

A STRATEGIC ANALYSIS OF A FOREIGN MARKET ENTRY

by

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ABSTRACT

Lifta-Rise, based in Canada, is one of the leading manufacturers of stair-lifts for wheelchair users in North America and the world. Maturity of its main market, the US, and appreciation of the Canadian dollar forced Lifta-Rise to look for new market growth opportunities.

In October 2004, the Disability Discrimination Act became law in the UK. As a result, all architectural barriers preventing wheelchair bound persons from accessing places offering services (for-profit and free-of-charge) would have to be eliminated. The UK, with similar culture, common language, and the existing enforcement of legislature favouring stair-lifts is the ideal growth opportunity for Lifta-Rise. Previous attempts, however, to establish product distribution in the UK by Lifta-Rise were unsuccessful and there was a possibility of discontinuing further business activities in that country.

The UK market presents a tremendous growth opportunity for Lifta-Rise products. This paper proposes a market entry that will help Lifta-Rise establish its brand and grow its installed base. The proposed strategy is consistent with management's preferences and ensures positive NPV.

DEDICATION

To my dear Mom and beloved Wife for their unrelenting support and faith.

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GLOSSARY

CE	(Conformité Européenne) indicates conformity with the essential health and safety requirements set out in European Directives.
DDA	Disability Discrimination Act.
Dealer	Company purchasing directly from a manufacturer at discount and representing the brand.
EBITDA	Earnings before interest, taxes, depreciation and amortisation.
GBP	Pound sterling, British currency
EU	European Union.
IS	Information systems.
IT	Information technology.
NPV	Net Present Value.
R&D	Research and development.
Trade	Company purchasing from a dealer and/or carrying out installations and maintenance on other company's behalf.
TUV	Indicates safety and quality of new and existing products, systems and services; known for its exceedingly high testing standards.
Stair-lift	Lifting devise designed to be used by wheelchair users.
UN	United Nations.
VAT	Value Added Tax, 17.5 per cent in the UK.

1 OVERVIEW

1.1 Introduction

Millions of people in the world are affected by disabilities that limit their mobility. Mobility challenged people encounter many obstacles each day. Barriers such as stairs, raised building entrances and steep inclines deny access to public buildings and even to parts of their own homes. The Public Accessibility equipment industry, which consists of manufacturers of stair-lifts, seeks to remedy these barriers by providing mobility solutions to the disabled and elderly.

The industry comprised of stair-lift manufacturers (manufacturers), and companies providing stair-lift installation and maintenance services (dealers) will be referred to as the Public Accessibility industry throughout this document. The products manufacturers make will be referred to as the stair-lifts or lifts. All monetary valuations throughout this paper are expressed in US dollars, unless otherwise indicated.

1.2 The Company

Lifta-Rise Accessibility (Lifta-Rise) is a manufacturer of stair-lifts located in Edmonton, AB, Canada. It is part of Seilbahn Holdings AG, a private Austrian company, headquartered in Fischbach, Austria. Seilbahn Holdings AG consists of two independent divisions: Ropeways and Stairlifts. Stair-lifts made by Lifta-Rise are distributed through dealers, companies specialising in offering stair-lifts installation and maintenance services.

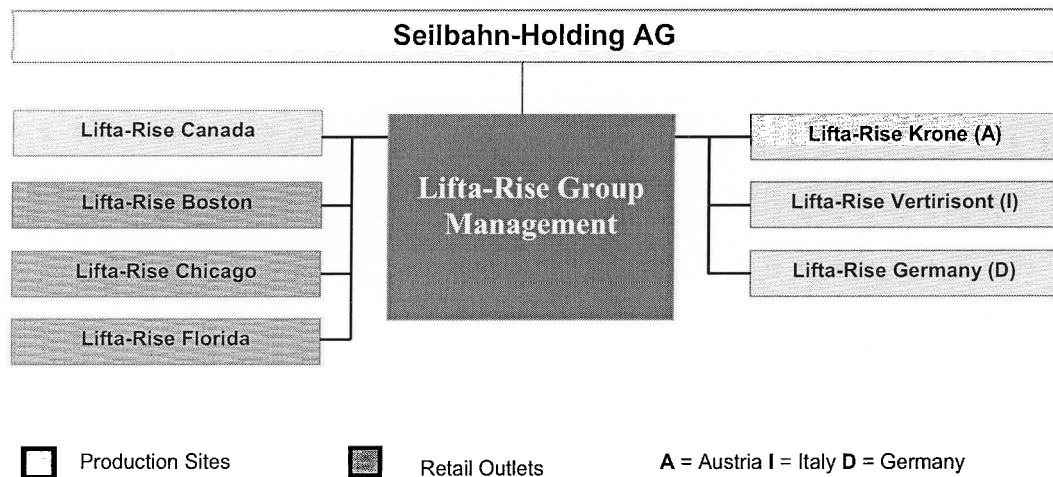
In 1970 Seilbahn Holdings won a contract to build the Elk Mountain Blue Ride, a cable car in Jasper, AB. After the project was completed, a few Austrian engineers decided to stay in

AB to provide maintenance services. Around the same time, the US Public Accessibility market was developing and there was a growing demand for stair-lifts. Lifta-Rise Ropeways purchased distribution rights and eventually the patent for a rope-and-cog lift system from Tegrie, another Austrian company, to distribute it in the US out of Canada. The Tegrie system allowed for the guide tubes, upon which the platform hanger rides, to follow inclination and curvature of the stairway.

The US demand for the stair-lifts was greater than expected. As of the mid-1980's stair-lifts were entirely designed and manufactured in Canada (Edmonton, AB). When the Tegrie patent expired, Lifta-Rise claimed the design as its own and the original design was modified and improved upon sufficiently to do it. The focus market for Lifta-Rise's equipment was the US, where it gained market leadership thanks to the patented design, and enjoyed monopoly position. As the awareness of the Public Access in the US grew, less expensive accessibility solutions arrived (straight incline lift and vertical platform lift). Reliance on just one type of equipment proved damaging to Lifta-Rise. Its market share started to decline rapidly in the early 1990s.

In the mid-1990's the company's product line was expanded to include straight and vertical platform lifts and Lifta-Rise regained its leadership position in the US. At the same time, the company tried to expand its international market presence in Japan, Hong Kong, Australia, Latin America and the UK. To strengthen its market presence in the European markets, Lifta-Rise founded an Austrian Lifta-Rise company in 1995 (Lifta-Rise Krone). Companies in other countries were acquired: Vertirison in Italy (1999) and Glueckentreppe (2004) Germany. Currently Lifta-Rise Accessibility Group includes production sites and retail outlets as per Figure 1.1 below.

Figure 1.1 Seilbahn Holding AG – Organizational Chart



By the Author, 2006

Manufacturing facilities and distribution centres:

Canada (1 of), Austria (1 of) Italy (1 of), Germany (2 of)

Retail operations:

Canada: Ontario (1 of) and British Columbia (1 of)

US A: Illinois (1 of), Florida (1 of) and Massachusetts (1 of)

Lifty-Rise retail offices are active only in the state or province where they are located and offer the same services as an independent dealership does.

International market penetration and European acquisitions assured Lifty-Rise's place as one of the top manufacturers of stair-lifts in the world, as evidenced by the volume of sales, see Table 1.1 below.

Table 1.1 Main Participant in the global Public Accessibility Market.

	Company	Country of Origin	Market Share	2005 Sales In millions
1	Thyssen	Germany	15%	\$169 ¹
2	Savaria	Canada	6%	\$65 ²
3	Stannah	UK	6%	\$62
4	Lifta-Rise	Austria-Canada	6%	\$62
5	Vimec	Italy	5%	\$55
6	National Wheel-O-Vator	USA	5%	\$55
7	Access Industries	USA	5%	\$55
8	Extrema	Italy	5%	\$52
9	Hiro	Germany	5%	\$52
10	Motala	Sweden	4%	\$47
11	Phoenix	UK	4%	\$45
12	Kalea	Sweden	4%	\$40
13	BC Lift	Denmark	3%	\$36
14	Wessex Medical	UK	3%	\$35
15	Terry Lift	UK	3%	\$35
16	Pollock	UK	3%	\$32
17	Weigl	Austria	3%	\$31
18	Cama	Denmark	3%	\$30
19	others	N/A	13%	\$155

Data Source: Author 2006, all sales figures estimated, except where noted.

Stair-lift design (to fit particular site conditions) takes place in Canada, Austria and Germany while manufacturing occurs in Canada. Locations in Austria, Italy and Germany have limited manufacturing capabilities. They receive stair-lift components or complete equipment from Canada and do assembly work to fit specific project requirements.

Retail centres offer stair-lift installation and maintenance. These centres are former Lifta-Rise dealerships acquired by Lifta-Rise.

¹ www.thyssenkrupp.com, 2004_2005 Financial Statement and Management Report.

² www.savaria.com, 2005 Management Report.

Stair-lifts are distributed through dealerships, companies specialising in stair-lift installation and maintenance. Currently, Lifta-Rise Accessibility has dealerships in the USA, Canada, Latin America, Europe, the Far East and Australia.

The author holds position of the International Sales Manager, whose responsibility is the management of existing, and development of new dealerships in the following regions:

Far East: Hong Kong, Japan, Singapore, Southern China

Latin America: Mexico, Colombia, Chile, Brazil

South Pacific: Australia and New Zealand

British Isles: UK and the Republic of Ireland

The first stair-lifts sold by Lifta-Rise in the USA, in the 1970's, were made by Tegrie in Austria with a high price point – a reflection of the cost of production, freight, duties, taxes, marketing and monopoly market position in North America. Having an established a reputation for quality of workmanship and equipment reliability, Lifta-Rise continued selling the curving stair-lift at high prices, even when the design and fabrication of the equipment were done entirely in Canada, thus lowering cost of production. Lifta-Rise took full advantage of its Austrian origins in its marketing (reputation for quality) and firmly followed a differentiation strategy.

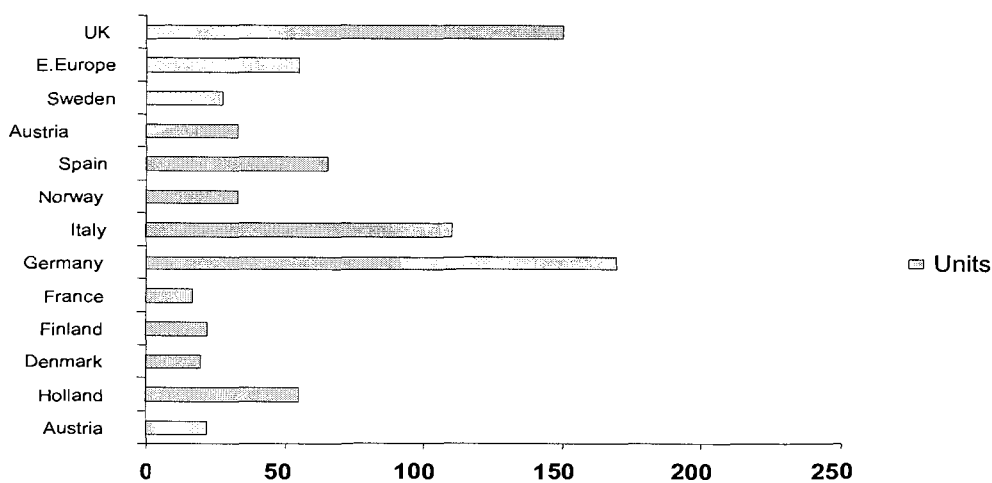
1.3 Market Expansion into the UK

As the first manufacturer of the stair-lifts in North America and the first to develop a network of Public Accessibility dealerships, Lifta-Rise achieved a market leadership position, which allowed it to choose favourable conditions upon which dealerships were set up in the US and Canada (Lifta-Rise's main markets). Dealerships were expected to represent exclusively Lifta-Rise made stair-lifts. Yet, high prices, and initially limited product range, forced Lifta-Rise dealers to complement their accessibility solutions portfolio with stair-lifts made by other

manufacturers, both US based and from overseas. Lifta-Rise showed itself inflexible in relations with dealers who increasingly found themselves buying competitors' stair-lifts and subsequently began to terminate their distributorship rights. The insistence on the exclusive Lifta-Rise product representation, rigid credit term policy and high sales volume forecasts became hallmarks of Lifta-Rise's dealership management style.

As the North American market for stair-lifts matured and Lifta-Rise's leadership position was undermined by competitors, Lifta-Rise looked for markets overseas to utilise its overcapacity and seek growth. The European Community market offered such potential. Legislation enforcing installation of stair-lifts in public spaces was either in place, or about to be introduced. Therefore, economic conditions were favourable, as most of the member countries enjoy high GDP and have well developed social programmes (as the government is the enforcer and the largest sponsor of the Public Accessibility). Potential European demand for Lifta-Rise made products in 2005, based on quote and budget requests received by dealers cooperating with Lifta-Rise, is shown in Figure 1.2 below. The UK became focus market for Lifta-Rise due to cultural, business and language similarities.

Figure 1.2 European Yearly Market Demand for Lifta-Rise Products.



Lifta-Rise's valuation of the UK market was traditionally based on estimates provided by the UK companies with which it worked. Thus the senior management team has traditionally held a figure of \$2 million per year in revenue as a target number, although it has never been achieved. Based on the demand of 150 equipment (actual orders, bookings and quote enquiries) in 2005 alone at an average price of \$14,375 per equipment this number is confirmed as realistic, as per today's market conditions: $150 \times \$14,375 = \$2,156,250$

1.3.1 Past Lifta-Rise Market Activities

Lifta-Rise experienced varying degrees of success in the markets of continental Europe, apart from the countries where its facilities were located (as per Fig. 1.1 above). The company did not achieve much success in the UK, the second largest Public Accessibility market currently in Europe, Fig. 1.2 above. Within seven years (1996-2003), Lifta-Rise established and terminated business relationships with four successive British companies in an effort to establish its position as the Public Accessibility manufacturer of choice in the UK market. Lack of any lasting success can be attributed to factors such as:

Exclusive Product Representation -- only one UK Company in partnership with Lifta-Rise at a time was authorised to distribute Lifta-Rise products. This practice had a twofold negative effect. Firstly, market penetration was limited by the extent of the geographic coverage and/or market segment penetration by the UK company. Secondly, the exclusive representation arrangement limited the number of trades having access to Lifta-Rise products. No Public Accessibility company in the UK had an effective coverage of the country. Due to geography of the terrain and strong regional tendencies (e.g., England vs. Scotland or North vs. South, et cetera), more than one set of distribution points were needed. Additionally, all the UK partners previously chosen by Lifta-Rise were clustered in the south of England, away from major urban centres.

Lack of Cultural Sensitivity -- it was assumed by Lifta-Rise that because of the same language shared by both countries doing business in the UK would be simple. Marketing literature designed for the North American market was used by Lifta-Rise in the UK, oblivious to cultural differences in spelling and vocabulary. Further, the selection of product application pictures, models, and general brochure layout neglected marketing message expectations of the British target audience.

High Sales Volume Expectations -- exclusive distributorship of Lifta-Rise products in the UK was granted to a UK company only if high, and unrealistic, sales figures imposed by Lifta-Rise were agreed upon. Inability by these UK companies to meet those figures within 12 months of time resulted in Lifta-Rise's subsequent search for another company in the UK.

Lack of Brand Awareness -- in order to secure an exclusive distributorship agreement, Lifta-Rise agreed to the rebranding of its stair-lifts in the UK by its UK partner at the time, who already had an established position in the broader Accessibility market. Rebranding was also precautionary measure on the UK company's part. Having established its own brand for the stair-lifts the British company could always use other manufacturers' equivalent products, as safeguard if it ceased business activities with Lifta-Rise.

Wrong Choice of Partners -- frequent changes of UK representatives confused the market. There was a lack of continuity in following Public Accessibility sales leads, and installed base maintenance. The UK market research done by Lifta-Rise lacked the necessary depth to determine the most effective strategy of establishing a successful presence in the UK market. At best, the criteria for choosing partners in the UK can best be described as superficial and opportunistic. The following are companies that were used as the distributor of Lifta-Rise stair-lifts (from the earliest to most recent):

Stannah(1996-1998) -- a leading UK manufacturer of seat-lifts, it has eighty per cent share of the residential (private residences) seat-lift market (Appendix 3). Stannah entered the Public Accessibility market, recognising the growing demand for this kind of product in the UK and tried to use its presence in the broader accessibility market to enter this growing market segment. Stannah utilised its extensive marketing experience and existing channels of distribution – trades – to promote stair-lifts. However, Stannah lacked the necessary experience to deal with Public Access applications at the time, and it ultimately wanted to develop its own Public Accessibility product range. Today, Stannah offers a full portfolio of Public Accessibility solutions and has a separate division specializing in this industry. It has become one of Lifta-Rise's main competitors in the UK market.

Bison Bede (1999-2000) -- a start-up company specialising, similar to Stannah, in seat-lifts, and other domestic-use equipment for people with physical disabilities. Looking to complete its product portfolio it entered into an agreement with Lifta-Rise, upon the conclusion of its relationship with Stannah. The co-operation between Bison Bede and Lifta-Rise lasted only 6 months, as the new company found itself short of cash. Its financial situation improved when Bison Bede concentrated on its core business competencies, i.e., the manufacture and installation of seat-lifts and hoists.

Wessex Medical (2000-2001) -- a part of Ratcliff, a large manufacturing company specializing in truck tail lifting platforms and truck lifts. Wessex manufactures a through-the-floor lift and holds a dominant position in the UK and European markets in this product category. Like the previous two companies, Wessex knew the domestic market segment well and used its existing marketing strategy, channels of distribution and sales personnel to promote stair-lifts. After a year and a half, frustrated by the failure to establish itself as a player in the Public Access industry in the UK market, Wessex refocused its efforts on its core business, i.e., domestic use lifts.

Sunrise Medical (2001-2002) -- a company specialising in providing assistive technology, mobility and personal care for disabled people. Sunrise Medical had an extensive UK market presence, in terms of marketing, distribution channels and capital investment needed to effectively introduce new products into its portfolio. The company also realised the importance of being able to offer stair-lifts, as the UK government was preparing to phase in the Disabled Discrimination Act (DDA) and the final phase of introduction was to take place in October 2004. For nearly two years, Sunrise Medical and Lifta-Rise discussed contract terms and marketing plans. This was the period of lowest sales by Lifta-Rise in the UK market ever. As the date of the DDA was approaching and Lifta-Rise was locked in with Sunrise Medical, numerous product enquiries by small stair-lift installation companies from the UK were turned down.

