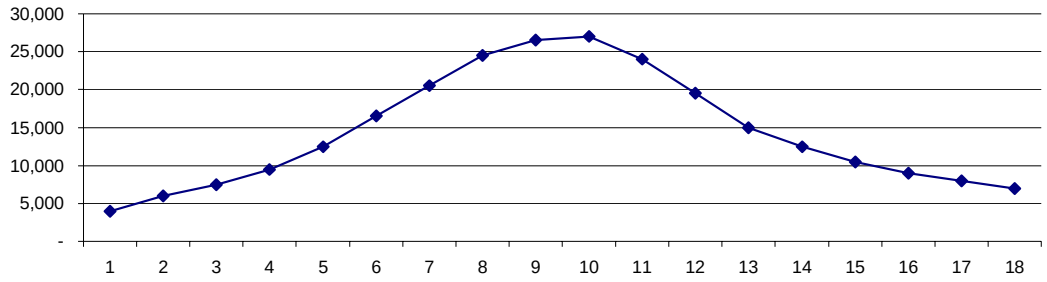

Figure 1. Expected sales over the 18 month product life

We assume (as best case) that we can sell 260,000 units over an 18-month period. This corresponds to 2% of the total target market. As shown above, we assume that sales ramp up over a period of approximately eight months, and are over by the end of the 18th month. Spreadsheet numbers assume that lower volumes of sales are spread in the same proportions across the entire 18-month selling period.

For this analysis, we have assumed that the product can be sold at some marginally-profitable rate over the entire 18-month expected market window. In reality, if sales are too low it is possible to stop the campaign with little or no penalty. When the media is costing more than it generates in sales, the campaign should be cancelled.

These numbers will be modified when we engage an infomercial agent, who is expected to provide more accurate estimates of ramp-up times, length of sales life, etc.

7.3 Cash and Profit Forecasts

The following sections contain details about unit costs and media costs, cash flow, and the pro forma income statement and balance sheet for the first two and one-half years, at 85% of planned sales.

7.3.1 Unit Costs

The unit cost of the product is to be less than $20 (or the product is, in the absence of mitigating information, deemed to be not viable).

Per unit telemarketing and other selling costs are as follows:

Per-unit selling costs

Total per unit:		*$ 16.65*
Inventory:		$ 0.50
Returns		$ 4.00
Return rate:	*5%*	
1-800 charges		$ 2.00
Order processing (packing, shipping)		$ 6.00
Bank fees		$ 2.40
Bank fee rate:	3%	
Customer service		$ 1.50
Dub cost		$ 0.25
Total per unit:		$ 16.65

Figure 2. Per-unit selling costs

These per-unit costs are industry estimates; precise numbers are the result of negotiations specific to each product.

It is expected that approximately 5% of products shipped are returned or not paid for. The bank fees apply to almost everything shipped, as credit cards are used for more than 90% of sales. Fulfillment houses are equipped to receive checks; checks are cleared before a unit is shipped.

Dubbing cost varies considerably. A dub is required for each station and city, in order to overlay location-specific 1-800 numbers and, depending on testing results, different prices.

Note that the shipping and handling costs are lower than the associated charges, providing an additional source of revenue.

7.3.2 Media Costs

The major cost of an infomercial campaign is for the purchase of media. The numbers used here are industry averages; actual numbers vary greatly, depending on time of day or year, and on stations and regions.

There are two ways of estimating media costs. The first uses average reach of infomercials, and the second uses estimates the media expenditure required to generate a dollar of revenue. The two methods produce approximately the same results; the spreadsheets used by LRM compute both estimates, and, to be cautious, use the more expensive option.

The first estimating method is shown in the following table.

Media costs

Media cost per unit:	$	40	
Industry average media cost:	$	300	per 1000 households per 1/2 hour
% of families targeted:		19%	of total households
		185	targeted families per $300
	$	1,620	per 1000 targeted households per 1/2 hour
Viewer purchase rate		4.00%	of targeted households
Num. Purchases		40	per 1000 targeted households per 1/2 hour
Media cost per sale	$	40	
Unit revenue:	*$*	*90*	
MER:		2.22	$ revenue per $ media cost

Figure 3. Media costs

The industry average cost of media required to reach 1000 households for one-half hour is $300. LRM's initial product is oriented toward 18% of households, so it is estimated to cost correspondingly more to reach 1000 targeted households. The percentage of households is given, which produces an expected cost of media per unit sold.