The UK market has been recognised by Lifta-Rise as difficult, as the attempts to make it a success failed one by one (as described above). Diminishing returns on the investment in the marketing, training and trips to the UK were accentuated by dismal sales figures, which decreased from year to year (see Table 1.2 below) resulted in Lifta-Rise's inability to meet the \$2 million mark senior management had in mind by wider and wider margin. Where other European, and even North American, stair-lifts manufacturers succeeded, Lifta-Rise was unable to turn a profit.

1.3.2 Current Lifta-Rise Market Activities

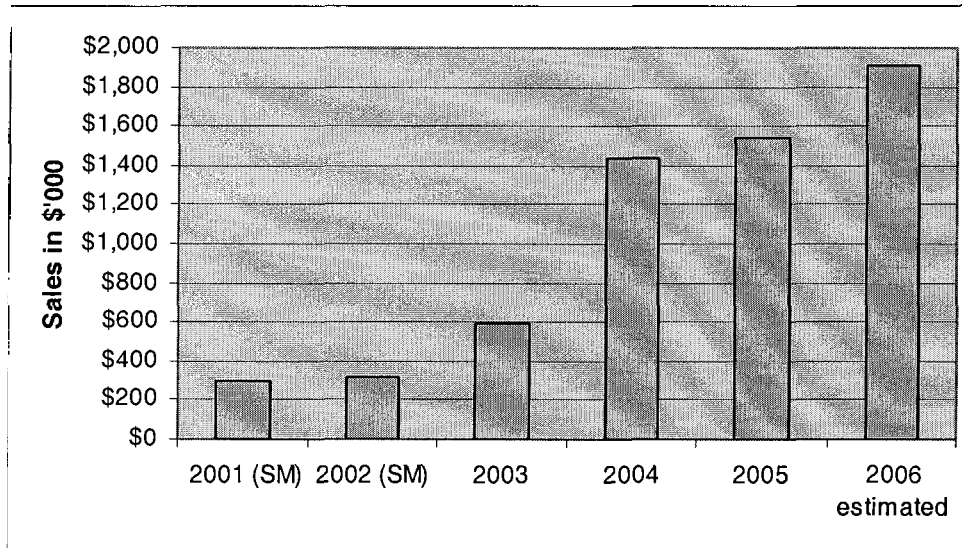
As of 2003, with a different business approach, there has been a marked and robust increase in volume of sales to the UK, as per Table 1.2 and Figure 1.3 below. The years 2001 and 2002 are marked SM to indicate that Sunrise Medical was the exclusive Lifta-Rise distributor in the UK at that time. At the end of 2002, the current International Sales Manager took over the UK as a direct territory. Sales in 2006 based on the sales-to-date: \$955,704 in June 2006, 24 per cent increase on sales from June 2005.

Table 1.2 Sales to the UK, 2001-2006.

2001 (SM)	2002 (SM)	2003	2004	2005	2006 estimated
\$293,383	\$315,758	\$592,238	\$1,442,779	\$1,540,971	\$1,910,000

SM = partnership with Sunrise Medical

Figure 1.3 UK Sales 2001 – June 2006



Based on Table 1.2.

Currently (2003-2006) Lifta-Rise provides products to two independent companies, which have different business models, and are not manufacturing or trading companies like previous Lifta-Rise Partners.

Company 1 – dealing with Lifta-Rise since 2003, situated in the south of England this company is owned by two equal partners. The partners have extensive industry experience having worked for Stannah, Thyssen and Wessex (major industry players). The partners complement each other; one has a sales background while the other has operations experience. The company is 3 years old and is self-financing through business activities. Initially, the company specialised in British made products and offered a complete Public Access product range. Dissatisfied with the level of customer service from their suppliers and lack of product differentiation (many UK companies prefer “British made” products) they approached Lifta-Rise in 2003. Initially Lifta-

Rise supplied only a curving Incline Platform Lift (IPL), (Appendix 2). Attempts by Lifta-Rise to include straight IPL and Vertical Platform Lifts were successful in the following year. Today this company satisfies 85 per cent of its product needs through Lifta-Rise. At the end of 2005 the company made a decision to stock straight IPL to be able to offer competitive deliveries, as the only domestic manufacturer of this product (Stannah) has been experiencing capacity problems of an unknown nature. Thus, in addition to direct sales they distribute straight IPL to other trades.

Total number of personnel employed (field and office):	8
Credit terms (in days):	30
Total purchases in 2005:	US\$510,000
Total purchases to date:	US\$1,350,000

Company 2 – dealing with Lifta-Rise since 2005 and situated in the north of England, it was founded in 2004 by a former sales manager of Minivator, one of the medium-size UK suppliers. The founder has a superb knowledge of the existing accessibility companies, dealers and manufacturers, as well as extensive experience in sales management. The company's main source of income is commissioned product sales (through mark-up) to trades in the north of England and, to a lesser extent, direct sales to end users. Apart from office equipment the company has no assets. Company 2 buys the complete Lifta-Rise product range, which satisfies 95 per cent of its needs.

Total number of personnel employed (field and office):	4
Credit terms:	pre-pay
Total purchases in 2005:	US\$630,000
Total purchases to date:	US\$9650,000

1.4 Objective of this Project.

The performance deficit in the UK market, i.e., never reaching the \$2 million per year sales revenue, left Lifta-Rise's senior management, with two options around 2003:

- 1) Give up further attempts to develop the UK presence.
- 2) Try one last time with a different approach.

Due to the legislation becoming law in 2004 in the UK, Discrimination Disability Act (DDA), and increasing demand for stair-lifts, the first option above was considered an unsound business proposition and as a result, second option was chosen. This decision was further reinforced by the fact that the sales in the US markets were stagnating and UK was perceived as the next easiest market to enter on cultural bases, i.e., same language and similar business culture.

Since 2004 yearly sales volume to the UK has been increasing, as per Table 1.3 below, to be 72 per cent (2004), 77 per cent (2005) and 95.5 per cent (2006) of the \$2 million target revenue.

Table 1.3 Increase in the UK Revenue 2003-2006.

Target UK Revenue	2003	2004	2005	2006 estimated
\$2,000,000	\$592,238	\$1,442,779	\$1,540,971	\$1,910,000
100%	30%	72%	77%	95.5%

There is every indication (dealers' levels of quotes and enquiries) that year 2007 will see volume of sales to this territory reach, or exceed, \$2 million mark. Increasing sales, year on year, indicate that growth in the UK market is sustainable and far from peaking, as indicated by the total market potential in section 2.1, to follow.

This paper will attempt to analyse current UK market conditions, the differentiation strategy focus designed to gain strong market presence, and Lifta-Rise's preparedness to undertake an effective consolidated approach to achieve it.

The need to exploit opportunities resulting from current market activities and the legislation will be used to evaluate the recommendations of this project. Measures of success of the proposed approach will be readily definable by the volume of sales, the degree of increase of the Lifta-Rise's brand awareness and longevity of business relationships developed in the UK.

2 UK PUBLIC ACCESSIBILITY MARKET

The following sections give an overview of market size, stair-lift types in use in the UK market and their suppliers, main drivers affecting demand for stair-lifts, and the target customers.

2.1 Trends and Market Size

The key trends are:

- Local Authorities providing funding for stair-lifts in public spaces and private residences
- Schools (primary through university)
- Service providers complying with Disability Discrimination Act (DDA)

Local Authorities are the leaders in introducing equal access principles in public spaces. Service providers, mostly businesses, are reactive and introduce accessibility solutions only when forced to. Schools are taking a proactive approach and individual school districts have equipment installed in anticipation of having wheelchair bound students (based on student registration). Future school market potential is enormous; there are 129 universities³, and hundreds of primary and secondary schools in the UK. As a part of the UK Government's Access Initiative⁴, GBP44 million were allocated in 2002 to provide access to schools for disabled people, a significant portion of which was earmarked for lift products. This funding is expected to be increasing by up to 50 per cent year on year.

³ www.universitiesuk.ac.uk

⁴ Industry market study by the author.

Estimates of the current UK market potential for Lifta-Rise stair-lifts, for the 2003-2006 time period, when Lifta-Rise adopted the current strategy, can be based upon the number of enquiries received by the current dealers in the period of 4 years, as listed in Table 2.1:

Table 2.1 Public Access Enquiries per Market Segment (2003- 2006).

Key Market Segment	Current Segment Units	Weighted Average Unit Price	Market Potential
Local Authority	1,300	\$14,375	\$18,687,500
Commercial	650	\$14,375	\$9,343,750
Private	150	\$14,375	\$2,156,250
Total	2,100	\$14,375	\$30,187,500

Data Source: research by the author based on dealers' quote log, in US\$. Number of units rounded off to the nearest 50.

Some of the above enquiries have already become orders. Others have potential of becoming orders in the near future, as they were used for budgeting purposes by the enquirers, or were supplied by competing dealers. Assuming that only 50 per cent of all the enquiries received by dealers for 2003-2006 (as per Table 2.1), will have turned into orders, and that sales in the same time period are \$5,375,988 (as per Table 1.2), then only 36 per cent of the UK market potential for Lifta-Rise products has been realised:

$$\$5,375,988 / (\$30,187,500 \times 50 \text{ per cent}) = 36 \text{ per cent}$$

The total potential of the whole UK market for Public Accessibility products can be estimated based upon numbers of existing government, recreational and historic buildings, schools, museums, et cetera, which are bound to provide facilities for people with disabilities at the earliest opportunity. Most of the buildings these public institutions occupy are of old design, which is not wheelchair friendly. Private retail businesses and places of employment are expected to resist DDA compliance for as long as possible, taking advantage of a grace period and other extensions. It must be taken under consideration that not all of the facilities mentioned above will

use stair-lifts as the preferred accessibility solution, and it is impossible to estimate the probability of the necessity of their DDA compliance. In this instance, however, an assumption will be made that 50 per cent of the establishments listed in the Table 2.2 below will need stair-lift equipment. Thus the total existing UK market potential for Public Accessibility products, excluding private businesses and retail, is assumed to be \$90 billion.

Table 2.2 Total UK Public Access Market Potential.

Establishment	Totals			
Local Government, County Halls	924			
Leisure Centers	950			
Libraries	600			
Museums	120			
National Trust Properties ⁵	70+			
Galleries	56			
Schools - Secondary/Higher	6900			
Universities ⁶	1200			
Private Schools	1100			
LEIA ⁷	140			
Special Schools	450	Unit Price	Total Potential	50% Potential
Total	12,510	\$14,375	\$180 billion	\$90 billion

2.2 Products

There are two basic types of Public Access products:

Incline Platform Lifts (IPL) these powered lifts (Appendix 1) are mounted on the stair or wall fixed guide rails. They have a platform large enough to accommodate any size of wheelchair currently in use, as well as its user. The platform folds down against the wall, where it

⁵ National Trust manages historic sites and buildings, which are considered part of national heritage.

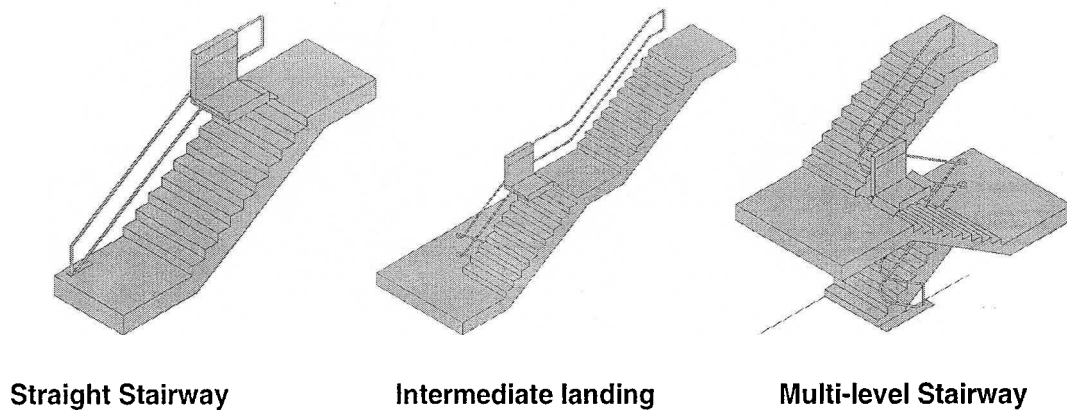
⁶ Estimated total number of campuses.

⁷ Lift and Escalator Industry Association

is stored, when not in use. The flexibility and adaptability of its design makes IPL an ideal, and quite often the only, solution that enables wheelchair users to move into and around multi-storey environments (buildings, subway stations, shopping malls, et cetera).

Three IPL drive systems are currently in use: rack and pinion, friction, and wire rope. Use of the drive system determines the flexibility of IPL's design, i.e., whether the guide rails can follow the incline and curvature of the stairway. Thus the drive system determines whether a specific IPL can be used in a particular application or not. The most popular and least flexible, design wise is the rack and pinion system, used in Straight Stairway (Appendix 1) and sometimes Intermediate Landing stair layout, as depicted in Fig. 2.1.

Figure 2.1 Typical Applications of Incline Platform Lift.



Rack and pinion also is the least expensive drive system. This type of IPL can be manufactured to stock and cut to fit the stairway, as needed. If available from stock, a lift can be measured, assembled and installed within three business days.

The friction system has more flexibility of design and is ideal for the Intermediate Landing and some Multi-level Stairways, less complicated than depicted in Fig. 2.1. It is more expensive than the rack and pinion system.

Wire rope drive system is the most flexible in terms of following the stairway layout and tight bends, very much like the Multi-level Stairway in Fig. 2.1. This system can be used for all three stairway applications indicated in Fig. 2.1 above. It is however the most expensive and as a result its application is limited to Multi-level Stairway and Intermediate Landing, where no other system can perform. It is the most site-specific of the IPL and it takes longest to manufacture and install.

The IPL's do not require any modifications to the existing building's architecture, stairs or walls. Different manufacturers use different drive systems in their IPLs. Friction and wire rope systems are patented, while the rack and pinion system is generic, without any proprietary restrictions of use.

Vertical Platform Lift (VPL) is the most recognisable type of lifting equipment. It looks like a passenger elevator and uses similar type of controls to operate. There are two basic types of VPL: Short Rise (Appendix 2) without a hoistway and Tall Rise (Appendix 2) with metal or masonry hoistway (also known as shaftway). VPLs lift vertically, so they are installed away from stairway. Because of the need for a hoistway, except the Short Rise VPL, additional structural work or changes to the existing building is required. This means extra cost, permit and use of valuable floor space in retail environment (shops, restaurants and hotels). They are however aesthetically more acceptable to the customers at large and are easy to install.

VPL's are given design preference by architects, after passenger elevators: “, where a passenger lift cannot be accommodated, vertical platforms lift (platform lift), although not equivalent to passenger lift, may be considered as an alternative option to provide access for

persons with impaired mobility”⁸. If, and only if, a VPL cannot be installed then an IPL can be considered as an accessibility solution.

Two VPL drive systems are in use: leadscrew and hydraulic. The hydraulic system is smoother and quieter, while the leadscrew is less expensive. The market preference is for a hydraulic lift.

2.2.1 Lifta-Rise Product Differentiation

The customers, who are generally not the equipment users but its owners, delegate purchasing to access consultants or architects. The lack of product knowledge creates the need for a detailed and easy to understand sales and support literature, further aided by knowledgeable sales personnel (dealer’s or manufacturer’s). Apart from technical reliability and safety of use, stair-lift aesthetics is an important factor in choice if the purchase decision is architect led. The customers’ main decision to purchase stair-lift equipment results from the necessity to comply with regulations, if they are service providers (under the Act). They are, therefore, cost conscious and not necessarily quality driven. The primary source of funds used to comply with the DDA requirements are indicated in Table 2.3 below.

Table 2.3 Stair-lifts Reimbursements per Market Segments.

Key Market Segment	Primary Payer
Local Authority	Budget (competition for allocation of funds)
Commercial	Commercial organization (paid from profits)
Private	End user (possible charitable contribution or local authority grant)

The full range of Public Accessibility products offers a one-stop shopping experience to decision makers, and if successful the first time round, translates into repeat business,

⁸ Part M, supplement to the building code.

considerably reducing search costs for all future projects. Lifta-Rise products are positioned in the UK as high quality, feature-rich, and with optimum product support. The high quality of products is reflected in a variety of finishes, including stainless steel, which offers both aesthetic and long service-life features. Various user-specific equipment operation options and physical flexibility of design offer full product customization capability. Product support is fortified by extended warranties, exceeding industry standards. Each Lifta-Rise products offer a Unique Selling Proposition (USP), which will encourage a choice of the whole product range in various applications. Key features and benefits specific to the Lifta-Rise product range are listed in Table 2.4 below.

Table 2.4 Lifta-Rise Products' Key Features and Benefits.

Key Feature	USP	Benefit	Architect	Dealer	End User	Payer
Aesthetic options (polished stainless steel track)	X	Provide an improved aesthetic	X		X	
Slim line design	X	Provides greater versatility of installation	X	X		
Platform sizes		Provides greater versatility of installation	X			
Design assistance	X	Provides specifiers with full information and design package	X			
Security system connection	X	Enables stair-lift to be connected to fire alarms or security system			X	X
Manual override	X	Allows the lift to be overridden manually in case of failure		X	X	
Battery back-up		Allows the lift to be used in case of power cut		X	X	
Product reliability (supported by extended warranty)	X	Dealers avoid expensive emergency maintenance visits. End user daily activities are not curtailed		X	X	X

USP = Unique Selling Proposition

2.3 Supply

Lifts are supplied to the market by domestic and foreign manufacturers. Eighteen of them are listed in the Table 2.5 below. Three companies providing the whole range of Public Access product ranges, as described in section 2.1, Stannah (UK), Thyssen (Germany) and Lifta-Rise (Canada) are marked in bold (Table 2.5). They are the main competitors in the UK market and will be compared in sections to follow.

Table 2.5 Public Access Manufacturers Active in the UK Market.

Company	Country of Origin	Products	Distribution & Installation
Stannah	UK	IPL straight & curving, VPL short & tall rise	YES
Wessex	UK	VPL short rise	YES
Phoenix	UK	VPL tall rise	YES
Terry Lift	UK	VPL short rise	YES
Pollock	UK	VPL short rise	YES
Minivator	UK	VPL short rise	distribution
Thyssen	Germany	IPL straight & curving, VPL short & tall rise	YES
Hiro	Germany	IPL straight & curving, VPL tall rise	distribution
Motala	Sweden	VPL tall rise	distribution
Kalea	Sweden	VPL tall rise	distribution
Aritco	Sweden	VPL tall rise	distribution
AB Lift	Denmark	IPL straight	distribution
Cama	Denmark	IPL straight	distribution
Vimec	Italy	VPL tall rise	distribution
Extrema	Italy	VPL tall rise	distribution
Weigl	Austria	IPL straight & curving	distribution
Lifta-Rise	Canada	IPL straight & curving, VPL short & tall rise	distribution
Savaria	Canada	VPL short & tall rise	distribution

Data Source: Author 2006

Initially, UK manufacturers offered stair-lift installation services. As the demand for stair-lifts increased they focused on product supply to dealers and trades. They have however maintained installation and maintenance teams, often incorporated under different names. Each manufacturer developed its own network of dealers. UK manufacturers compete for projects against themselves and dealers.

Foreign manufacturers sell directly to dealers. They may choose to sell to one dealer, who then sells on to other dealers and trades, or they will sell to several dealers on equal basis. No foreign firm currently has manufacturing capability in the UK.

2.4 Demand

The market place is being led by legislation, The Disability Discrimination Act (DDA), and thus stair-lifts have become a legislative requirement, not a choice. Stair-lifts are installed whenever there is a need for them, i.e., wheelchair bound persons are frequenting a place providing services or are expected to do so. It is not possible to know future numbers of wheelchair bound people as the reasons for this kind of disability are different, inconsistent and unpredictable. Only current numbers of wheelchair users are known. The last extensive survey of number of people with disabilities was conducted when DDA was being formulated. It is estimated that about 20 per cent of the adult population, about 11.7 million people, are covered by the provisions of the Act.⁹ An estimated 800,000 are wheelchair users. Numbers of stair-lifts required are not determined by the absolute number of wheelchair users in the country but rather by the fact that the places that service providers occupy have effective barriers for wheelchair users.

⁹ Source: The Disability Discrimination Act: Analysis of Data from an Omnibus Survey; In-house report 30, Graham Whitfield, DSS, 1997

2.5 Target Customers

For the stair-lifts manufacturers the target customers are companies specializing in the installation of stair-lifts: the dealers.

For the dealers, three groups of customers are discernable, Key Market Segments, in order of significance:

Local Authority:	libraries, museums, leisure centres, schools, bus/train stations, et cetera
Commercial:	retailers, places of entertainment (pub's cinemas, restaurants, et cetera), banks, recreation centres, hotels
Private:	residential applications

Buildings owned or used by local governments and architects employed by local governments are the most important target customers for Public Accessibility companies, as they must set the example in implementation of the DDA. The second most important group are Access Consultants, who, as the only accredited UK-wide organisation facilitates through its members, access auditing and access consultancy¹⁰. Total numbers of the aforementioned companies are listed in Table 2.6 below.

Table 2.6 UK Public Access Market Information - Prospects

Key Prospects	Totals
Architects - Loc Government ¹¹	600
Public Building Managers	6900
Access Officers	2700

¹⁰ www.nrac.org.uk

¹¹ RIBA, Royal Institute of British Architects

3 INDUSTRY ANALYSIS

This chapter will analyse the existing competitive environment of the UK Public Accessibility industry. The Five Forces (two more forces were added: Government and Chance) model (M.E. Porter's 1985)¹² will be used to identify the Key Success Factors (KSF). The KSFs will be used to define rivalry between Lifta-Rise and its principal competitors and to identify opportunities and threats that will be used in a subsequent chapter to define strategic alternatives for doing business in the UK. Following this discussion, the industry Value Chain (VC) analysis (Porter, 1985)¹³ a complementary model of identifying competitive forces, will be used to confirm and amplify the results of the Five Forces analysis.

3.1 Five Forces Model

Each of the forces identified in subsequent sections influences the direction of impact on all firms within the industry and how they compete for the market share. The environment described is not static, and as it changes so does the degree of competition amongst existing market players. The forces are all external to the firms, thus they affect all firms in the same manner. At the end of each subsection, key success factors (KSF) will be identified. Some sections will share similar KSFs, further confirming their significance.

Throughout the entire section 3.1 '+' and '-' signs are used to denote:

(+) = factor increases intensity

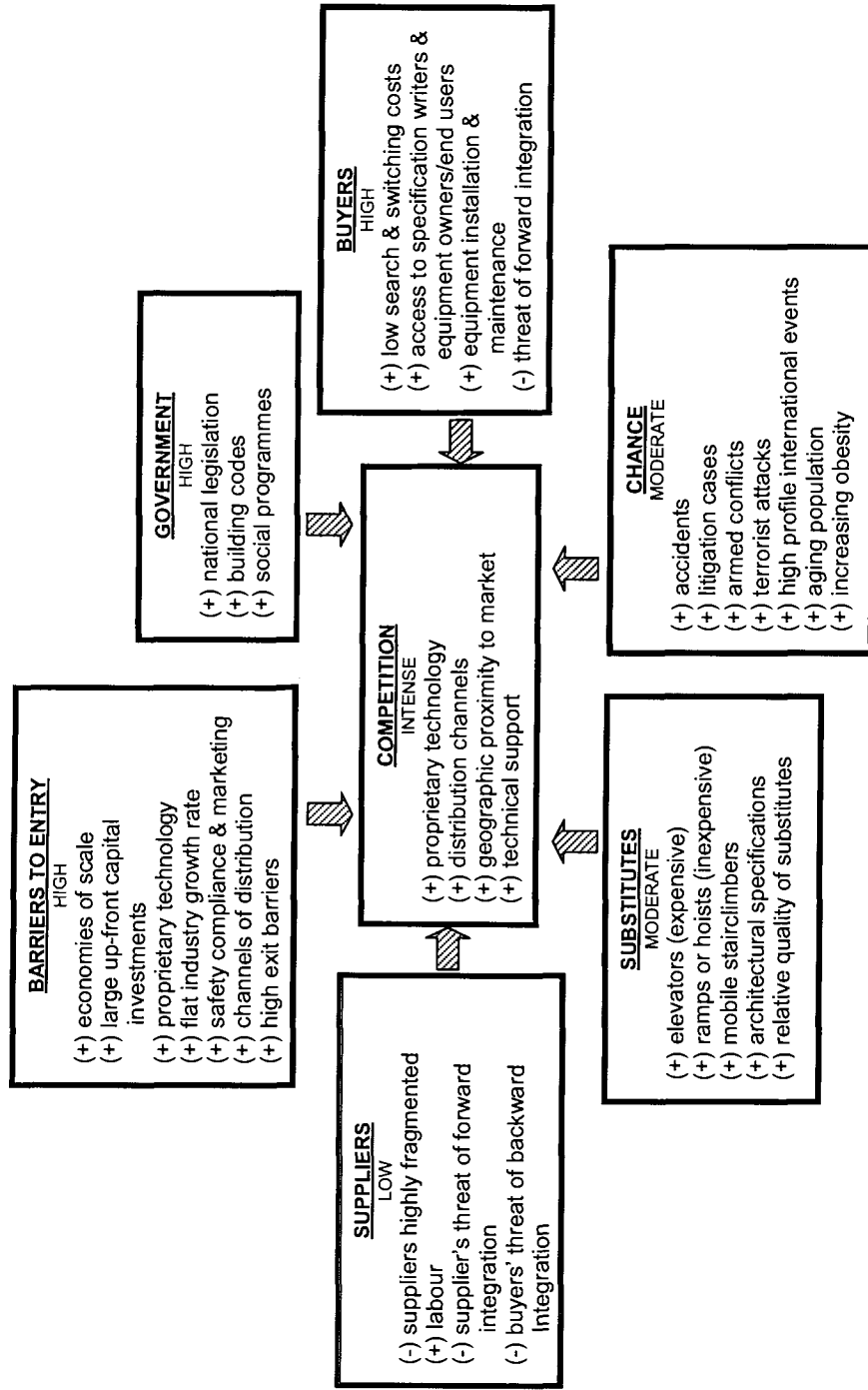
(-) = factor decreases intensity

The Five Force Model is summarized in Figure 3.1 below.

¹² Porter, M. (1979) *How Competitive Forces Shape Strategy*, HBR (March-April).

¹³ Porter, M. (1985) *Competitive Advantage: Creating and Sustaining Superior Performance*, New York, NY:

Figure 3.1 Competitive Forces



3.1.1 Barriers to Entry (high power)

Factors that facilitate or inhibit other manufacturers from entering the market will be discussed in this section.

(+) **Economies of Scale** -- manufacturing process imposes minimum efficiency scale (MES). Smallest UK manufacture (Minivator) employs 35 personnel (design, production and office). None of the foreign manufacturers has any manufacturing capacity in the UK. Twice as many foreign firms export their products to the UK (Table 2.5). Extra production capacity allows foreign manufacturers to export their stair-lifts to the UK. Increased production decreases their MES and therefore lowers their cost per stair-lift, which helps them be price competitive (to overcome added cost of freight).

(+) **Large Upfront Capital Requirements** -- manufacturing facilities would have to be leased or purchased. Machinery for metal bending, welding, et cetera must be had. An estimated payback time of a CNC machine used in the manufacturing process is 3 to 5 years. Engineering knowledge and expertise are necessary, which translates into higher remunerations.

(+++) **Proprietary Technology** -- lift manufacturers use different drive mechanisms and electronic controls, which are patented. The critical components of the drive systems and controls are assembled in house by the manufacturers. Project specifications or site conditions may allow only one product type/manufacturer dominate. This factor allows manufacturers to apply product-focused differentiation strategy. In a product-saturated UK market this is considered one of the most important factors.

(+) **Flat Industry Growth Rate** -- nominal profits are expected to be earned. Stair-lifts are ordered and installed only when there is a definite need for them, e.g., a wheelchair bound

student joining school, county council flat is assigned to a wheelchair user, shopping area is refurbished, et cetera. Estimated UK market growth is 4-5 per cent a year (2004 and 2005).

(+) Safety Compliance & Marketing -- all equipment must be built and tested to rigorous standards, as it is meant to be used by people with limited mobility. Cost of testing can be expensive, e.g., TUV and CE. Safety regulations are constantly upgraded, with which all stair-lift equipment must be compliant if it is to be offered to the public

Marketing costs are high in an attempt to differentiate products and services offered by manufacturers. Those include training seminars, brochures and catalogues, trade show participation.

(+++ Channels of Distribution -- stair-lift manufacturers distribute their product only through qualified dealers (the distribution system is similar to the automobile industry). Having an experienced and varied dealership network is essential to the manufacturer's success. A dealer network takes time to develop. Winning and maintaining dealers' loyalty is the focus of the marketing effort by every manufacturer. The dealer expresses his commitment to a manufacturer through attending training seminars, ordering marketing materials, inclusion of manufacturer's corporate images into his own corporate image and advertising. An effective and committed dealer network develops market for the manufacturer.

(+) High Exit Barriers -- some assets and expertise are peculiar to the industry and offer little liquid value. Good Will and Reputational Capital are confined to the industry. The most common form of exit in this industry is through mergers and acquisitions, which have been relatively frequent in the past 3 years.

Identifiable KSF: Proprietary Technology, Distribution Channels

3.1.2 Buyer Power (high power)

The dealers' ability to influence manufacturers through their bargaining power will be identified in this section.

(+) Low Search and Switching Costs -- all manufacturers provide product specifications and design information on their web sites. In addition, product literature is provided on request and at no cost. For the dealer to buy equipment from the manufacturer, factory training is required. The average cost to the dealer is \$3,000 (unless it is sponsored by a manufacturer), not a considerable amount of money. Dealers attend industry trade shows where competing manufacturers exhibit their latest product modifications and innovations, and are always willing to sign up new dealers: national (Interbuild, Naidex) or international (REHA, Lift Milano).

(+++) **Access to Specification Writers and Equipment Owners/End Users** -- successful dealers actively interact with architects and specification writers in their respective geographic regions. Time and resources are spent to educate those writing specifications and as a result, lasting trust-based relationships are developed between dealers and architects/specification writers. Dealers have first-hand experience of lift buyers' needs. They can influence decision makers as to the equipment brand to be used.

Dealers' professionalism reflects on the manufacturers' reputation (reputational capital), and thus manufacturers build dealer loyalty to secure dealers' top quality professional conduct and commitment to the brand.

At the same time, manufacturers try to gain direct access to architects and specification writers to have more control over the specifications' content and make it product/brand exclusive, through inclusion of unique product features. This access is achieved through direct mailers (traditional and electronic), and product and regulations seminars held at trade shows and at

architectural chapter meetings. This proprietary technology enables, through specification writers, to exclude competitive products.

(+++) **Equipment Installation and Maintenance** -- dealers determine terms and execution of both the installation of the equipment and its maintenance (after-sale service). Unsuccessful installation, resulting in equipment being unreliable, can damage a manufacturer's reputational capital. Manufacturers protect themselves collectively through industry specific associations advocating and regulating installation procedures and qualifications requirements, (e.g., Lift and Escalator Industry Association or LEIA). Channels of distribution are important in the geographic scope of services they can provide and the level of brand loyalty (commitment to the manufacturer). Maintenance provides a steady future cash flow for dealers, as long as they have access to spare parts from the manufacturer, a factor reinforcing dealer's brand loyalty.

(-) **Threat of Forward Integration** -- in order to exercise better control over geographic markets, a manufacturer may decide to shorten the value chain to extract greater economic rents. For example, in the latter half of 2004 Gartec was acquired by Aritco, a Swedish manufacturer of vertical platform lifts (VPL), Access 4 All was acquired by Kone, a major elevator manufacturer. By gaining control over their dealers, the manufacturers increase their profits, i.e., gain the retail margin, and increase sales volume of its own products by eliminating competitors' products that are part of dealers' product portfolio.

Identifiable KSF: Proprietary Technology, Distribution Channels.

3.1.3 Supplier Power (low power)

The degree of manufacturers' dependence on suppliers of raw materials (components and labour) will be examined in this section.

(-) Suppliers are Highly Fragmented -- stair-lift manufacturers utilise components and parts readily available on the open market. The only product-specific items are steel shapes or aluminium extrusions used for guide rails or lift enclosures. These items, however, can be sourced out from other suppliers. The only sunk cost would be the cost of dies used in the extruding process.

Slight design modifications can be accommodated if the supplier of parts/components is changed, as for example, when chips or PCB boards change due to changes in equipment's features.

Suppliers are selected based on cost and deliveries. All parts and components are imperishable items, in terms of durability and design changes. Stair-lift manufacturers do upgrades rather than complete product redesigns. Majority of design changes are driven by aesthetics.

In conclusion, inputs are commoditised and manufacturers have low switching costs.

(+) Labour -- as task specialisation and lift sophistication increase, labour becomes more expensive due to greater capital to labour ratio, as compared to the past, which requires a greater set of skills. Medium and large firms within the industry are faced with prospects of labour unionization. Every effort on the manufacturers' part is made to avoid any form of organised labour movement to keep variable costs at market levels and to be able to ensure continuous production process.

Manufacturers have difficulties attracting and retaining quality personnel, as the industry is not perceived as very attractive for further career advancement. Lack of quality technical personnel prevents implementation of IT solutions that would increase competitiveness.

(-) Suppliers' Threat of Forward Integration -- lift manufacturers make up a small portion of suppliers' business who concentrate on meeting expectations of their largest industrial and manufacturing customers. Stair-lift manufacturers add marginally to the increase on the demand side for the suppliers. The nature and complexity of stair-lifts is well beyond the core competencies and a scope of work of any individual supplier.

(-) Buyers' Threat of Backward Integration -- inputs are too generic and too many to effectively backward integrate. Manufacturers of stair-lifts would defocus greatly from their core competencies.

Stair-lifts manufacturers are too small, in terms of their needs and purchasing power, to backward integrate, where major components are concerned, e.g., motors, steel shapes, aluminium extrusion, et cetera.

Identifiable KSF: there are no significant key success factors.

3.1.4 Substitutes (moderate power)

The likelihood of using other types of products, as substitutes to stair-lifts, will be examined in this section.

Substitutes tend to be:

(+) expensive:

Elevators – the price difference can be 4 times and up, relative to stair-lifts. Excellent long-term solution offering mobility option to able-bodied, as well. This solution is favoured by building codes.

(+) inexpensive:

Ramps or hoists – although less expensive they have their physical limitations of weight capacity (hoists) and distance travelled and angle of inclination (ramps) (Appendix 3).

Mobile stairclimbers – require an able-body operator (Appendix 3).

Most stair-lift dealers do not use substitutes, which constitute a different industry and require a different set of skills. Use of substitute means loss of business to the dealer.

(+) Architectural Specifications -- architects specify products they see as most fitting for the Public Accessibility application. Elevator manufacturers and lift manufacturers compete for that market. Most architects are familiar with elevators and see them as the solution that serves both able-bodied and disabled users. The Public Accessibility industry educates architects and specification writers about lifts and their benefits. The most significant benefits are lesser cost, no modifications to existing architecture, ease of retrofitting, exclusivity of use by wheelchair users, low maintenance cost, et cetera. Stair-lift manufacturers are united in an effort to prevent specification-driven product substitution. Any stair-lift manufacturer trying to make product specifications inclusive of his products helps other manufacturers.

(+) Relative Quality of Substitutes -- good to excellent (elevators).

Identifiable KSF: there are no significant key success factors.

3.1.5 Chance (moderate power)

The possible effects of chance events upon the industry will be analyzed in this section.

(+) Accidents -- car/job related accidents, medical conditions constantly contribute to the total number of wheelchair users.

(+) **Litigation Cases** -- these raise awareness of wheelchair bound users' needs, like the case of Ryan Air (Appendix X) being sued for charging a person for the use of wheelchair to board the plane.(make a footnote reference). Businesses are reminded of the necessity to make their premises accessible to people with disabilities by widely publicized court cases. Public opinion is fully supporting wheelchair users.