The second estimating method uses industry average MERs of 2.5 for October through April (the "indoor" months), and 2.0 for May through September, when television viewing is lower for the summer.

At a 4% target viewer purchase rate, the first method produces a media cost of $40 per unit, the second method produces a cost of between 20% and 25% of revenue, or between $36 and $45.

More accurate response rates and patterns can be purchased from infomercial media buyers, and from infomercial production agents.

7.3.3 Cash Flows

The following chart shows the main estimated cash flows over the 30 month life of the initial product. The bank loan starts to grow at the start of month 8, when infomercial production starts, and the product is being finalized and prepared for production. At month 10 (2 months before taking orders), the initial inventory is paid for, on the assumption that the manufacturer requires 60 days for delivery.

At 85% of expected sales volume, the bank loan is repaid by month 21, and accumulated after-tax starts to grow.

Media purchases are estimated as a percentage of revenue, as are telemarketing costs.

Taxes are estimated, and are assumed to be paid every month at 40%. This simplification does not account for loss carry-forward from year 1 to year 2, and does not include the reduced rate for CCPC income below $200,000CDN. The cash flow numbers therefore do not exactly match the income statement and balance sheet that follow.

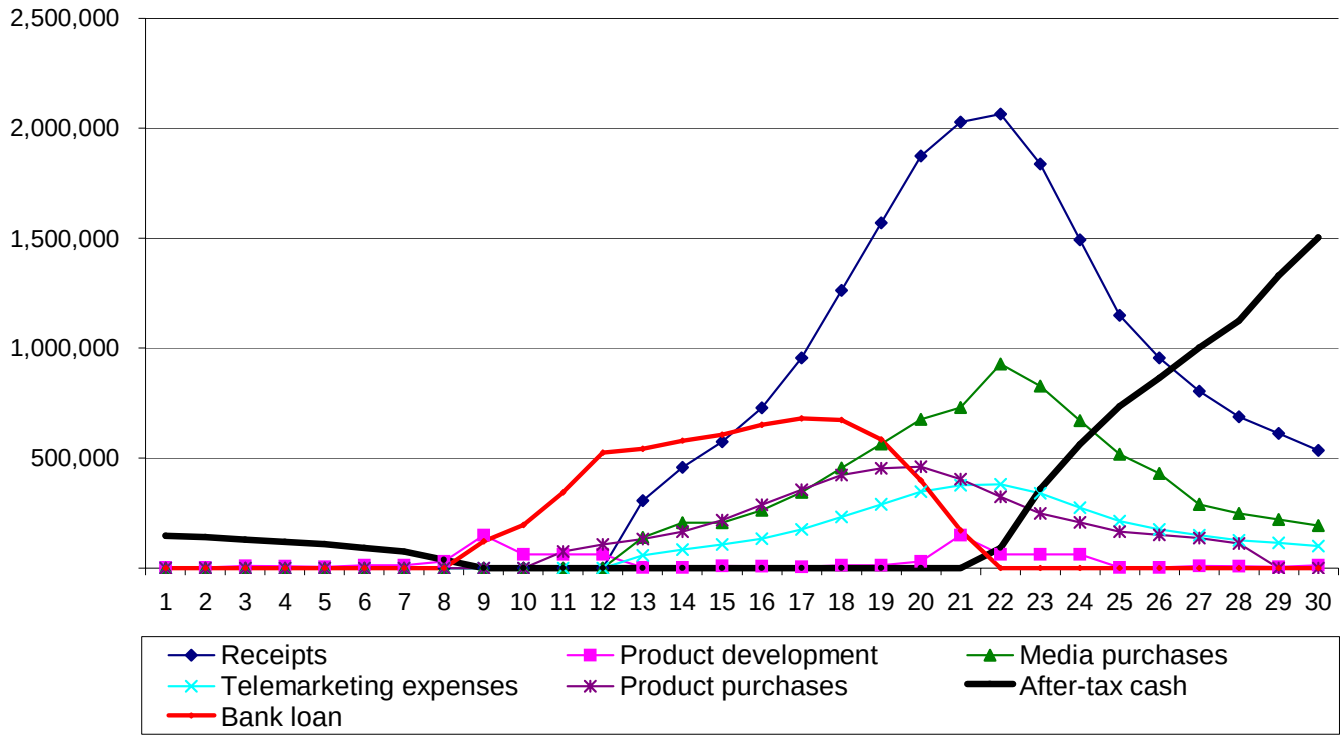

Figure 4. Expected cash flows

7.3.4 Income Statement

Year 1 is spent in product development and infomercial production, and there are no revenues. Product development costs are entered at %50 higher than estimated, since the estimates are likely to slip.

Year 2 contains most of the sales of the product. Media purchases and telemarketing costs, because they can be associated closely with products sold, are shown as costs of selling.

R&D expenses in years 2 and 3 are for the development of LRM's next products. In the absence of any information about these products, the numbers for the initial product have been used.

Taxes have been estimated at 20% on the first $130,000 (or approximately $200,000 CDN), and 40% on the rest. The loss from year 1 is carried forward in to year 2.

3 Year Income Statement

(At 85% of planned volume)

	Year 1	Year 2	1st 6 months Year 3
Net sales (@ $90/unit):	-	15,147,000	4,743,000
Number of units sold:	*-*	*168,300*	*52,700*
Cost of sales			
Cost of product sold:	-	3,366,000	1,054,000
Media purchases:	-	6,005,901	1,896,419
Telemarketing expenses:	-	2,802,195	877,455
Total cost of sales:	-	12,174,096	3,827,874
Gross margin:	-	2,972,904	915,126
Gross margin percentage:	*n/a*	*20%*	*19%*
R&D expenses			
Market analysis/planning:	12,000	12,000	12,000
Product development:	49,500	49,500	28,500
Infomerical production:	352,500	352,500	-
Total R&D expenses:	414,000	414,000	40,500
Selling, general, & administrative expenses			
Salary expense:	73,000	215,000	120,000
Total SG&A expenses:	73,000	215,000	120,000
EBIT:	(487,000)	2,343,904	754,626
Interest:	8,279	67,653	-
Net income:	(495,279)	2,276,250	754,626
Loss carried forward:		495,279	-
Taxable income:	-	1,780,971	754,626
Taxes:	-	686,389	275,850
Net profit:	(495,279)	1,589,862	478,775

Statement of Retained Earnings

Retained earnings at beginning:	-	(495,279)	1,094,583
Add: Net income:	(495,279)	1,589,862	478,775
Retained earnings at end of year:	(495,279)	1,094,583	1,573,358

Figure 5. 3 year income statement

7.3.5 Balance Sheet

LRM is a virtual company with no insignificant no fixed assets. Products are assumed to have no life beyond the infomercial selling period. If the initial product sells 85% of hoped for volume, LRM will have $1.7 million in the bank at the end of the initial selling period.

3 Year Balance Sheet

(At 85% of planned volume)

			1st 6 months
Assets	**Year 1**	**Year 2**	**Year 3**
Current assets			
Cash:	-	755,833	1,723,358
Inventory:	180,200	488,750	-
Total current assets:	180,200	1,244,583	1,723,358
Total assets:	180,200	1,244,583	1,723,358
Liabilities			
Short-term debt:	525,479	-	-
Owners' equity:	150,000	150,000	150,000
Accumulated R/E:	(495,279)	1,094,583	1,573,358
Total liabilities:	180,200	1,244,583	1,723,358

Figure 6. 3 year balance sheet

There is expected to be revenue in year 3 from the product being developed in year 2, but, to be conservative, future product revenue is not estimated here.