(+) **Armed Conflicts** -- ongoing tensions in Northern Ireland and overseas military expeditions produce a small, yet very visible, group of military personnel in wheelchairs. Many of them stay in active duty, having been reassigned to other positions. Armed forces generally are respected in the UK.

(+) **Terrorist Attacks** -- past (IRA) and recent (The London Tube bombing of July 2005) acts of terrorism maim people who receive overwhelming support from the local communities and the government. They contribute to raising awareness of the needs of wheelchair users (among other forms of disabilities resulting from terrorism).

(+) **High Profile International Events** -- London was selected to host the 2012 Summer Olympics. As a result large parts of East London, will be modernized and, among other things, made accessible to wheelchair users. Other parts of the UK frequented by foreign holiday makers will also undertake the effort to bring their facilities up to modern standards.

(+) **Ageing Population** – the UK society is going through a “demographic transition” in which mortality and fertility decline from higher to lower levels. The older population is growing faster than the total population. Currently, the growth of the older population (1.9 per cent) is higher than that of the total population (1.2 per cent). It is projected that by 2025-2030 population over 60 will be growing 3.5 times as rapidly as the total population.¹⁴

¹⁴ World Population Ageing 1950-2050, Population Division, DESA, United Nations

(+) **Obesity** -- In 1980, 8 per cent of women and 6 per cent of men in England were obese by 1998 that had almost trebled to 21 per cent of women and 17 per cent of men¹⁵. “If prevalence continues to rise at the current rate, more than one in four adults will be obese by 2010”.¹⁶

Identifiable KSF: there are no significant key success factors.

3.1.6 Government (high power)

The means through which the government influences the industry will be identified in the following section

(+++) **National Legislation** -- for millions of persons whose mobility is challenged access to buildings and the facilities within can be difficult and at times impossible, even with third party help. In some instances, attempts to enter or manoeuvre within buildings may even result in accidents. Lack of physical access can prevent persons with mobility challenges from enjoying the same freedoms and quality of life as those without disabilities (independent unaided mobility). This makes access for the mobility disabled a civil rights issue.

The Disability Discrimination Act (DDA and Act) aims to end the discrimination which many disabled people in the UK face. This Act gives disabled people rights in the areas of:

employment

access to goods, facilities and services

The Act requires that employers and service providers, and those buying or renting land and property should not discriminate against disabled people. Discrimination occurs when a disabled person is treated less favourably than someone else for a reason relating to his/her

¹⁵ <http://news.bAB.co.uk/2/hi/health/1170787.stm>

¹⁶ Sir John Bourn, National Audit Office

disability. The Act defines 'disabled person' as a person with a "physical or mental impairment which has a substantial and long term adverse effect on his ability to carry out normal day-to-day activities."¹⁷ Among disabled people, mobility impairments are included. The Act affects all service providers, whether service is provided free of charge or paid for and regardless of size of provider.¹⁸

DDA milestones:

December 2, 1996 - employment rights and first rights of access came into force

October 1, 1999- review policy, procedure and practices

October 31, 2004 - final rights of access came into force (alter physical features)

Subsequently, as of October 2004, service providers are expected to make reasonable adjustments to physical barriers, defined as "any feature arising from the design or construction of a building on the premises occupied by the service provider"¹⁹

Reasonable adjustments may be:

- removal of a feature
- alteration of a feature
- provide means of avoiding the feature
- provide the service by an alternative means

Enforcement of the DDA takes place via county courts, whereby anyone who feels discriminated against on basis of his/her disability can file a law suite against the service provider acting against the Act.

¹⁷ Disability Discrimination Act

¹⁸ Disability Discrimination Act, Part III

¹⁹ Disability Discrimination Act, Part III

DDA, although not a policing document, is an important vehicle to educate service providers of the necessity of having stair-lifts, as means of overcoming architectural barriers (mostly stairs), and as a basis of legal enforcement by the wheelchair bound people.

(+++) **Building Codes** -- Part M building regulation was published in 2004. It laid down guidelines for making buildings accessible to disabled people: widths of doorway, ramp gradients, and choice and method of installation of stair-lifts. Part M also focused on safety and use-friendly features of stair-lifts. In addition to the British Standards: BS 5323:1980, BS 6440:1993 and BS 5776:1979, which deal with stair-lift equipment, Part M became a standard against which stair-lifts' product features and installation are measured.

(+) **Social Programmes** -- stair-lifts, ramps, et cetera, can be provisioned to those in need (as determined and confirmed by an occupational therapist) through social services. A general practitioner (GP), nurse or a social worker can produce a referral to occupational therapist (local social services throughout the UK have occupational therapy departments). Disabled people can apply for grants through the social services to have stair-lifts installed in their place of residence, "if the purpose of the adaptation is to allow the disabled people basic access to their home the local authority has a duty to award the grant, i.e., it is mandatory."²⁰

Identifiable KSF: Proprietary Technology.

²⁰ Disabled Living Foundation, DLF Fact Sheet, 2003

3.2 Industry Value Chain Analysis

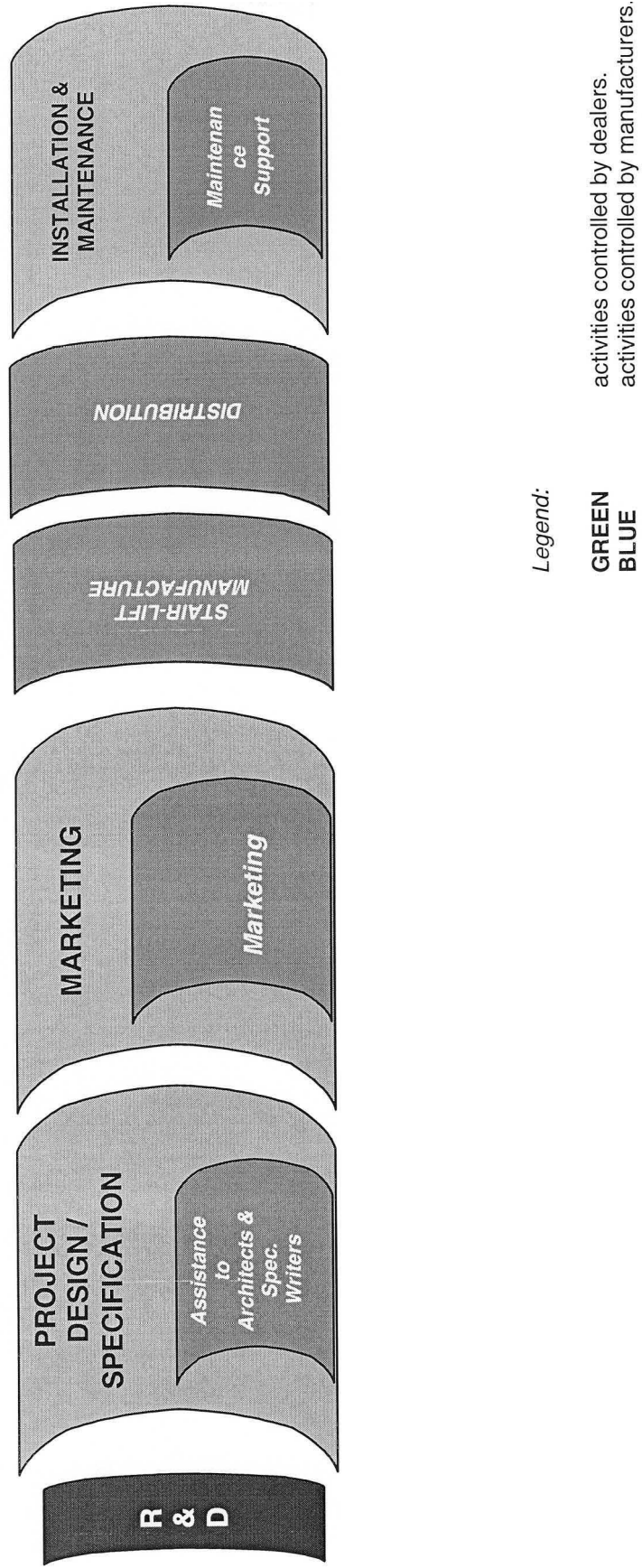
The frame work of the value chain helps analyze specific activities through which a firm creates value and competitive advantage. Through an in-depth examination each step of value creation within the industry, Key Success Factors (KSF) identified in section 3.1 (5 Forces) will be confirmed (as a cross-check) and new complementary KSFs, may be identified. Value chain analysis will be helpful in deciding upon competitive advantage to pursue by Lifta-Rise:

Cost advantage better understanding costs and reducing them

Differentiation focusing on activities associated with core competencies

In this value chain analysis only the primary activities will be examined. Support activities, normally part of the value chain, as specific to Lifta-Rise will be analysed in the later sections of this paper.

Figure 3.2 Public Access Industry Value Chain.



Based on M.E. Porter's Value Chain (1985)

3.2.1 R&D

Changes to building codes and safety standards, brought about by government legislations, prompt manufacturers to include enhanced user-friendly and safety features. Stair-lifts have progressed from user-designated (a special key used to be issued to users) and slow, and unattractive looking equipment, which required prior user training, to slick-looking, intuitive-logic operated equipment. Slowly, product feature and operation convergence between stair-lifts and elevators is taking place. Wheelchair users are familiar with elevators and are expecting similar operation sequences and simplicity of use from stair-lifts. Thus special keys, constant pressure controls (directional buttons have to be depressed for the duration of journey and attendants are being eliminated). These previously dominant features made using stair-lift equipment by wheelchair users uncomfortable and deprived them of independence (by requiring an attendant). Leading companies within the industry have increased their R&D spending in the last 5 years to incorporate more user friendly features, e.g., one-touch control buttons (similar to the elevator's), proximity card readers (FOB), light-up buttons, some of which are proprietary. New regulations in the UK (previously mentioned Part M) impose use of audible and visual indications of vertical platform lift's arrival and location. UK companies were the first to introduce these modifications to their existing equipment and even made them retrofitable. They have the definite advantage in the vertical platform lift product segment. Foreign manufacturers, including Lifta-Rise, added those features, as well.

This section confirms Proprietary Technology as a KSF.

3.2.2 Project Design & Product Specification

Stair-lift manufacturers contact architects and specification writers directly whenever possible to offer assistance in creating the best Public Accessibility solutions. These are offered as generic solutions and are free-of-charge. Architects and specification writers are also referred

to the corporate web sites - a valuable resource, containing typical product CAD drawings and specifications, which can be easily downloaded. These, of course, are brand-specific.

Manufacturers also organize product awareness seminars and Disability Accreditation courses, which allow people involved in design and/or product specification writing to better understand the needs of disabled people concerning access in public architectural spaces. These seminars are free of charge. They are becoming less relevant, however, as they are perceived by seminar participants as unfair sales methods.

Dealers have more direct and frequent contact with architects, specification writers and access officers because of geographic proximity and, quite often, already established close working relationships. The only exceptions are the large corporate projects, e.g. Halfords²¹, or TGIF²² throughout the UK. These are done by the UK manufacturer and/or large UK elevator installation companies. National corporations prefer dealing with a company that has the capacity to install stair-lifts and provide the after-sale service all over the country.

This section confirms Distribution Channels as a KSF.

3.2.3 Marketing

Most of the product and service marketing is done by dealers in their respective geographic territories. They advertise in local Yellow Pages, newspapers and send direct mailers to architects, government bodies, churches, schools, et cetera. These dealers mainly promote their own companies, developing brand equity, and then the products they offer (manufacturer's brand). In some instances, dealers will promote generic accessibility solution concepts, whereby they can choose to install competitive products to maximize their profits through lower purchasing costs.

²¹ Halfords is a national hardware/automotive store chain, similar to Canadian Tire.

²² Thank God It's Friday – an American restaurant chain.

To minimize opportunistic behaviour by dealers stair-lift manufacturers subsidise dealers' marketing efforts and/or organizes advertising on dealers' behalf, exploiting economies of scale resulting from their large printing capacity (outsourced). In addition, manufacturers have corporate web sites with a large number of critical search words (metatags) and phrases purchased. The web site offers all the relevant design information to any architect or specification writer needing it. Also, design manuals and instructional DVDs can be requested online. Increasingly however, dealers have become the source of product application information and the first point of contact for the architects, Access Officers, et cetera Thus stair-lift manufacturers' role as the ultimate accessibility experts has diminished.

The use of the internet has decreased the information availability gap between UK-based and foreign manufacturers. Manufacturers concentrate their efforts on designing easy to navigate web sites with self-serve options, enabling architects and dealers to create specifications and preliminary designs. A good web site helps reinforce dealers' brand loyalty, who create links from their web sites to a specific manufacturer's site. Manufacturers reciprocate by naming dealers on their sites, and/or sending leads received from Target Customers (section 2.1.4) to the respective dealers.

This section confirms Distribution Channels as a KSF.

3.2.4 Stair-Lift Manufacture

Each public access solution is unique and requires equipment that is designed for a specific application. Incline lifts are as unique as the layout of stairs where they will be installed. Vertical platform lifts will have different travel height, platform size (several standard options are available) and entry/exit configuration. This variety of options necessitates that each lift is designed from scratch, i.e., approval drawings are produced, prior to lift's manufacture. Accuracy of the design and its speed are essential. The sooner the dealer receives the approval drawings the

sooner the project he is working on can proceed. The additional design value is extracted by offering special sizes and options that are customer-specific, e.g., schools, store chains, which may include specific control buttons, colours and platform sizes.

The next step is the manufacture. Again, dealers want to have their lift manufactured in the shortest time possible. The sooner the installation is completed, the sooner they get paid. Quick product delivery and installation cycle is critical to dealers' cash flow. Invoices for government projects in the UK (majority of public accessibility projects) are supposed to be paid at a 28-day cycle. Late installation caused by later than expected stair-lift delivery from the manufacturer can result in cash flow strain for the dealer, who may have to wait through another invoice cycle. Quick product delivery is also a competitive feature of a dealership.

Identifiable KSF: Geographic Proximity to Market.

3.2.5 Distribution

Product distribution is affected by the following factors:

Manufacturer's Origin

Domestic: stair-lifts made in the UK

Foreign: stair-lifts exported from the EU or North America

Point of Sale

Direct: stair-lifts are delivered from the manufacturer (domestic or foreign) to several dealerships that compete against other dealers representing competitive manufacturers.

Through intermediaries: stair-lifts are sent to select few dealers who then sell on to trades.

Sales Force

Domestic manufacturers employ sales people who cover smaller geographic areas under their management. Domestic manufacturers can be very proactive in searching for best possible channels of distribution.

Foreign manufacturers use sales managers, based in the home country, to whom the UK is a geographic territory (region) and do not have multiple sales force. Sales managers select dealerships they think would best suit their market penetration strategy, through tradeshows or e-commerce (searching UK companies' web sites or being contacted by UK companies through the corporate sites).

Geographic Proximity to the Market

The manufacturers' geographic proximity to the market determines success of the distribution effort. Domestic manufacturers offer product pick-up service or shorter delivery time than the foreign manufacturers who have to factor in transit time and added cost of freight into their product offering to the UK dealers.

Credit Terms

Credit terms offered by the manufacturer's depend on their size (product capacity and financing ability), and size and credit history of the dealerships. Most common payment terms in use in the UK are pre-pay and 30 days. Only a few large dealers will enjoy 60-day terms.

This section confirms Distribution Channels and Geographic Proximity to Market as KSFs.

3.2.6 Installation & Maintenance

Installation of stair-lifts is carried out by the dealer. The efficiency of installation process and overall project management determine dealer's competitiveness and market reputation. The dealer relies on the manufacturer's timely product delivery and completeness of the order shipped, i.e., no short shipments. Installation work (technicians) is scheduled based on stair-lifts' availability, as determined by manufacturer's production schedule. Dealers are very careful about scheduling their technical personnel to do installation within the allotted time. Any extra time spent on installation lowers dealer's profit, through extra labour cost or liquidated damages. Manufacturers must make sure that stair-lifts are shipped to site as ordered. Many stair-lift installation sites are far away from the dealer's base. Any short shipped items may have to be delivered at a later date, which forces the dealer to go back to site (an unscheduled trip equals additional travel time plus labour cost). Again, this lowers dealer's profits.

The manufacturer's involvement in the maintenance of stair-lifts consists of technical support (offering trouble shooting assistance and lifts schematics, when needed) and quick dispatch of spare parts. Dealers, generally, do not carry many spare parts as it would tie up their cash. Spare parts are made available to the dealers, by courier, as needed, i.e., when equipment breaks down. The manufacturer must ensure availability of spare parts at all times, so the dealer can have them, at the latest, within 3 business days.

It is also important that spare parts are available for stair-lifts which had been phased out by manufacturers or replaced by new models. Supply of spare parts for 7 – 10 years after product obsolescence is expected. Long term maintenance contracts and the right to distribute spare parts within a territory is lucrative to the dealers, as previously mentioned in section 3.1.2, under Equipment installation and Maintenance.

Identifiable KSF: Technical Support.

3.3 Defining Key Success Factors

KSFs as identified above help meet market expectations for product and service offering that result in competitive advantage. The following are definitions of the KSFs, as identified in previous sections – Five Forces and Value Chain.

Proprietary Technology: sophisticated drive systems allow competitive product exclusion through greater adaptability of equipment to new architectural design or existing site parameters. Use of different materials and finishes magnifies aesthetics-based decision making process by architects and purchases. Combined, these features result in the Unique Selling Proposition (USP), as identified in Table 2.4, p. 22. The equipment's ability to fit into tight spaces of old architecture prevalent in the UK is of critical importance. The use of different materials and finishes minimizes the effects that similar external appearance of stair-lifts has on diminishing product recognition and brand identification to buyers and end users. Proprietary technology helps manufacturers to differentiate away from low cost expectations of the buyers and dealers.

Distribution Channels: because of the intended stair-lift users (wheelchair bound people) and potential liability risk, resulting from improper stair-lift installation, manufacturers deal exclusively with companies that have qualified technical personnel to carry out equipment installations and maintenance. Dealers actively market their companies and interact with architects, general contractors and accessibility officers, as identified in Table 2.6, p. 25. They promote the stair-lift brand of their choosing and offer all the warranties and guaranties fully endorsed by the manufacturer. Many manufacturers rely almost entirely on their dealers' marketing and sales efforts and do not employ sales personnel of their own.

Dealers also sell products on to trades - companies specialising in installation of stair-lifts on behalf of other companies or working within a very small restricted geographic area. It is a

secondary network of distribution that manufacturers have no control over, but are happy to endorse, as it increases the demand for their products and raises their brand awareness.

Overall, manufacturers are dependant on dealers as intermediaries for information on customer preferences and price sensitivity.

Geographic Proximity to Market: product availability is an important selling feature that can command higher prices. As the Public Accessibility market is legislature driven, where it is impossible to receive licence to operate business or law suites are pending unless accessibility is provided, fast turn around overrides price sensitivity. Generally, Public Accessibility equipment has relatively low price elasticity as, overall, governments or large institutions/corporations include it in their budgets in the preceding year; the private sector is more price-sensitive.

Managing logistics, product storage by dealer, and possible delays in a shipment's arrival, altogether add to the cost of doing business. A manufacturer's geographic proximity to the market is beneficial to the dealer's effectiveness. Shorter product delivery time can lessen the impact of higher product prices on buyers.

Technical Support: extended warranties and product reliability can only be supported and assured by readily available technical support, as in trouble shooting and spare parts availability. Establishments offering services rely on stair-lifts being operational at all times so the wheelchair users may have access to the services offered. Maintenance service offered by dealers is included with new equipment warranty, thus partly sponsored by the manufacturer. It offers an income stream potential to the dealer in the area, who provides maintenance contract or spare parts, if maintenance is carried out by others.

The KSFs listed above confirm that in the absence of the local distribution centre and/or manufacturing Lifta-Rise with its sophisticated equipment (more cost intensive) and added cost of freight should only pursue the differentiation strategy in the UK market in the immediate future. Lifta-Rise products are distinguishable through their different aesthetics and greater reliability resulting in the unique Selling Proposition (USP), as indicated in Table 2.4, p. 21. The USP will be signalled to the market through higher prices, relative to competing manufacturers.

3.4 Rivalry

In this section the main competitors in the UK market will be examined and Lifta-Rise's ability to effectively compete against them will be discussed on the basis of the previously identified KSFs.

3.4.1 Main Competitors

Competition in the stair-lift industry in the UK can be classified as intense. There are many suppliers (Table 2.1) offering similar or equivalent products and they all cater to an estimated number of 150 dealers²³, i.e., companies dealing with target customers (section 2.1.4).

Of all the manufacturers engaged in the UK market, the following two companies stand out as having the longest market presence and best reputation for offering complete Public Access solutions similar to Lifta-Rise's: Incline Platform Lifts (IPL), straight and curving, and Vertical Platform Lifts (VPL), short and tall rise (section 2.1.1)

Stannah Lifts Holding Ltd. (UK) is a family-owned business. The company's products include elevators, seat lifts, access platform lifts, and goods lifts. Stannah also offers repair and maintenance services. The company was originally founded as a crane and hoist manufacturer by

²³ www.leia.co.uk – LEIA (Lift and Escalator Industry Association) directory of registered stair-lift installation companies.
www.liftdirectory.com an industry directory in the UK.

Joseph Stannah in the 1860's. The main source of income and international expansion for Stannah Lifts Holding Ltd. (Stannah) is the seat lift (Appendix 3), the leading seat lift in the UK with an estimated market share of 80 per cent. Continental Europe and the US are the second and third largest markets, respectively. Stannah's prominent position in the private residence accessibility led through product migration, where seat lift technology was used to engineer IPL, to the Public Access market entry. With the well-established network of distributors and marketing already in place, Stannah became the leading Public Accessibility distributor. Initially, Stannah distributed under its own brand products manufactured by other firms (including Lifta-Rise). The Public Access division of Stannah was span off the main group. Only 4 years ago did Stannah released its own vertical lift, when it recognised that its UK market leadership position in the Public Accessibility was being undermined by foreign and domestic entrants. Stannah's strength in the UK market comes from its varied product portfolio of lifting equipment (seat lifts, elevators, dumb waiters, and stair-lifts) and spare parts and maintenance services offered for the very large installed base of all its products. Total sales for all divisions are estimated to be \$250 million²⁴, as confirmed by industry insiders in conversations with the author. Stannah employs estimated 1,500 people through all its divisions. The Public Access sales are estimated to be 25 per cent of the total turnover, at \$62 million, of which 25 per cent is in the foreign markets. Stannah is a manufacturer, distributor and maintenance provider of its own products in the UK.

ThyssenKrupp Access Corp. (Germany) a part of the major multinational industrial conglomerate, started as part of the Elevator Group of ThyssenKrupp. The core markets remain Germany and Holland. ThyssenKrupp Access Corp. (Thyssen) has currently a product range offering a complete one-stop accessibility solution centre for home, passenger or commuter vehicles (car, bus or train) and public buildings. The importance of Public Accessibility to ThyssenKrupp is reflected in the fact that the Accessibility division is an independent business

²⁴ www.hoovers.com/stannah-lifts, report by Watt Close, E. Portway.

unit within the Elevator segment. Total sales of the Accessibility division went up to \$168.6 million in 2005 from \$151 million a year before, an increase of nearly 12 per cent. Total sales of the Elevator segment in the same period were \$5,022 million up from \$4,730 million a year before, increase of just over 6 per cent²⁵. The European and American market positions experienced growth and resulted in additional income for the division.

Thyssen's growth and success is attributable to the reputational capital of the ThyssenKrupp, its geographic extent of operations and excellent capital position of the conglomerate. In many instances large subway, shopping mall and other public-utility-space projects include elevators, escalators, moving walkways and lifts. Unlike other major elevator manufacturers, e.g., Otis, Kone, Schindler, Thyssen Elevators can supply its own stair-lifts. As they constitute a small overall percentage of the total project value, stair-lifts are sometime cross-subsidised by the more expensive elevators and escalators. Thyssen's presence in the UK market has been punctuated by several attempts to rebrand (Thyssen Access, ThyssenKrupp UK, TKUK), and redefine its position: from partial stair-lift assembly in the UK, to product installations, to distributing to end users through a service centre. The most recent change of strategy has been a management buyout of all of Thyssen public access operations in the UK. The resulting company is called EquiLift and will be an exclusive distributor and installer of the Thyssen public accessibility solutions. All stair-lifts will be manufactured in Holland and Germany, as before. EquiLift is de facto an extension of Thyssen in the UK, which has integrated vertically and rebranded at the same time. The Public Access sales are estimated to be \$4.5 - \$5 million. Thyssen is a distributor and maintenance provider of its own products in the UK.

²⁵ www.thyssenkrupp.com, 2004_2005 Financial Statement and Management Report.

3.4.2 Competitive Key Success Factor Comparison.

Table 3.1 below lists KSFs identified in previous sections and assigns Importance Factor (IF) to each of them. The IF numerical values are estimated based on dealer feedback and market observations. They are also consistent with the frequency with which they occur in this text.

Table 3.1 Summary of Key Success Factors.

KSF	IF
Distribution Channels	40
Geographic Proximity to Market	20
Proprietary Technology	30
Technical Support	10
TOTAL	100

Distribution Channels: Stannah sells and installs stair-lifts directly and supplies them to trades. Thus they have the largest distribution network of the companies being compared. Trades, however, do not limit themselves to Stannah products as they would find it difficult to compete against direct sales by the manufacturer. Thus trades' loyalty to Stannah is low.

Thyssen takes advantage of its elevator division's presence which supplies them with an extended network of lead gathering and maintenance capability. Thyssen sales are done however through one channel, presently it is EquiLift.

Lifta-Rise distributes its products, mainly through 2 dealers, already described in section 1.3.1 Current Lifta-Rise Market Activities. Both companies help Lifta-Rise differentiate its products through a very service driven market focus, and the fact that both have a thorough knowledge of the competitors. Company 1 principals used to work for Thyssen and Stannah and are well qualified to exploit shortcomings of those manufacturers' product shortcomings and alleged lack of customer service. The principal of Company 2 used to be employed Minivator

(another UK manufacturer/distributor) and is exploiting his knowledge of that company's inefficiencies. Both Lifta-Rise distributors are very effective in winning over trades dissatisfied with Stannah, Thyssen and Minivator.

Geographic Proximity to Market: Stannah is a household name in the Accessibility industry in the UK and offers a product pick-up option to local trades. It gives perception of ready availability of equipment, spare parts and technical support. Thyssen also has a strong UK presence by virtue of many years of doing business in the UK and the fact that its fabrication facilities are close by in Holland and Germany. Lifta-Rise is in a more difficult situation as all the products are made in Canada and sent by Ocean (added transit time) or Air (added high cost) to the UK. Product deliveries can be disrupted by industrial actions (e.g., striking trucking companies, sea ports, airports). Remoteness of fabrication facilities and lack of substantial storage capability in the UK strengthen the perception of potentially unreliable supply. Thus, Lifta-Rise's scores is very low.

Proprietary Technology: Different from European made equipment aesthetics and some patented user oriented features can effectively be used to differentiate Lifta-Rise products from Stannah's and Thyssen's. Lifta-Rise installed base in the UK is large enough to offer references to architects, who are motivated by aesthetics and equipment's sophistication when writing project specifications. Both Stannah and Thyssen use generic mechanical and electronic solutions in their equipment, and use their brand equity to differentiate. Thus, Lifta-Rise has the highest score.

Technical Support: Stannah and Thyssen, as per anecdotal evidence, do not have an efficient customer service and it takes either company a long time (up to 36 hours) to supply spare parts and offer trouble shooting advice. Dealers and trades expect better service as both manufacturers have UK-based facilities.

At Lifta-Rise, spare parts requests from the UK are given priority and are expedited within 24 hours by courier (dealers are not required to carry inventory of spares). Dealer receives spare parts within 36 hours of placing an order. Also, extended warranties, exceeding industry standards, help differentiate Lifta-Rise product as more reliable, safer and less expensive to maintain. Lifta-Rise offers live trouble shooting guidance by phone.

All three companies have comparable product lines: straight and curved incline platform lifts (IPL) and short/tall vertical platform lifts (VPL). To help identify the opportunities and threats for Lifta-Rise, the KSFs are graded on the 1 – 5 scale, where 1 = satisfactory and 5 = excellent. Grading is not based on volume of sales but on qualitative criteria contributing to effectiveness of current market strategies and growth potential, as identified in previous sections. They are then multiplied by the Importance Factor (IF), as per Table 3.1 above. The resulting competitive benchmark grading is listed in Table 3.2 below.

Table 3.2 Key Success Factors – Competitive Benchmark Grading.

Key Success Factors	IF	STANNAH		LIFTA-RISE		THYSSEN	
		grade	line total	grade	line total	grade	line total
Distribution Channels	40	4	160	2	80	3	120
Geographic Proximity to Market	20	5	100	1	20	3	60
Proprietary Technology	30	3	90	5	150	3	90
Technical Support	10	4	40	3	30	3	30
TOTALS			390		280		300

IF = importance factor Grades are scored are on 1 – 5 scale; 1= satisfactory 5 =excellent

3.4.3 Threats and Opportunities

The external analysis of the UK Public Accessibility market, through the 5 Forces and the Industry Value Chain analyses, uncovered the following threats and opportunities for Lifta-Rise, as per Table 3.2 above.

The most significant threat is Distribution Channels. Current Lifta-Rise dealers divide their focus between product marketing, installation and distribution. Greater focus on direct sales activities such as assistance in writing specifications and distribution to trades would result in more rapid growth of Lifta-Rise market share. Stannah benefits from an extensive network trades' distribution network and Thyssen from its Thyssen Elevator offices throughout the country. The second major threat is Geographic Proximity to Market. The current Lifta-Rise product availability in the UK is negatively affected by the remoteness of the Canadian manufacturing facilities. Ability to shorten the sales delivery time through local stockpiling or manufacturing capability would add to the competitive advantage of Lifta-Rise's distribution channels. Local availability of spare parts and technical support would increase profitability of maintenance contracts by current dealers. Stannah has a full manufacturing and stocking capability in the UK. Thyssen product can be fast-tracked from Holland or Germany, if need be.

The largest opportunity for Lifta-Rise's products is the Proprietary Technology. The stair-lifts are easier to market in the UK through different than European aesthetics and technological superiority. These product strengths could be further exploited if more efficient distribution channels and improved proximity to the market could be achieved. Stannah and Thyssen use generic technologies and try to differentiate through reputational capital.

The Proprietary Technology could be further strengthened by the Technical Support. Lifta-Rise equipment is very reliable, thanks to technological superiority, and is supported by extended warranties. Live telephone trouble shooting service is available to the UK dealers and spare parts availability meets those offered by the UK-based manufacturers and distributors. Local trouble-shooting help and spare parts availability would further enhance Lifta-Rise's product desirability.

4 STRATEGIC ALTERNATIVES

This chapter will focus on strategic alternatives of the UK market expansion available to Lifta-Rise, based on the analysis of the Key Success Factors and the resulting threats and opportunities (described in the preceding chapter).

4.1 Alternatives

Alternatives that would allow Lifta-Rise to prosper in the competitive environment of the UK market as described will be explored in this section. Each alternative will be evaluated in terms of current market conditions and the global strategic priorities of Lifta-Rise's current management. Thus, alternatives deemed currently unsuitable could become a preferred option in the future if the variables under consideration change. The alternatives are somewhat related and are analysed in a progression from the least to the most involved, in terms of capital expenditure, asset control and level of risk tolerance by the current president and the senior management team.

KSFs identified in section 3.4.2 (Table 3.1) will be addressed in each of the options. Three Lifta-Rise internal variables used in decision making process are added to the KSFs: Control (refers to the degree of control Lifta-Rise can exercise); Cost of Implementation (refers to capital needs); and Risk Factor (refers to the effect of a potential failure of implementation). At the end of this chapter the costs of implementation and income in terms of Net Present Value (NPV) for all options will be compared. Earnings before interest, taxes, depreciation and amortisation (EBITDA) will be used as a measure of income, and the metric helpful in assessing the viability of options under consideration.

All options presented here have been given consideration by the senior management team in the past. A time line of four years was chosen to indicate viability of each option's sustainability.

Current Lifta-Rise's market share is small, as per Table 4.1 below, and it is believed that it could grow if the right conditions are created (estimated UK market growth is 4-5 per cent a year; years 2004 and 2005)

Table 4.1 UK Public Accessibility Market Share.

Company	Country of Origin	2005 Sales in millions	Market Share
Stannah	UK	\$46.0	15%
Wessex Medical	UK	\$27.0	6%
Phoenix	UK	\$22.0	6%
Terry Lift	UK	\$15.0	6%
Pollock	UK	\$14.0	5%
Minivator	UK	\$9.0	5%
Thyssen	Germany	\$4.5	5%
Hiro	Germany	\$2.0	5%
Motala	Sweden	\$3.0	5%
Kalea	Sweden	\$3.5	4%
Aritco	Sweden	\$2.5	4%
BC Lift	Denmark	\$2.5	4%
Cama	Denmark	\$2.5	3%
Vimec	Italy	\$4.0	3%
Extrema	Italy	\$3.0	3%
Weigl	Austria	\$1.5	3%
Lifta-Rise	Canada	\$2.0	3%
Savaria	Canada	\$1.0	3%
TOTALS		\$165	100%

Data Source: Author 2006, sales figures estimated, based on LEIA estimates.

4.1.1 Option A - Regional Sales Manager (UK).

At the present the UK market is managed out of the Edmonton, AB office by the International Sales Manager. He appoints dealers, determines pricing strategy and credit terms. E-mail and telephone communications with British dealers are augmented by 3 visits to the UK in a year. Having a UK-based Regional Sales Manager (RSM) would change very little, if anything at all, as far as the territory management is concerned. Current partners in the UK (Company 1 and Company 2) are experienced and do not require constant attention. Apart from dealers being able to communicate with a Lifta-Rise representative in the same time zone, and relieving the work load of the International Sales Manager, there is little perceived benefit from having a permanent UK based Regional Sales Manager. The current strategy does not support new account development for fear of increasing likelihood of different dealers competing against one another with the same product, which would stump sales growth. The UK-based RSM option is therefore discounted.

Having Edmonton-based RSM looking after the UK would allow for more thorough market information gathering capability. More accurate information on product pricing potential would become available, thus dealer power could be somewhat decreased.

The degree of control of day to day business would improve marginally and total cost of implementation would be low. Remuneration for the RSM would consist of a salary and expenses as introduction of sales commission would lead to profit seeking behaviour by the incumbent, who would try to sign up new dealers or lower prices to increase volume of sales. The incumbent would be controlled (in either location) out of Canada and visits to the UK by the International Sales Manager to the UK would continue. This Option #could be reviewed again in the future, provided the number of UK dealers dealing directly with Lifta-Rise has substantially increased as a result of any changes in current strategy or market conditions, e.g., decreased number of manufacturers supplying to the UK.

Proprietary Technology: Products would retain its differentiated position.

Distribution Channels: Better decision making information as regards adding one or two more dealers would be available to the UK RSM (not an immediate consideration).

Technical Support: The RSM would not have the necessary capacity to offer any technical product assistance, as it would be beyond the scope of his/her expertise.

Geographic Proximity to Market: It would remain unchanged if the RSM were to be based in Canada.

Degree of Control: Lifta-Rise's control would be limited to the RSM.

Cost of Implementation: Costs would be relatively low, consisting of salary (\$55,000 p.a.) and business expenses. It is uncertain at this time if such a fixed expense would be justified, if in essence, the RSM would relieve the work load of the International Sales Manager. The present value (PV) of the total cost of implementation is estimated at \$256,604, Table 4.2 below, for a period of four years; salary and associated expenses increase by 2 per cent per annum (target inflation rate currently held by Bank of England²⁶ and Bank of Canada²⁷).

²⁶ www.bankofengland.co.uk/monetarypolicy/framework: "Price stability is defined by the Government's inflation target of 2%".

²⁷ www.bank-banque-canada.ca/en/inflation/index: "The Bank of Canada aims to keep inflation at the 2 per cent target..."

Table 4.2 Option A – Cost of Implementation.

Year	2007	2008	2009	2010
Costs p.a.	\$69,000	\$70,380	\$71,788	\$73,223
Discount	12%			
PV	\$215,345			

Risk Factor: There is little financial risk involved with this option, apart from the incumbent’s salary and business expenses. Reputational and relational risks weighs in more, e.g., misrepresentation of company’s policies, strategies and alienation of existing dealers. Lifta-Rise would rely on RSM’s ability to influence dealers’ activities, which would be limited. NPV of EBITDA is calculated in the Table 4.3 below.