7.4 Investments and Returns

LRM expects to pay just over $400,000 to develop its initial product, and be worth just over $1.7 million 30 months later, with a second product ready for selling. This is a growth rate of approximately 80% per year.

If this rate can be sustained, the NPV of the firm's returns (discounted at 12%) is over $4 million.

7.5 Sources of Funds

LRM will perform initial research and development using funds provided by the founders. Once prototypes have been built and preliminary infomercial script concepts worked out, real money will be required in order to commit to manufacturing, to produce the infomercial, to purchase media time, and to ready the telemarketing services.

It is anticipated that once LRM has gone this far it will be able to get commercial loans. As the cash flow shows, extra money is required only toward the end of the product development process, as the infomercial is filmed and the initial inventory is purchased.

If the manufacturer is able to deliver product within 4 weeks of ordering, LRM will not need to maintain an inventory. Furthermore, reducing the delivery lead time from two months to zero will lower the loan requirements by about $180,000.

If bank loans are not forthcoming, LRM will enter partnership agreements with its infomercial partners that share more of the returns in exchange for the required funds. This is not as beneficial to LRM, as these partners will want a share of the returns.

8 Execution Plan

Each LRM product will be developed in three phases.

1. **For the initial product,**

   - Establish parameters for dealing with outsourcing partners

2. **Determine feasibility**: from month 1 to month 4, determine in detail whether the product and marketing approach will work:

   - Determine a realistic market size for the product, and determine whether it can be reached using infomercials;
   - Can the product be designed at the right cost for this market, and can it be designed within the allowed six month window

By this point, LRM will have spent a relatively small amount on the project. The estimate is less than $30,000.

3. **Product and Infomercial Development**, from month 5 to month 12, start serious product development, concurrently perform the following:

   - Full product development
   - Prepare infomercial
   - Prepare manufacturing
   - Purchase media.
   - Etc.

By this point LRM will have spent another $525,000, and possibly have an additional $180,000 in inventory.

4. **Infomercial Campaign**

   - Execute the infomercial campaign
   - Prepare to move to retail

Once the infomercial starts running, it becomes self-financing, as the infomercial business operates essentially on a cash basis.

9 Appendices

The following appendices provide more detailed information about

- Financial details;
- Schedules and product plans;
- Infomercials;
- The initial product;
- Products that compete with the initial product; and
- References on infomercials and other topics helpful in understanding this plan.

Appendix A: Financial Details

A.1 Cash Flow

The following table summarizes expected quarterly cash flows. Taxes are estimated conservatively, and do not exactly match the other statements.

Quarterly cash flow	**Year 1**				**Year 2**				**Year 3**	
	Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**
Beginning balance	150,000	129,000	91,500	-	-	-	-	-	562,043	1,002,557
Plus: receipts	-	-	-	-	1,190,000	2,618,000	4,862,000	4,794,000	2,584,000	1,632,000
expected units sold	-	-	-	-	14,875	32,725	60,775	59,925	32,300	20,400
Cash available	150,000	129,000	91,500	-	1,338,750	2,945,250	5,469,750	5,393,250	3,469,043	2,838,557
Disbursements										
Salary	6,000	12,000	25,000	30,000	35,000	60,000	60,000	60,000	60,000	60,000
Product development	15,000	25,500	189,000	184,500	15,000	25,500	189,000	184,500	15,000	25,500
Media purchases	-	-	-	-	550,684	1,060,067	1,968,697	2,426,453	1,235,598	660,821
Sales expenses	-	-	-	-	247,669	544,871	1,011,904	997,751	537,795	339,660
Product purchases	-	-	-	180,200	512,550	1,065,900	1,316,650	779,450	453,050	112,200
Interest	-	-	-	8,279	20,579	24,260	20,673	2,142	-	-
Estimated tax	-	-	-	-	38,606	230,421	401,591	209,562	165,043	136,808
Total disbursements	21,000	37,500	214,000	402,979	1,420,088	3,011,019	4,968,514	4,659,858	2,466,486	1,334,989
Surplus (deficit)	129,000	91,500	(122,500)	(402,979)	(81,338)	(65,769)	501,236	733,392	1,002,557	1,503,568
Finance: borrow (repay)	-	-	122,500	402,979	81,338	65,769	(501,236)	(171,350)	-	-
Ending balance	129,000	91,500	-	-	-	-	-	562,043	1,002,557	1,503,568