Table 4.3 Option A - NPV. Analysis.

Year	2007	2008	2009	2010
Sales increase/yr	5%	5%	5%	5%
Revenue Increase	\$2,005,500	\$2,105,775	\$2,211,064	\$2,321,617
Gross Profit at 47%	\$942,585	\$989,714	\$1,039,200	\$1,091,160
RSM Salary	-\$55,000	-\$56,100	-\$57,222	-\$58,366
Business Expenses	-\$12,000	-\$12,240	-\$12,485	-\$12,734
EBITDA	\$873,585	\$919,334	\$967,412	\$1,017,937
Discount	12%			
NPV	\$2,848,376			

Table 4.3 above, the assumptions made: Sales increasing in a straight line 5 per cent per annum on estimated revenue for 2006 at \$1,910,804 (Table 1.2). There is a historic basis for this assumption: sales increased by 7 per cent from year 2004 to 2005. Companies 1 and 2 did not have enough capacity to manage leads, enquiries and installations. In 2005 both companies took on additional staff. As a result, the UK market revenue in June 2006 was up 24 per cent compared to June 2005. It is feared by the UK dealers that 2007 will see a slow-down in sales growth due to

insufficient capacity (similar situation to years 2004 – 2005). In Table 4.3 above a more conservative assumption of 5 per cent sales increase is made. The gross margin, based on discounted sales to the UK dealers, is assumed to be 47 per cent (based on current sales). There will be no added UK labour component, or any other UK-specific expense, in this option. Currently short-term (12 months) cost of capital for Lifta-Rise is 10 per cent. An additional 2 per cent is added to account for inflation (for the time frame of four years). Business expenses include air fare to the UK, telephone calls, and related expenses.

4.1.2 Option B - Controlling Stake in a British Dealer.

Both dealers (Company 1 and 2) currently buying products from Lifta-Rise are new. They do not have enough fixed assets or “good will” to be able to determine their fair market value. The owners have invested, apart from money, a substantial amount of time and emotional involvement in developing their businesses, which is difficult to translate into money. They would also like to see their business grow before they relinquish control over it. Preliminary discussions with owners of Company 1 established a hypothetical per-owner amount of \$1,750,000 buy-out and a guaranteed contract as a managing director (MD) for a period of at least three years with the estimated salary of \$70,000 per annum each. This option includes Lifta-Rise’s capital involvement only.

At the current time, Lifta-Rise strategy relies heavily on working on equal terms with Company 1 and Company 2. Acquiring a controlling stake in one of the companies may make the other one leave unappreciated and dissatisfied, or even threatened, by the manufacturer integrating vertically. This kind of entry into direct sales by manufacturers has been either short-lived (e.g., Thyssen) or had a very limited territory penetration (Aritco, Swedish manufacturer of VPL acquired its dealer Gartec, geographically limited to greater London area), unless supported by manufacturing capability (only Stannah succeeded in this approach).

Should the controlling stake in a dealer be acquired it would be difficult to exercise control over the company's day to day business without having a full-time Lifta-Rise employee on board. That would require an additional ongoing cost and control responsibility which is difficult to maintain from the head office.

This course of action would be warranted if the market for Lifta-Rise products was already well-developed and the intension was to extract greater profits, which are currently dissipated through intermediation of distribution.

Proprietary Technology: Product would retain its differentiated position. Some parts sourcing and utilising production capacity in Germany (EU member) could take place to keep product costs down.

Distribution Channels: It is believed that the other current dealer would look for alternative suppliers to maintain its independence. Developing a new network of trades could take some time.

Technical Support: A technician dedicated to trouble shooting service can be hired.

Geographic Proximity to Market: It would, particularly if new entity would change its name to indicate Lifta-Rise's participation. Overall physical ability to serve the market would improve. Hiring sales personnel in this option is not envisioned.

Degree of Control: Lifta-Rise would have better market intelligence in regards to pricing and the actual product demand.

Cost of Implementation: Based on the desired buy-out price of \$1,750,000 (GBP 1 million) and the estimated MD salary of \$70,000 per owner, existing staff salaries, rent cost (see

Appendix 4 for summary of costs), the present value (PV) of implementation cost would be \$4,817,263, as per Table 4.4 below.

Table 4.4 Option B – Cost of Implementation.

Year	2007	2008	2009	2010
Costs p.a.	\$358,200	\$362,564	\$367,015	\$371,556
Buy-out Cost	\$3,500,000			
Discount	12%			
PV	\$4,606,220			

Risk Factor: Lifta-Rise would be reluctant to pay for a log of enquiries and potential orders (too intangible). The level of commitment of current business owners and their staff to the future of the new entity is difficult to predict, the best employees may leave. NPV of EBITDA is calculated in Table 4.5 below.

Table 4.5 Option B Benefit-NPV Analysis.

Year	2007	2008	2009	2010
Sales increase/yr	10%	10%	10%	10%
Revenue Increase	\$2,101,000	\$2,311,100	\$2,542,210	\$2,796,431
Gross Profit at 47%	\$987,470	\$1,086,217	\$1,194,839	\$1,314,323
Salaries	-\$350,000	-\$354,200	-\$358,484	-\$362,854
Rent, Admin., Insurance	-\$8,200	-\$8,364	-\$8,531	-\$8,702
EBITDA	\$629,270	\$723,653	\$827,823	\$942,767
Buy-out	-\$3,500,000			
Discount	12%			
NPV	-\$1,172,886			

Table 4.5 above, the assumptions made: Sales are assumed to increase in straight line 10 per cent per annum on estimated 2006 revenue of \$1,910,804 (Table 1.2). This increase is due to

expected positive effect created Lifta-Rise's additional capital investment, which would inspire confidence in other dealers and trades looking for an alternative source of stair-lift supply.

Company 1 buy-out price: \$1,750,000 (GBP 1 million) and fixed salaries of \$70,000 p.a. for each of the 2 owners, as managing directors (MD) for 4 years. Based on historical data it is believed that the overall capacity of the new entity to service the entire country (direct and trade sales, maintenance and technical support, seminars, etc.) would be limited and therefore higher sales growth rates are not expected. It is assumed that Company 2 will remain loyal to Lifta-Rise. The gross margin, based on discounted sales to the UK dealers, is assumed to be 47 per cent (based on current sales). There will be no added UK labour component, or any other expense, in this option. Currently short-term (12 months) cost of capital for Lifta-Rise is 10 per cent. An additional 2 per cent is added to account for inflation (for the time frame of four years).

4.1.3 Option C - Lifta-Rise Retail Office.

Unlike the retail offices in North America which offer stair-lift installation and after-sale service, the proposed retail office in the UK would not be involved in direct sales, i.e., sales to Direct Customers, as identified in section 2.1.4. Its function would include liaising with large corporate customers (national accounts), such as Halfords and Debenhams (retailers) and TGIF (restaurants) and the Hilton Group (hospitality) local marketing representation (seminars for architects, access officers and occupational therapists, mailers), warehousing complete equipment or standard stair-lift components, offer technical and logistics supports to companies installing and/or maintaining Lifta-Rise made equipment. Sales inquiries would continue to be routed through Companies 1 & 2.

An office located in the UK would add the sense of the local and familiar to people seeking accessibility solutions and trades in buying Lifta-Rise equipment, which would become more UK market specific. Warehousing equipment or its components would have the obvious

benefit of a shorter delivery time and better credit terms to the dealers for some products (not all stair-lifts can be made to stock), as the transit time of the Ocean freight would be eliminated.

This Lifta-Rise operation would be able to consolidate shipments going to Company 1 and Company 2, in the South and the North respectively, and negotiate better shipping costs. Consolidated duties and brokerage fees would also be made less expensive. Right now all charges to do with importing products in the UK, and time spent doing it, is duplicated. Dealers would save a considerable amount of time if they could collect goods from the local Lifta-Rise warehouse rather than the docks or the airport, as it is done today. By not having to stock some products and not having to pay value added tax (VAT, 17.5 per cent of goods' value) upfront on collection of goods (tax is reimbursed by the government at the end of the fiscal year) dealers would have a healthy cash flow.

For an example, a small shipment worth \$2,365.50 carries total additional charges, when clearing customs (UK Cartage, depending on product type and value not included in this example), of \$626.55, of which VAT is \$468.05. That is nearly 20 per cent of the goods' value.

The Lifta-Rise retail office would not be involved in direct sales activities. These functions would be performed by existing dealers who could increase the supply to trades, as they do today. Local product availability would eliminate transit time (4 weeks by Sea) which eats into dealers' credit terms (30 days at best). This, in turn, would enable dealers to offer credit terms to the trades. Current dealers are best qualified to decide to whom they can supply product, without cannibalising their own market share and losing product differentiation benefit. The functions of the Retail Office are summarized in Table 4.6 below.

Table 4.6 Summary of Functions of Lifta-Rise Retail Offices.

FUNCTION	DESCRIPTION
National Accounts (commercial sector)	Major national retailers, e.g., Halfords and Debenhams are currently upgrading to meet DDA requirements. Hilton Group and TGIF are examples of the leisure industry doing the same.
Marketing	Educational seminars for specifiers, architects, accessibility officers. Mailer campaigns.
Warehousing	Consolidating shipments into the UK, clearing customs, payment of duty and VAT. Product availability on demand.
Technical Support	Product knowledge and design help in the same time zone. Trouble shooting expertise available during regular business hours.
Account Management	Day-to-day business issues with dealers can be resolved quickly. Better appreciation of local issues.
Political	The air of familiarity and the sense of the "domestic" supplier

Proprietary Technology: Product would retain its differentiated position. Lifta-Rise would be able affect the market by further differentiation through more refined, UK specific, user-friendly features of its products.

Distribution Channels: Dealers not having to import product themselves would save time, and could concentrate on their own direct sales activities and sales to trades.

Technical Support: One full time person could keep stock of warehouse and provide technical support. Knowledge gained in trouble shooting calls would help in keeping supply of spare parts.

Geographic Proximity to Market: Having an incorporated Lifta-Rise entity in the UK would send a signal of commitment to the market and would dispel any reservations for trades or architects of dealing with a remote supplier. It would make doing business with large national accounts easier, as well. Stock piling of inventory would allow for increase in speed of sales delivery and spare parts.

Degree of Control: Lifta-Rise would have a full control of its operations and market strategy.

Cost of Implementation: A large upfront expenditure would be required to rent the premises (warehouse with office space) and to hire two personnel:

1) Branch Manager – incumbent would have two areas of responsibility:

Marketing: Organizing accessibility knowledge and product seminars to architects and trades, and developing national accounts within the Commercial Market Segment. Gathering product development related information which would further strengthen proprietary technology (KSF), resulting in UK specific product design.

Operations: Ordering equipment from the factory in Canada, inventory audit, and overseeing cash flow.

2) Technician -- warehouse upkeep (receiving and dispatching goods) and troubleshooting support to installers.

3) Secretary -- part-time office person.

The present value (PV) of implementation cost would be \$1,099,600, as per Table 4.7 below.

Table 4.7 Option C – Cost of Implementation.

Year	2007	2008	2009	2010
Costs p.a.	\$298,300	\$301,296	\$304,352	\$307,469
Start-up Cost	\$6,000			
Discount	12%			
PV	\$924,564			

Risk Factor: Finding the right facility (capacity and geographic location) at a reasonable cost, finding the right person for the position of Branch Manager (either local or from

Canada). As more in line with Lifta-Rise's risk averse culture, this option would be a prelude to Option D, which would be a pure Greenfield strategy.

NPV of EBITDA is calculated in the Table 4.8 below.

Table 4.8 Option C NPV Analysis.

Year	2007	2008	2009	2010
Sales increase/yr	15%	15%	15%	15%
Revenue Increase	\$2,196,500	\$2,525,975	\$2,904,871	\$3,340,602
Gross Profit at 47%	\$1,032,355	\$1,187,208	\$1,365,289	\$1,570,083
Facility Lease Cost	-\$148,500	-\$148,500	-\$148,500	-\$148,500
Salaries	-\$144,000	-\$146,880	-\$149,818	-\$152,814
Utilities	-\$2,000	-\$2,040	-\$2,081	-\$2,122
Admin. Cost & Insurance	-\$3,800	-\$3,876	-\$3,954	-\$4,033
EBITDA	\$734,055	\$885,912	\$1,060,938	\$1,262,614
Start-up Cost	-\$6,000			
Discount	12%			
NPV	\$2,913,218			

Table 4.8 above, the assumptions made: Sales are assumed to increase, in straight line, 15 per cent per annum on estimated 2006 revenue of \$1,910,804 (Table 1.2). It is a conservative estimate between 7 per cent and 24 per cent increase in 2005 and 2006, respectively, and is believed to be possible due to the existing dealers' focus on seeking out new business and increasing product distribution to trades (they will not have to organise freight and related brokerage because of the local product availability). Stock piling of product is assumed to increase competitiveness through faster sales deliveries. The current strict credit terms (net 30 and pre-pay) stifle the growth of sales, as most of the duration of the credit term is taken up by Sea freight time. Local product availability will improve the cash flow existing dealers and trades. Facilities are leased for a fixed rent (four-year contract), as per Southampton, Hampshire area.

(for lease and salaries calculations see Appendix 4). Landed product price in the UK will increase (discounts will be reduced) by 5-7 per cent across the product line. Freight cost per each unit of product is assumed at 5 per cent of cost. Thus gross margin, based on current sales is assumed to be 47 per cent (see Appendix 4 for explanations). The UK labour component and other business expenses are allowed for. Currently short-term (12 months) cost of capital for Lifta-Rise is 10 per cent. An additional 2 per cent is added to account for inflation (for the time frame of four years).

4.1.4 Option D- Lifta-Rise UK

The last of the proposed strategic choices is setting up a Lifta-Rise UK operation. It would be a fully incorporated UK company, which would include office and sales, production facility (for partial assembly) and warehouse. It is assumed that in the beginning it would be a small operation specialising in partial assembly of stair-lift modules. Complex custom designs would be carried out in Canada or European Lifta-Rise companies. It is the most expensive strategic alternative to implement. Lifta-Rise's position in the UK market is still relatively weak and its current market growth can only continue if the present strategy of product differentiation and selective choice of partners continues. In order to cover the anticipated high fixed costs, should Option D be selected, sales volume would have to be high. And selling stair-lifts to anyone willing to buy them will force Lifta-Rise to compete on price, which it cannot do as its products are premium priced, relative to European made lifts.

Proprietary Technology: Differentiated aspect of the product line could be diluted by indiscriminate sales, in order to secure high volume of sales.

Distribution Channels: Those would have to be increased at a rapid pace (dealers and trades). Sales force would have to be hired and the initial cost would be high.

Technical Support: High level of technical support, equal that of the Canadian operation would be provided.

Geographic Proximity to Market: Lifta-Rise products would be regarded as domestically made.

Degree of Control: Lifta-Rise would be a hundred per cent in control of the entire operation. The company would be able to affect the market directly, without relying on dealers.

Cost of Implementation: This is the most expensive option. The right kind of facilities able to accommodate a warehouse, fabrication shop, and office space would have to be leased or purchased. Office, sales and fabrication staff would have to be employed. An experienced managing director would have to be found, either locally or in Canada. The search process and eventual hire would be expensive, most likely on a long term contract basis. Facilities would have to be purchased. Salaries would include 1 MD, 1 sales person, 1 office staff and 5 production staff. The present value (PV) of the estimated implementation cost would be \$3,151,818 as per Table 4.9 below.

Table 4.9 Option D – Cost of Implementation.

Year	2007	2008	2009	2010
Costs p.a.	\$387,700	\$395,454	\$403,363	\$411,430
Facility Purchase	\$1,700,000			
Start-up Cost	\$10,000			
Discount	12%			
PV	\$2,919,992			

Risk Factor: Failure in securing large enough volume of orders would result in the operation making losses and having to be supported by the parent company in Canada. Having to close the facility due to insufficient volume of work would have a very detrimental effect on

Lifta-Rise's future business in the UK, and possibly other international markets (see section 3.4.3 Threats). It is believed that such an extensive undertaking, financially and strategically, is against the risk averse culture prevalent at Lifta-Rise. NPV of EBITDA is calculated in the Table 4.10 below.

Table 4.10 Option D NPV Analysis.

Year	2007	2008	2009	2010
Sales increase/yr	20%	20%	25%	25%
Revenue Increase	\$2,292,000	\$2,750,400	\$3,438,000	\$4,297,500
Gross Profit at 45%	\$1,031,400	\$1,237,680	\$1,547,100	\$1,933,875
Salaries	-\$365,000	-\$372,300	-\$379,746	-\$387,341
Utilities	-\$18,000	-\$18,360	-\$18,727	-\$19,102
Admin. Cost & Insurance	-\$4,700	-\$4,794	-\$4,890	-\$4,988
EBITDA	\$758,300	\$704,706	\$971,837	\$1,307,570
Facility Purchase	-\$1,700,000			
Start-up Cost	-\$10,000			
Discount	12%			
NPV	\$1,317,780			

Table 4.10 above, the assumptions made: Sales increasing 20 per cent per annum in year 1 and 2, due to ready product availability, through local assembly capacity and the focus on increasing sales through various channels of distribution, e.g., direct sales, dealers, trades and elevator companies. The 25 per cent sales increase in years 3 and 4 is attributed to the improved ability to meet market demand resulting from the efficiency and expertise gains (production and sales personnel), and increased market awareness of Lifta-Rise's presence. Sales increase each year is believed achievable, as per current sales growth (24%, as per Table 1.2). Facilities are purchased, as per Southampton, Hampshire, area rates. Salaries based on 1 MD, 1 sales person, 1 office staff, 5 assembly staff.). The price of the landed product in the UK will increase; discounts will be reduced by 5-7 per cent across the product line. The gross margin is assumed to

be 45 per cent, based on current sales and greater local product cost. The UK labour component and other business expenses are accounted for (see Appendix 4 for explanations). Currently the short-term (12 months) cost of capital for Lifta-Rise is 10 per cent. An additional 2 per cent is added to account for inflation (for the time frame of four years).