Figure 7. Expected quarterly cash flows

A.2 Finances Spreadsheet

Attached to this document is an Excel workbook (WeirM99205c.xls) containing the model used to determine the financial details of this venture. The workbook contains spreadsheets detailing

- **Summary**, containing values referenced product price, bank loan rate, etc.
- **Market**, summarizing values derived from demographic data in spreadsheet WeirM99205d.xls.
- **Next Product**, showing and manipulating the criteria for whether to proceed with developing the next product.
- **Variable Costs**, showing the breakdown of non-product unit costs.
- **Media Costs,** showing how media costs are estimated.

- **Cash Flow,** showing cash flows over the life of the initial product.
- **Lookup,** containing the numbers fed into the cash flow sheet.
- **Statements,** showing the income statement and balance sheet derived from the other sheets
- **Quarterly Cash Flow,** showing quarterly cash flows derived from the other sheets

We expect this model to be improved over time, to reflect the accumulation of more accurate data, and LRM's growing experience.

Appendix B: Schedules & Project Plans

The schedule that follows covers the year of product and infomercial development.

These schedules are currently tentative, and are used primarily to help determine when payments must be made, and for rough planning.

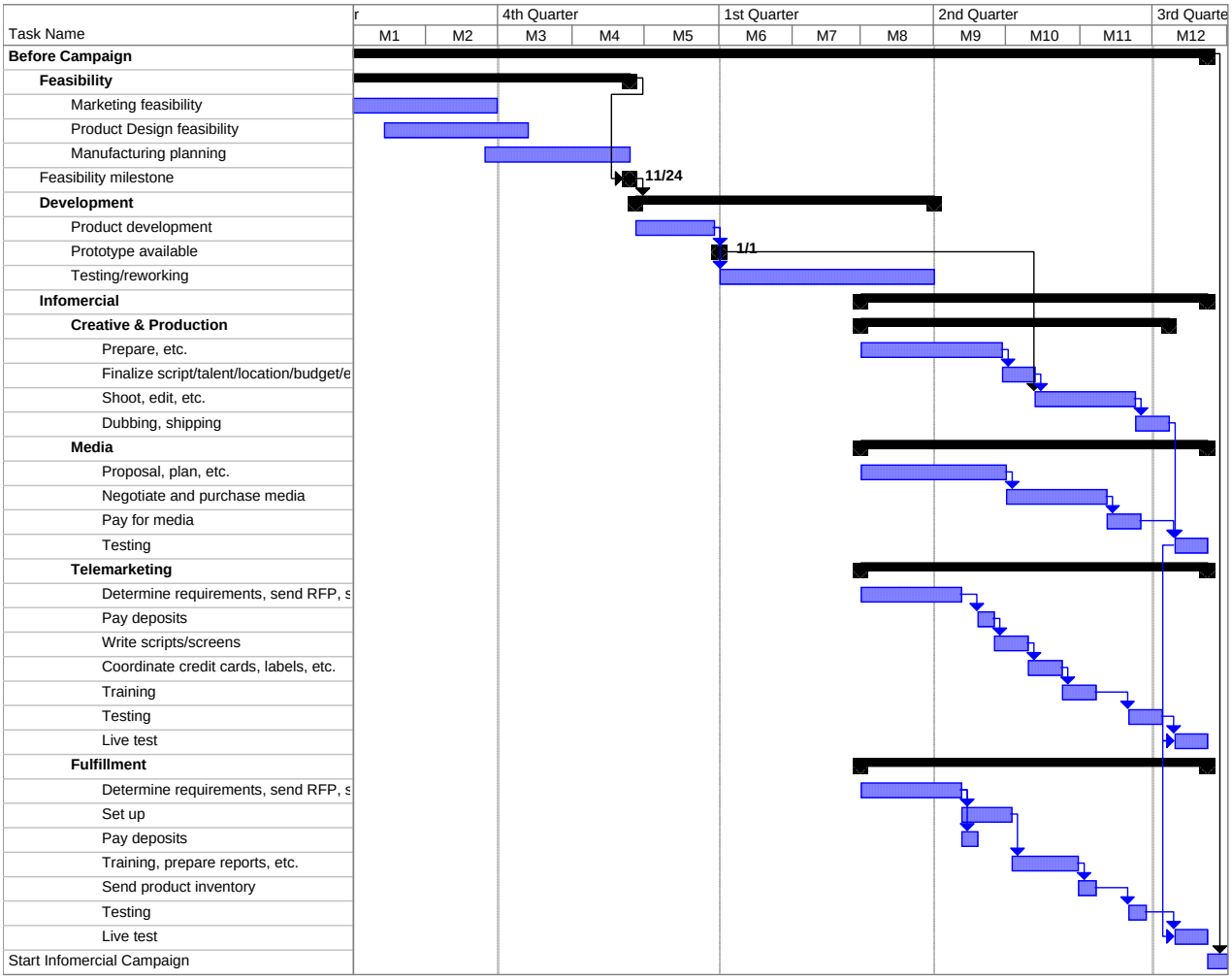

Figure 8. Tentative schedule

Infomercial production is scheduled as late as possible, so that there is the most time available for making product adjustments, waiting for late product prototypes, and refining the infomercial concepts — in addition to delaying payments.

Serious infomercial production starts five months before the start of the campaign, but product prototypes are required only when filming starts in month 10. This gives leeway to the development team to make late adjustments, based on manufacturing requirements, etc. However, infomercial production can not start until the product in finalized; only the final product can appear on air.

Most infomercial production costs are concentrated in the last three or four months before starting the broadcast campaign. A large part of these costs go to purchasing test media time, and to preparing the telemarketing operation.

Appendix C: Infomercials