4.2 Comparison of Options

Before all four options are compared, sensitivity-based NPV calculations of options C and D have been conducted (Appendix 5). Results are listed in Table 4.11 below.

Table 4.11 Sensitivity-based NPV Results.

Option	C''	D''
NPV	\$2,399,115	\$563,216

Table 4.11 above, the assumptions made: After the initial increase in sales, due to greater commitment to the UK market and in line with forecasts in Tables 4.8 and 4.10, volume in sales will decrease. The decrease could be affected by internal operational inefficiencies of the Lifta-Rise operations, competitors' retaliation and other external factors. Thus the forecast sales increases are reduced to reflect worst-case scenario.

The percentage decrease is arbitrarily chosen by the author; although remains in line with the existing sales increase trends (see Appendix 5 for NPV calculations).

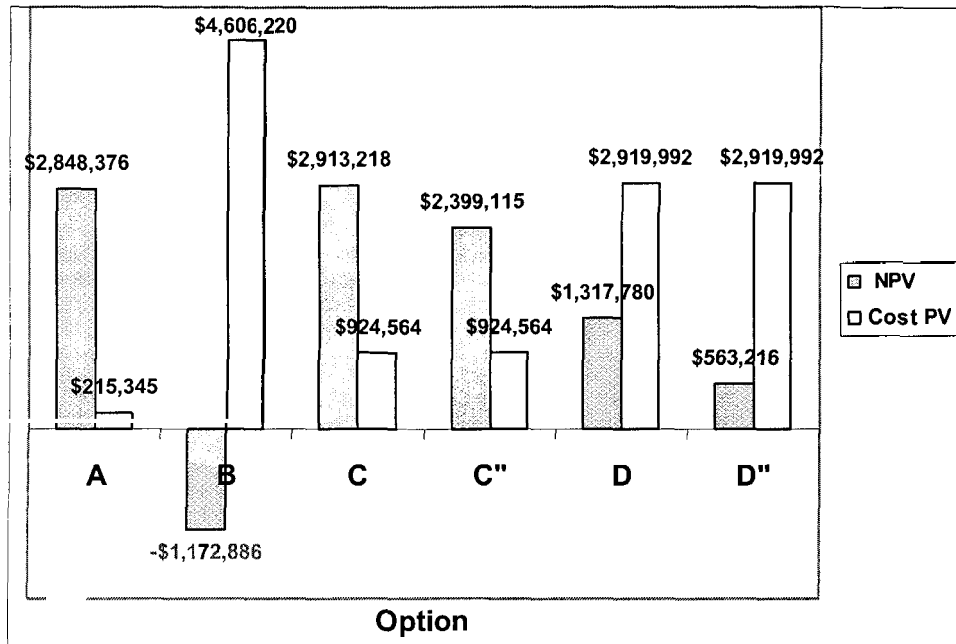
Sensitivity analysis for options A and B has not been conducted as option A bears very little risk (it is virtually the same as the current UK territory management) and options B is excluded from further consideration on the basis of its negative NPV.

The next step is to compare the results of NPV analysis and PV (present value) of implementation costs for all four options. Table 4.12 below lists all the results and it is charted in Figure 4.1 below.

Table 4.12 Comparison of Strategic Options' NPV and Cost PV.

Option	A	B	C	C''	D	D''
NPV	\$2,848,376	-\$1,172,886	\$2,913,218	\$2,399,115	\$1,317,780	\$563,216
Cost PV	\$215,345	\$4,606,220	\$924,564	\$924,564	\$2,919,992	\$2,919,992

Figure 4.1 NPV and Cost PV Comparison.



Based on Table 4.12

Strategic options will be discussed in order of magnitude of the NPV and feasibility of implementation.

Option C -- it is believed that this option is most likely to succeed. It offers the best dealer and trade support to increase the volume of sales. It deepens dealer dependence on Lifta-

Rise technical support and presents relatively low risk of lost capital expenditure. It can also help in reinforcing Lifta-Rise brand awareness, which is still weak in the UK. Moreover, option C could become an intermediate stage to option D when market conditions and senior management team's preferences warrant it.

A local Lifta-Rise office could provide future equipment maintenance services as a separate profit centre. However, in the immediate future the emphasis should be placed on increasing the primary sales resulting in the increase of the installed base of the Lifta-Rise products. This can only be achieved through a UK-based facility.

Option A -- offers the best investment return compared to the capital outlay, and the least amount of risk. However, it does not facilitate any significant increase in the UK market share. Existing dealers and trades are relatively small companies that do not have the necessary resources (financial and storage infrastructure) to stock products. Thus, they cannot compete on the basis of quick sales delivery. For the dealers, installations of new equipment provide the largest profits and at present they prefer not to get involved in long-term maintenance contracts. Breakdown repairs are costly, especially if installation sites are remote. It is highly doubted that option A would be sustainable for the period of 4 years. In order to increase volume of sales, more dealers would have to be added in the future. Managing more than two dealers out of Canada would be an overwhelming task. Servicing the growing installed base would also be difficult. Lifta-Rise's reputation for equipment reliability could suffer and thus negatively affect future sales.

Option D – as a Greenfield market entry strategy, it is risky both in terms of potential capital loss and more importantly, reputational capital loss. Failure in securing sufficient volume of orders would result in the Lifta-Rise operation being closed down. Large corporate accounts and architects would be dissuaded from including Lifts-Rise products in the project specifications

for fear of lack of future technical maintenance. Existing dealers and trades buying Lift-Rise equipment would seek more reliable sources of supply. Coming back to the UK would be difficult, if not impossible, for Lifta-Rise should its operations be closed down. This option has greater chances of succeeding if preceded by option C, which would have established the Lifta-Rise brand in the UK, and business relationships with country-wide retailers and architects, two very important market segments. All cost of doing business in the UK would have been known through option C, thus an upgrade to option D would be easier.

Option B – although seemingly easier than option C or D, it is the riskiest. The greatest unknown in buying a stake in a UK dealer would be lack of certainty of owners' and employees' loyalty to the new entity. Ensuring reliable quality personnel may require a direct Lifta-Rise management involvement, which would be an added cost. This option, also, offers very few assets for the invested capital.

Option C is recommended.

5 INTERNAL ANALYSIS

This chapter will examine the company in terms of the managerial bias, organisational abilities and available resources with respect to the proposed Option C - establishment of the UK retail office.

5.1 Analysis of Management Preferences

In this section the existing management preferences will be analysed to determine if the required preferences for the proposed strategic option are present, and if not, what changes may be required to ensure success of the proposed option.

5.1.1 Existing Preferences

Senior management's preferences will be considered from the following three perspectives:

- Modernization Budget
- Revenue Increase Expectations
- Increased Status

Modernization Budget: In the last 15 years there has been very little capital investment in the Canadian facility. All profits have been extracted by the parent company, a clear sign of milking strategy in place. The senior management team has been trying to win capital investment allowance to upgrade Canadian facilities to bring production costs to equal standard world levels.

If the plan of establishing a UK retail office proceeds, the President of the Canadian operation will be able to claim capital investment needed to expand the existing manufacturing capacity (increase capital to labour ratio) and back office support (IT upgrade) in anticipation of increased product demand,

Revenue Increase Expectations: Recent acquisitions in continental Europe (in Germany in 2004 and Austria in mid-2006) placed an additional demand on revenue generation, particularly by Lifta-Rise in Canada, the largest facility within the Lifta-Rise Group. Since the new focus has been to penetrate the expanding European market, the sales targets in the Canadian operations have been increased each year by the parent company. Faced with an appreciating Canadian dollar and stiffer competition in the US, and current production at full capacity, it would be virtually impossible for the senior management team to further increase sales volume without jeopardising profits from decreasing returns to scale, i.e., paying overtime production staff to increase output, and product discounting to encourage US dealers who carry other manufacturers' products to switch over to Lifta-Rise. The suggested market activities in the UK will result in increased revenue that will satisfy the owners' and Canadian operation's management profit and budgetary expectations.

Increased Status: Lifta-Rise was the first within the Group to open overseas markets and as a result enjoys greater decision-making privileges. UK success would further increase the prestige of the current senior management, the President in particular, and further increase independent decision making capability. Also, the global status of the Lifta-Rise Group in the world market would increase, and the owners' personal satisfaction and prestige with it.

5.1.2 Management Preferences Gap Closing Analysis

The senior management team has very little in terms of gap closing requirements to meet the needs of the strategic proposal. In the short-run, existing planning and manufacturing

capability can be fully utilised without any need for changes or modifications. The proposed Option #3 is in line with the existing emphasis on profit making capability and satisfying professional ambitions.

5.2 Organisational Capability Analysis

This section will analyse Lifta-Rise in terms of its culture, systems and structure.

5.2.1 Culture

The existing culture is based on command-and-control management style and adherence to tradition. Production follows central planning principles and due to the lack of capital investment to modernize Canadian facilities, the manufacturing process follows the same high standards of labour intensive product quality control as it did twenty years ago. There exists a strong belief in the company being the leader in the Public Accessibility industry and the strong desire to maintain its leadership position permeates all the ranks. The command-and control management style is affected by company's risk averse culture. Product distribution has traditionally been carried out in a way that would minimize the risk of failure. Therefore, exporting and heavy reliance on dealers is the preferred method of product distribution. Lifta-Rise's responsibility is decreased in terms of product installations, repairs, maintenance and marketing, which are managed by dealers.

Although based in Canada, Lifta-Rise follows the US safety, R&D, engineering and design principles. It is sometimes difficult for the company to adjust to provincial and federal requirement of the Canadian as well as international markets.

5.2.2 Systems

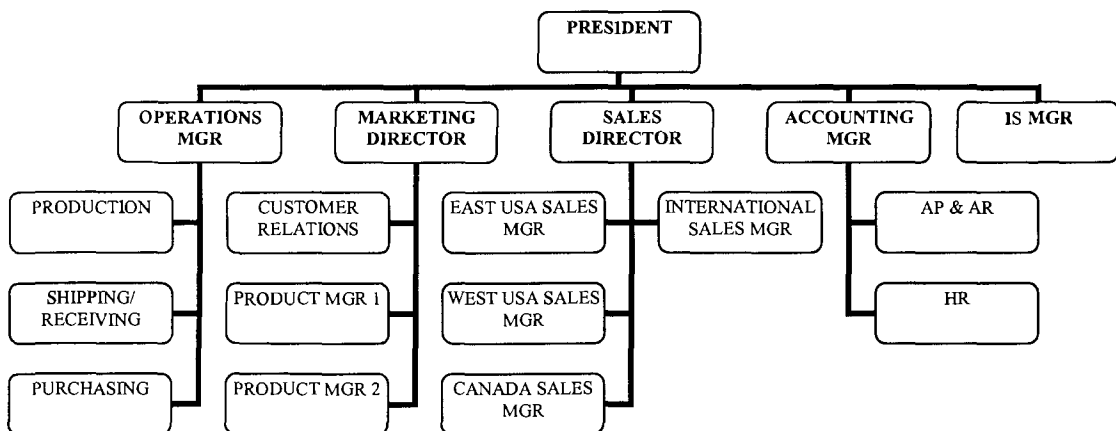
Lifta-Rise has a well developed dealer service systems in place and it has vast experience in supporting its Retail Offices in the US. These resources can be utilised to support the UK retail

office. In addition, a Dealer Support Web Site with the e-commerce capability is being further developed and improved. Dealers and Retail Offices will be able to place and track orders on line. Retail Offices will be able to view on line planning and production schedules allowing them to better satisfy their product specification needs and timelines.

5.2.3 Structure

The company is structured in a manner that follows a top-down management structure and compartmental division of departments through the reporting structure, as per Figure 5.1, below.

Figure 5.1 Lifta-Rise Reporting Structure.



The President does not have direct access to the developments in the international markets. With the emphasis on the US market requirements, any other market-specific product requirements are of secondary importance. This creates a gap in the UK MD's ability to influence events in Canada, further hampered by the geographic distance and time difference. Other internal obstacles would come from:

Marketing Director -- focused on the marketing needs of the US market.

Product Managers -- focused on the US market-driven product options.

Sales Director -- would like the UK MD to report to him.

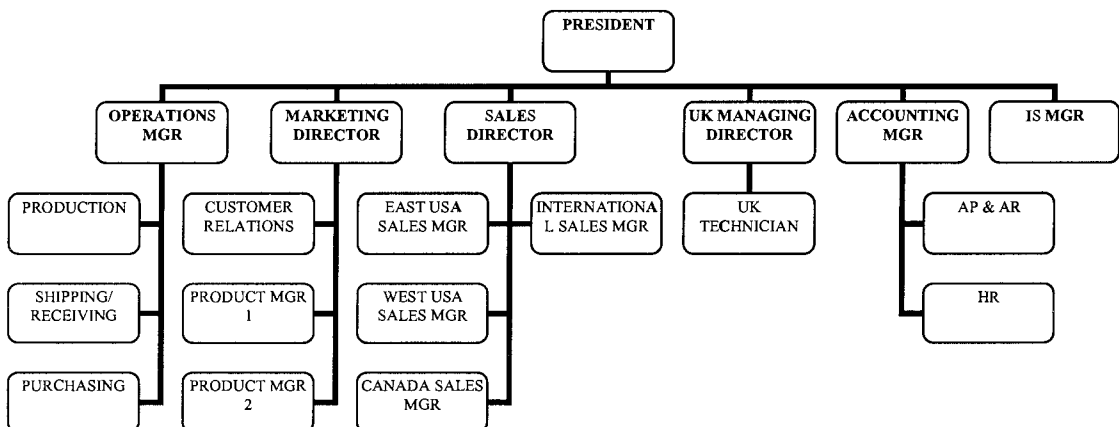
5.2.4 Organization Gap Closing Analysis

The existing cultural focus of the company on the US market could be augmented by greater direct involvement of Product Managers in the implementation of product UK-specific options. This could be achieved by inviting respective Product Managers to the UK by the MD and make them feel like stakeholders in the success of the UK retail office.

The Marketing Director's US focus would not be easily diverted, as that is the only market known to him. The UK retail office's marketing needs could be satisfied locally, where there is an abundance of quality marketing firms, which could provide all the design work. The printing of marketing material could be done in Canada to take advantage of economies of scale, by consolidating printing needs with the US-specific literature.

The proposed strategic option will require changes to the existing reporting structure,, as per Figure 5.2 below.

Figure 5.2 UK Reporting Structure.



By reporting directly to the President, the UK MD would be in a better position to compete for the resources than the International Sales Manager. The President would welcome another senior manager reporting to him and it would also satisfy his desire for control. Direct reporting would eliminate an intermediary between the UK MD and the President, namely the Sales Director. In addition, the International Sales Manager, relieved of the UK territory, would be able to focus on the development of new international markets.

Geographic remoteness of the UK retail office would make it impossible to control all aspects of day-to-day business by the senior management team, and the President in particular. It would enable, however, a direct reporting structure and management by objective by the President, until the incumbent has proven her/himself and earned President's trust. The UK-operation manager would effectively perform the function of the National Sales Manager, thus relieving the International Sales Manager based in Canada, from his involvement in the day-to-day business management of that territory. As a result of greater market focus, sales in the UK are expected to improve. Operating in a self-contained region, profitability of the UK retail office would be easily monitored through quarterly reports submitted to the President.

The Retail Office option satisfies the senior management team's familiar method of product exporting and the ability to directly manage the UK operation, thus satisfying the need to control.

5.3 Resource Analysis

This section will analyse resources currently available and resources that will be needed to ensure successful implementation of the proposed option.

5.3.1 Operational Resources

Physical: The existing manufacturing facility in Canada would supply standard equipment components which can be mass produced without straining the production capacity. They would be shipped by ocean in containers and stockpiled in the UK facility. Additional European production capacity, in Germany and Austria, could be used to supply site-specific and custom product options (German and Austrian facilities do not manufacture the same main lift components produced by the facility in Canada).

Storage facilities are plentiful in the UK, especially around the major urban centres and sea ports. Because the products would be sent in ship containers the most convenient location of the Retail Office would be in the south of the country. Southampton is the second largest container seaport in the UK, after London. There is easy access to major motorways from the Greater Southampton area, and that is where Company 1, one of the existing dealers, is located. Inland transit time and cost would be greatly reduced compared to having a facility in the north of the country. Also, industrial and storage property prices are lower in the south.

Human:

Office: Experienced and efficient design capability and customer support exist in the Canadian facility, and it could easily be utilised to service the UK operation. Recently introduced self-serve options on the Dealers Support web site, e.g., do-it-yourself drawings, order tracking and order status reports would make customer service related issues easier and less time consuming to manage.

Production: Operations in Canada, Austria and Germany each have their own Operations Managers. As they work independently of one another it would be easy to utilise the spare production capacity of each facility for the UK office's additional production needs.

UK HR Needs: In the beginning two positions would need to be filled, a Managing Director and a Technician.

The Managing Director (MD) would look after the inventory, account management and national corporate account development, as per Table 4.6, p. 64. She/he would be aided by a part-time secretary (this position could develop into a full-time). MD would have a secretary.

The Technician would perform warehouse related duties and offer live technical and trouble-shooting support.

Financial: Lifta-Rise finances itself from profits. It has an excellent credit rating and ability to raise money at any time. Finding the initial capital necessary to kick-start the UK retail office would not be a problem, once the decision to proceed with the plan is made. The projections Table 5.1 below show profit, and hence seed monies to start the venture would be returned in short order. UK corporate tax is based on HM Revenue and Customs ²⁸ information.

Table 5.1 Income Projections – Option C.

Income Projections (2007 and 2008)			
	2007	2008	
Sales	\$2,196,500	\$2,525,975	
Gross Profit at 47%	\$1,032,355	\$1,187,208	
General Selling & Admin. Expenses	-\$274,563	-\$315,747	(12.5% on sales in Canada)
Total UK expenses	-\$304,300	-\$301,296	
Earnings before tax	\$453,492	\$570,165	
Tax	-\$89,921	-\$118,004	(30% UK)
Net earnings	<u>\$363,571</u>	<u>\$452,161</u>	

²⁸ www.hmrc.gov.uk/rates/corp.htm

5.3.2 Intangible Resources

Technological: Lifta-Rise owns the patents on its drive systems, which differentiate its products from the competition. Its products are versatile in the design and installation capability.