Direct response television is an extremely effective way of reaching a large audience. From somewhat sleazy beginnings, it has evolved — due both to its effectiveness and to the U.S. government's crackdown on misleading advertising — into a medium that has been used by major corporations such as Nissan and Sony, and even by presidential hopeful Ross Perot.

C.1 Infomercial Industry

When the Reagan government removed restrictions limiting the proportions of advertising to programming, a few companies purchased otherwise unused television air time to sell their products. Since televisions did not appreciate the number of viewers at un-programmed times, they sold the air time for a pittance, and the infomercial industry was born, making many people extremely wealthy while the market for air time developed.

Twenty years later, the cost of spots has levelled out, often at several hundred times more expensive than originally. Margins have thinned, but infomercials still have many attributes that make them attractive to LRM:

- The incremental costs of a campaign are quite low and can be rapidly ramped up and down.
- DRTV air time is purchased on an open market for broadcast and cable spots, and is paid for immediately. Spots can be chosen depending on available funds and on effectiveness. As with all spot markets, buying further ahead lowers prices but increases the difficulty of abandoning a spot should it prove unprofitable.
- Campaigns can be modified rapidly, because feedback from a spot is almost instantaneous. Numbers arrive within hours of the spot, and decisions can be made immediately about whether to increase or decrease the number of spots, whether to expand to another viewing region, etc.
- Infomercial marketing is about demonstrating the product: "Telling is selling."
- The infomercial industry has evolved an extensive support infrastructure that provides
  - Production facilities and filming
  - Media evaluation and purchasing

- Media dubbing and distribution (Each broadcaster or cable station has its own tailored version of the tape, with a unique 1-800 number, so that performance can be measured)
- Inbound telemarketing firms that handle incoming phone calls, for orders and inquiries, and who execute 'upsells', in which buyers are offered further products at reduced prices.
- Credit firms that buy the credit debt and provide a check for orders within a couple of days. They also handle multi-payment purchases.
- Fulfillment houses that package and ship products.
- Law offices specializing in infomercials.