Reputation: The company has been active for over 20 years in international markets and boasts prestigious installations worldwide (White House, Presidential Palace in Brasilia, Japanese Prime Minister's Residence) and the UK (10 Downing Street, Wimbledon, Buckingham Palace). Its products' offer long service life (up to 20 years) and are supported by extended warranty, as an option.

Innovation: Lifta-Rise has sufficient R&D capability to constantly update and innovate its products to maintain a differentiated position. UK market-specific technical requirements can be handled in-house.

5.3.3 Resource Gap Closing Analysis

Sufficient operational resources exist to support the UK retail office, except for the storage facility which needs to be leased.

Choosing the Managing Director would be most important. Two candidates are available. The first is a Lifta-Rise sales manager willing to relocate to the UK. The second is a former sales manager of a UK accessibility company. Due to recent merger and acquisition activities in the UK within the Public Accessibility industry, market availability of experienced sales and operations managers has increased. This opens a possibility of future sales personnel expansion on full- or part-time basis.

Finding a Technician would not be difficult. Due to early retirement schemes and redundancies resulting from the merger and acquisition activities mentioned above, the local pool of qualified and experienced technical personnel is abundant. Preliminary investigations by the

author confirm willingness of part-time employment or lower remuneration expectations by incumbents hoping to contribute to their retirement pension plans before full retirement.

There is enough industry information available to Lifta-Rise to hire local personnel for both positions mentioned above. UK industry relevant marketing and sales experience would be of great advantage. It would enable the potential to build sales through the current distributors and eventually could lead to Option #4 and really good results, considering the total UK market potential (as per Table 2.2). However, in view of the risk averse culture and the need to control described in the preceding subsections it is believed that the senior management team's preference for the MD position would be the Lifta-Rise candidate. All other future personnel needs can be satisfied locally.

6 RECOMMENDATIONS

In view of Lifta-Rise's current need to expand and solidify its commercial activities in markets other than the US, and the senior management teams' recognition of the UK market potential, it is recommended that Option C (Section 4.1.3) be implemented as soon as possible.

In the short-run (up to four years) the company is ready to handle the increase in business volume coming from the UK. In the long run, the company will have to adjust its strategy to suit the changing market realities in the UK and EU by either:

- regionalising, i.e., setting up an assembly line in the UK

or

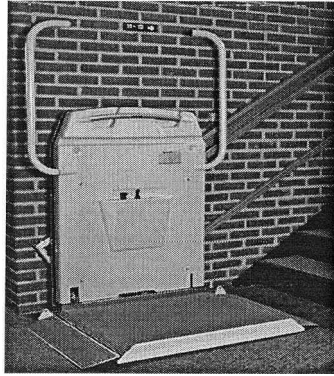
- centralising, i.e., consolidating the EU Accessibility market management, including manufacturing, through one of its offices in Germany or Austria, where production capability already exists.

The expansion into the UK market will allow Lifta-Rise to strengthen its position in international markets. It will enable the company to transplant its US expertise in setting up retail offices into other markets allowing for fuller utilisation of the Group's production capacity. The setting up of the UK retail office, the first outside of North America, would be a valuable learning experience to be exploited in other growth markets.

APPENDICES

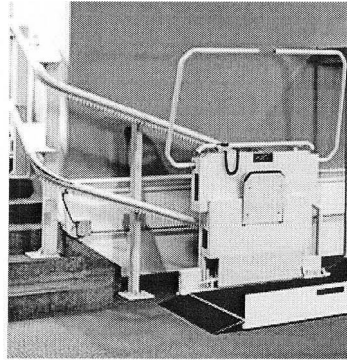
Appendix 1

STRAIGHT IPL, examples

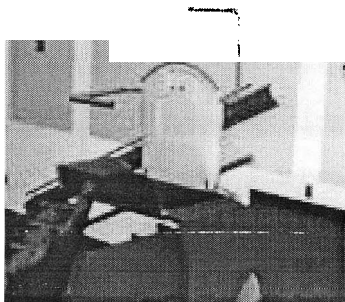


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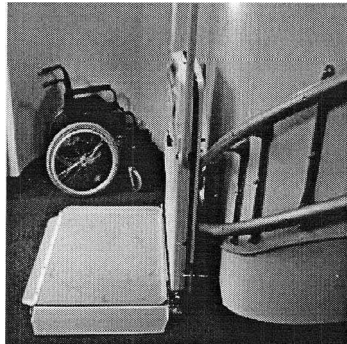
CURVING IPL, examples



THYSSEN



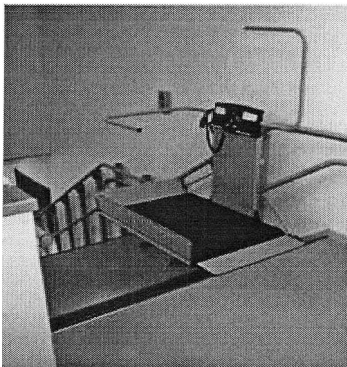
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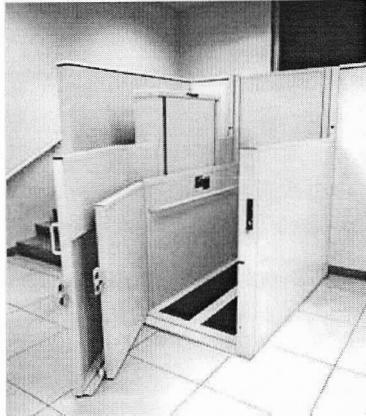
STANNAH



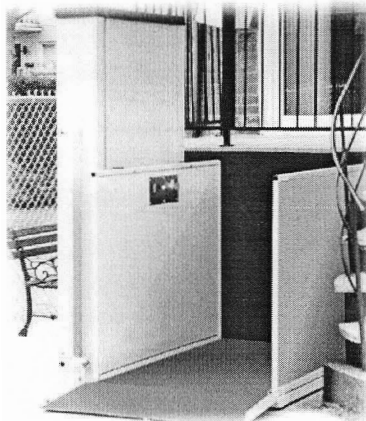
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Appendix 2

STRAIGHT IPL, examples

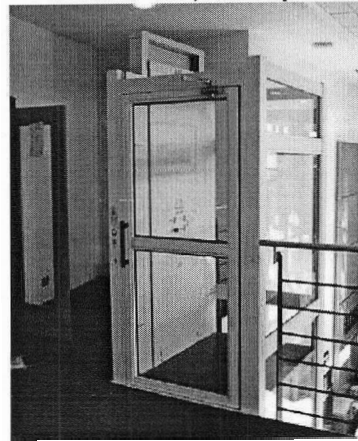


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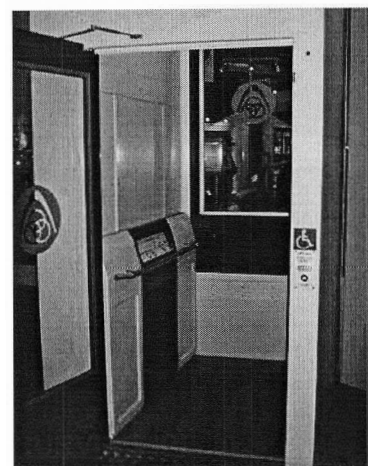
CURVING IPL, examples



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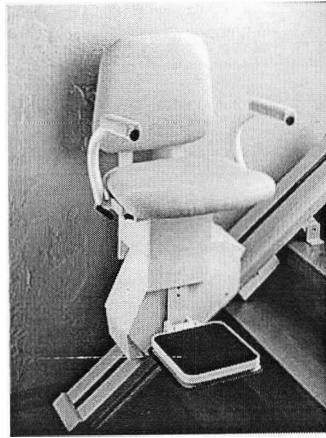


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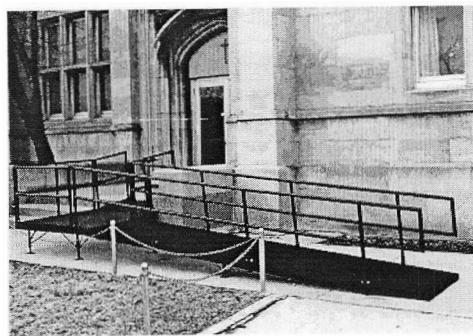
Appendix 3



STANNAH SEAT-LIFT



PORTABLE WHEELCHAIR LIFT



RAMP

Appendix 4

Calculations of Implementation Costs.

Table 4.2, p. 59 (Option A) – Costs per annum.

RSM Salary: \$55,000, 2% increase, year on year, due to inflation allowed for in calculations.

Expenses: \$14000, 2% increase, year on year, due to inflation allowed for in calculations.

Table 4.4, p.62 (Option B) – Costs per annum.

	2007	2008	2009	2010
MD Owner Salary	\$140,000	\$140,000	\$140,000	\$140,000
Current Staff	\$210,000	\$214,200	\$218,484	\$222,854
<i>Total Salaries</i>	<i>\$350,000</i>	<i>\$354,200</i>	<i>\$358,484</i>	<i>\$362,854</i>
Rent & Utilities	\$4,200	\$4,284	\$4,370	\$4,457
Admin Cost & Insurance	\$4,000	\$4,080	\$4,162	\$4,245

Total Salaries based on:

MD Owner Salary: \$140,000 = 2 x \$70,000, fixed.

Current Staff: \$210,000 = 6 x \$35,000 (average), 2% increase due to inflation allowed for in calculations in the table above.

Table 4.7, p.66 (Option C) – Costs per annum.

	2007	2008	2009	2010
MD Salary	\$70,000	\$71,400	\$72,828	\$74,285
Office Staff	\$34,000	\$34,680	\$35,374	\$36,081
Technician	\$40,000	\$40,800	\$41,616	\$42,448
<i>Total Salaries</i>	<i>\$144,000</i>	<i>\$146,880</i>	<i>\$149,818</i>	<i>\$152,814</i>
Admin Cost & Insurance	\$3,800	\$3,876	\$3,954	\$4,033
Lease	\$148,500	\$148,500	\$148,500	\$148,500
Utilities	\$2,000	\$2,040	\$2,081	\$2,122

Total Salaries based on:

MD Salary: \$70,000, 2% increase due to inflation added in calculations in the table above.

1 Office Staff: \$34,000, 2% increase due to inflation added in calculations in the table above.

Technician: \$40,000, 2% increase due to inflation added in calculations in the table above.

Lease Cost: \$148,500 p.a., fixed contract (13,500 sq ft x \$11/sq ft)

Table 4.9, p.69 (Option D) – Costs per annum.

	2007	2008	2009	2010
MD Salary	\$77,000	\$78,540	\$80,111	\$81,713
Sales Person	\$50,000	\$51,000	\$52,020	\$53,060
Office Staff	\$34,000	\$34,680	\$35,374	\$36,081
Secretary	\$25,000	\$25,500	\$26,010	\$26,530
Shop staff	\$179,000	\$182,580	\$186,232	\$189,956
Total Salaries	<i>\$365,000</i>	<i>\$372,300</i>	<i>\$379,746</i>	<i>\$387,341</i>
Admin Cost & Insurance	\$4,700	\$4,794	\$4,890	\$4,988
Utilities	\$18,000	\$18,360	\$18,727	\$19,102

MD Salary: \$77,000, 2% increase due to inflation added in calculations in the table above.

1 Sales Person: \$50,000, 2% increase due to inflation added in calculations in the table above.

1 Office Staff: \$34,000, 2% increase due to inflation added in calculations in the table above.

Secretary: \$25,000, 2% increase due to inflation added in calculations in the table above.

Shop Staff: \$179,000 = 4 x \$35,000 + \$39,000(lead hand), 2% increase due to inflation added in calculations in the table above.

NOTES:

Discount Rate Used to Calculate NPV.

Current short-term (12 months) cost of capital for Lifta-Rise is 10%. As a four-year timeframe is considered in this paper additional 2% of inflation premium will be added. The total assumed cost of capital of 12% is in line with non-inflationary 12-15% cost of capital.

Inflation.

All costs of doing business include increase of 2%, year on year, which is equal to the target inflation rate currently held by Bank of England²⁹ and Bank of Canada³⁰.

Gross Margin on products sold to the UK, after dealer discount.

Gross Margin Options A and B

<i>Option A & B</i>	Cost	Price	Gross Profit	Gross Margin
Straight IPL	\$4,000	\$7,100	\$3,100	44%
Curving IPL	\$8,500	\$18,500	\$10,000	54%
VPL	\$7,000	\$13,000	\$6,000	46%
			Average	47%

Based on type and quantity of product sold to the UK, average gross margin of 47% is assumed in this project (based on actual sales). General expenses constitute 12.5% of sales, on average. Neither option A nor B would change gross profit as the products would still be fully manufactured in Canada.

²⁹ www.bankofengland.co.uk/monetarypolicy/framework: "Price stability is defined by the Government's inflation target of 2%".

³⁰ www.bank-banque-canada.ca/en/inflation/index: "The Bank of Canada aims to keep inflation at the 2 per cent target..."

Gross Margin Options C and D

Landed product price in the UK will increase (discounts will be reduced) by 5-7% across the product line due to the following:

Cross ocean freight and brokerage arrangements will be done by Lifta-Rise

Ready product availability, which frees dealer cash flow

Same time zone technical support (trouble shooting, spare parts)

Preliminary discussions with existing dealers confirm that such price increase is feasible because of the improved sales delivery offered by a future Lifta-Rise UK operation, and dealer savings resulting from the lack of need to arrange freight and brokerages. Profit margins for options C and D are listed in the tables below.

Option C does not assume any, or minimal, local labour input. With the increased prices and increased cost of products by 5% (added freight and brokerage charges) gross profit is assumed to be 47%. It is a realistic assumption as products sold to the UK are discounted heavily (due to extended delivery time and added cost of freight).

<i>Option C</i>	Cost	Price	Gross Profit	Gross Margin
Straight IPL	\$4,200	\$7,455	\$3,255	44%
Curving IPL	\$8,925	\$19,425	\$10,500	54%
VPL	\$7,350	\$13,650	\$6,300	46%
			Average	47%

Option D assumes reduced gross margin down to 45%; assuming product cost increase by 10%, due to initially, higher local costs.

<i>Option D</i>	Cost	Price	Gross Profit	Gross Margin
Straight IPL	\$4,400	\$7,455	\$3,055	41%
Curving IPL	\$9,350	\$19,425	\$10,075	52%
VPL	\$7,700	\$13,650	\$5,950	44%
			Average	45%

Corporate Tax in the UK

Corporate tax rate in the UK is 30% on profit of GBP 300,001 – GBP 1,500,000³¹.

³¹ www.hmrc.gov.uk/rates/corp.htm, HM Revenue and Customs

Appendix 5

Sensitivity Based NPV Calculations of Options C, C", D and D".

OPTION C"				
Year	2007	2008	2009	2010
Sales increase/yr	15%	10%	5%	5%
Revenue Increase	\$2,196,500	\$2,416,150	\$2,536,958	\$2,663,805
Gross Profit at 40%	\$988,425	\$1,087,268	\$1,141,631	\$1,198,712
Facility lease cost	-\$148,500	-\$148,500	-\$148,500	-\$148,500
Salaries	-\$144,000	-\$146,880	-\$149,818	-\$152,814
Utilities	-\$2,000	-\$2,040	-\$2,081	-\$2,122
Admin. Cost & Insur.	-\$3,800	-\$3,876	-\$3,954	-\$4,033
EBIT	\$690,125	\$785,972	\$837,279	\$891,243
Start-up cost	-\$6,000			
Discount	12.0%			
NPV	\$2,399,115			

OPTION D"				
Year	2007	2008	2009	2010
Sales increase/yr	20%	15%	10%	5%
Revenue Increase	\$2,292,000	\$2,635,800	\$2,899,380	\$3,044,349
Gross Profit at 40%	\$1,146,000	\$1,317,900	\$1,449,690	\$1,522,175
Salaries	-\$554,000	-\$565,080	-\$576,382	-\$587,909
Utilities	-\$18,000	-\$18,360	-\$18,727	-\$19,102
Admin. Cost & Insur.	-\$4,700	-\$4,794	-\$4,890	-\$4,988
EBIT	\$569,300	\$729,666	\$849,691	\$910,176
Facility Purchase	-\$1,700,000			
Start-up cost	-\$10,000			
Discount	12.0%			
NPV	\$563,216			

Cost of Options Implementation NPV calculations.

OPTION A

Year	2007	2008	2009	2010
RSM Salary	\$55,000	\$56,100	\$57,222	\$58,366
Business Expenses	\$14,000	\$14,280	\$14,566	\$14,857
<i>Total Expense</i>	<i>\$69,000</i>	<i>\$70,380</i>	<i>\$71,788</i>	<i>\$73,223</i>
Discount	12%			
Cost NPV	\$215,345			

OPTION B

Year	2007	2008	2009	2010
Salaries	\$350,000	\$354,200	\$358,484	\$362,854
Rent, Admin, Insur.	\$8,200	\$8,364	\$8,531	\$8,702
<i>Total Expense</i>	<i>\$358,200</i>	<i>\$362,564</i>	<i>\$367,015</i>	<i>\$371,556</i>
Buy-out	\$3,500,000			
Discount	12%			
Cost NPV	\$4,606,220			

OPTION C

Year	2007	2008	2009	2010
Facility lease cost	\$148,500	\$148,500	\$148,500	\$148,500
Salaries	\$144,000	\$146,880	\$149,818	\$152,814
Utilities	\$2,000	\$2,040	\$2,081	\$2,122
Admin. Cost & Insur.	\$3,800	\$3,876	\$3,954	\$4,033
<i>Total Expense</i>	<i>\$298,300</i>	<i>\$301,296</i>	<i>\$304,352</i>	<i>\$307,469</i>
Start-up cost	\$6,000			
Discount	12%			
Cost NPV	\$924,564			

OPTION D

Year	2007	2008	2009	2010
Salaries	\$365,000	\$372,300	\$379,746	\$387,341
Utilities	\$18,000	\$18,360	\$18,727	\$19,102
Admin. Cost & Insur.	\$4,700	\$4,794	\$4,890	\$4,988
<i>Total Expense</i>	<i>\$387,700</i>	<i>\$395,454</i>	<i>\$403,363</i>	<i>\$411,430</i>
Facility Purchase	\$1,700,000			
Start-up cost	\$10,000			
Discount	12%			
Cost NPV	\$2,919,992			

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