Canada and the DRTV Industry

Canada at one time had a fledgling infomercial industry, but the dominance of the U.S. market has move Canadian DRTV firms into providing Canadian and foreign distribution for American products. These Canadian firms typically license media for successful products, purchase product, and independently analyze the Canadian market, modify the media, and sell the product.

For this reason, LRM will not focus on the Canadian market.

C.2 Infomercial Services

- *Whitney Jordan Greensheet* http://www.jwgreensheet.com sells weekly, monthly, and annual rankings of infomercials. It also sells copies of tapes.
- A substantial list of companies providing the infomercial infrastructure can be found at www.infomercialindex.com/resrc3.html

Appendix D: Product Description

This section becomes more complete as product design is developed.

D.1 Technology Features

The base technology for the initial product consists of two units:

1. A control unit, e.g. as carried by the guardian, consisting of
   - On/off switch
   - Button to trigger/test alarm unit
   - Green operating light/Red low-battery light

   The control unit should be no larger than a pack of playing cards.

2. A portable alarm unit, e.g. as worn by the child, consisting of
   - On/off switch
   - An alarm triggered by
     - Exceeding specified (variable) distance from control unit
     - Loss of signal from control unit
     - Button on control unit
     - Button on alarm unit
   - Low-battery warning alarm
   - Green operating light
   - *Low cost,* to increase the margin on upsells of additional alarm units.
   - The alarm unit should be as small as possible.
   - Multiple alarm units must be able to work with a single control unit.

D.2 Product Features

The child alarm product packages the base technology:

1. The control unit
   - Can be worn on a belt or carried in a purse

2. The alarm unit
   - Can be worn by a small child
   - Cannot be easily switched off
   - Triggers when taken off without switching it off

The alarm unit is designed to be as inexpensive as possible to product, so that additional units can be sold as part of the telemarketing upsell.

D.3 Product Evolution Paths

- Theft protection for pets
- Theft protection for laptop computers, etc.

Appendix E: Competing Products

There are several products performing similar functions to the one planned by LRM. They are uniformly more sophisticated and complex, involve ongoing service charges, and — importantly — are defunct or not yet on the market.

These two products are in their early stages:

- The *Digital Angel* product from Applied Digital Solutions (ADSX) has received much press attention over the last year or so. Their product, initially designed as an implant for tracking felons, has been toned down to being oriented to keeping track of wandering seniors, children, and pets. It uses the global positioning system (GPS) to track anywhere in the world, and it can send various telemetry, such as body temperature and heartbeat, via satellite to a base station.

  The product, currently being beta tested, costs $299US for the monitor and receiver, and from $20 to $50US per month for the monitoring and alert service, centralized at a single location.

  More information about this product can be found at www.DigitalAngel.net.

- Leonie, a mobile phone product from Siemens, regularly sends location information to a base station. It is part of Siemens version of the "OnStar" system, and will cost about $100US for the phone and $30 per month for the service, which is due to arrive in North America in 2002.

These two products appear not to have made it to market:

- The WalkMate product from MicroGistics — which appears to no longer exist — has not materialized, but was to have been initially oriented toward campus safety, with a pager-sized device capable of triggering a locatable signal at a base station. There was to have been a version available that could define an area from which a child could not stray.

- ParkWatch, based on technology from WhereNet of Santa Clara, can locate children within a recreational area, and rents for about $5US per day. The WhereNet technology was developed for locating containers within warehouses. This product does not appear to be currently for sale.

There is at least one similar, but simpler product available:

- The Child Guardian, available via www.fdp-spywatch.com, consists of an alarm worn by the child that can be triggered by either the child or guardian pressing a button. The product has a range of 200 feet, but does not trigger when out of range. The product sells for $23US.

Appendix F: References

The following sources contain further information about infomercials, product development, and other areas relevant to this business plan.

Product Development

- Cooper, Robert G. *"Winning at New Products"*, Perseus Publishing, 2001

Infomercial Marketing

- Hawthorne, Timothy *"The Complete Guide to Infomercial Marketing"*, NTC Business Books, 1997
- Cannella Response Television, *"Infomercial Insights"*, Cannella Response Television, Inc. 1995